ACC NR: AP7001224 SOURCE CODE: UR/0066/66/000/012/0034/0036

AUTHOR: Mekler, V. Ya.; Zyk, S. L.

ORG: none

TITLE: Air conditioning for computers

SOURCE: Kholodil'naya tekhnika, no. 12, 1966, 34-36

TOPIC TAGS: electronic computer, air conditioning equipment

ABSTRACT: An air-conditioning system for computers is described (see Fig. 1) in which surface air coolers with direct evaporation are used. The air being forced into a computer is maintained at a constant temperature by bridge circuit 13 which, in winter and during periods of changing temperatures, acts on valve 18 for the first recirculation. The ratio of atmospheric to recirculated air is thereby varied. When a relative humidity of 40% is reached, humidity sensor 8, mounted in the air conduct, opens solenoid valve 7, and water starts to flow to the six sprayer nozzles (diameter, 1 mm). When 55% relative humidity is reached, the solenoid valve closes. When the atmospheric air temperature reaches 17C, the first cooling unit is switched on; at 17.5C the second is switched on, at 18C the third, and at 18.5C the fourth. If during summer the relative humidity of the incoming air is 70%, humidity sensor 9 gradually opens the valve for the second recirculation. At 65% humidity this valve closes. When the heat content of the atmospheric air exceeds that of the recirculated air, the valve for the first recirculation is fully opened by resistance

Card 1/2 UDC: 628.83:681.142.2

ACC NR: AP7001224

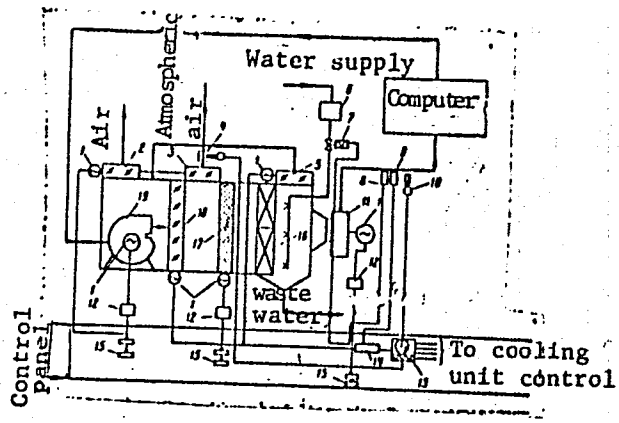


Fig. 1. Air-conditioning system with surface air coolers (schematic drawing)

1 - Electric drive; 2 - release vent; 3 - atmospheric air vent; 4 - resistance thermometer; 5 - valve for the second recirculation; 6 - water filter; 7 - solenoid valve; 8 - winter humidity sensor; 9 - summer humidity sensor; 10 - resistance thermometer; 11 - inflow ventilator; 12 - magnetic starter; 13 - recording hydrometer bridge; 14 - step interrupter; 15 - electric motor starting switch; 16 - surface air coolers; 17 - recording oil filter; 18 - valve for the first recirculation; 19 - recirculation fan.

thermometer 4 and the system operates in a closed air cycle. The four cooling units, mounted on a common condenser, have a capacity of 15,000 kcal/hr each. The main advantage of this air-conditioning system is its relatively small size and low electricity consumption. Orig. art. has: 3 figures.

SUB CODE: 09, 13/ SUBM DATE: none/ ATD PRESS: 5110 [JR]

Card 2/2

ZYK, W.

Some remarks concerning the starting and operation of a watertube boiler. p. 33, (GOSPODARKA CIEPLNA. ENERGETYKA PRZEMYSLOWA, Vol. 1, No. 6, Dec. 1953, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5 May 1955, Uncl.

ZYK, Witold, mgr inz.

Significance and possibilities of limiting compressed air consumption in mines. Gosp paliw 11 no.6:205-207 Je '63.

ZYK, W.

Construction installations for hydraulic and sand pillars in deep mines, p. 55. (PRZEGLAD GORNICZY, Stalinogrod, Vol. 11, no. 2, Feb. 1955.)

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

ZYKA, F.

Cervenka, K.; Ryöar, F. Drawing and production of broaches, p. 409. STROJIRENSKA VYROBA, Prague, Vol. 3, no. 10, Oct. 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6, June 1956, Uncl.

METYS, Rene; ZYKA, Ivan

Chronic volvulus of the stomach with spontaneous recovery. Cesk. rentg. 13 no.2:101-103 Apr 59.

1. Rentgenologicke oddeleni nemocnice OUNZ v Susici, zast. prednosta dr. Rene Metys.
(STOMACH, dis.
torsion, spontaneous recovery, x-ray (Cz))

(1)

CZECHOSLOVAKIA

HERMAN, M; SULCEK, Z; ZYKA, J

1. Central Geological Institute (Geologisches Zentralinstitut) (for Herman ?); 2. Institute for Analytical Chemistry, Karlova University (Institut für analytische Chemie, Karlsuniversität), Prague (for ?)

Prague, Collection of Czechoslovak Chemical Communications, No 5, May 1966, pp 2005-2013

"Oxidimetric determination and identification of cobalt and manganese, using titration of a ferricyanide solution in a medium of certain aminoalcohols."

ZYKA, VACLAV

Czechoslovakia/Cosmochemistry - Geochemistry. Hydrochemistry, D

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61339

[redacted] Vaclav

Institution: None

Title: On Genesis and Hydrochemistry of Mineral Waters in the Prerov District

Original Periodical: Ke genesi a hydro-geochemii mineralnich vod na Prerovsku. Sbor. sluko, 1951-1953 (1954), A1, 89-97; Czech; Russian and German resumés

Abstract: In Prerov District are found 2 types of mineral waters: (a) of sodium bicarbonate type and (b) of calcium-bicarbonate type. Of greatest interest are waters from Khropyne of sodium bicarbonate type having the following composition (in mg/l): Cl 1,087.0, SO_4 4.1, I 0.72, Br 2.9. Temperature of water 20.5°, air temperature 8.5°, pH 7.3, rH 22.7 (-10 mv), free CO_2 30.8 mg/l, free H_2S traces. Other waters are typically surface waters but their

Card 1/2

Czechoslovakia/Cosmochemistry - Geochemistry. Hydrochemistry, D

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61339

Abstract: composition reveals influence of seepage of petroleum water although to a lesser extent than in the case of Khropyne water. In waters of sodium bicarbonate type predominates CH_4 in the other CO_2.

Card 2/2

Geochemistry of mineral waters in the region Sliáčlliavo-
Lučenec-Lovice Václav Zýka (Masaryk Univ., Brno,
Czech.). *Geol. Práce* 3, 76-125(1965)(German summary).
—Chem. analyses are given of 42 waters. These include
NaCl-rich waters, NaHCO$_3$ waters derived from them by
biogenic reduction of sulfate in the presence of org. resins,
and Ca bicarbonate waters. Qual. tests showed the pres-
ence of Cu, Hg, V, Co, and As. Some of the waters are
high in Br and iodine and may be related to oil-field waters.
Michael Fleischer

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R002065810002-7"

CZECHOSLOVAKIA / Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 67229.

Author : Zyka V., Juranek J.
Inst : Not given.
Title : On the Problem of Geochemistry of Mineral Waters of the Northern and North-Western Parts of Presovskiy Kray.

Orig Pub: Sbirka praci vyzkumn. ust., 1956, E, No 17-21, 81-117.

Abstract: Based on the data developed by the geochemical survey the major mineral water bearing localities are classified as follows: 1) sodium-bicarbonate type,

Card 1/1

ZYKA, V.

Hydrogeochemical zones in central Europe.

p. 383 , (ACTA GEOLOGICA), Vol 4, no. 3/4, 1957, in German
Budapest, Hungary

SC: Monthly Index of East European Accessions (EEAi) LC. Vol. 7, No. 3,
March 1958

ZYKA, VACLAV

CZECHOSLOVAKIA/Cosmochemistry. Geochemistry. Hydrochemistry. D.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 35820

Author : Zyka, Vaclav
Inst : -
Title : The Distribution of Microelements in the Mineral Waters of Moravia.

Orig Pub : Rudy, 1957, 5, No 11, Prace Vyzkumn. ustavu, 1-6

Abstract : The mineral waters of Moravia and Slovakia were studied. It is shown that the majority of the waters studied belong, according to their mineral composition, to the group of calcium and sodium waters of the hydrocarbonate class. A content of Bi, Ag, Pb, Cu, Zn, and Fe microelements characteristic of ore deposits was determined spectrally.

Card 1/1

END

ZYKA, V.

GEOGRAPHY & GEOLOGY

Periodicals CASOPIS PRO MINERALOGII A GEOLOGII Vol. 3, no. 1, 1958

ZYKA, V. Geochemical types of mineral waters in Bohemia and their genesis. p. 103.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5, May 1959, Unclass.

D

Country : Czechoslovakia
Category : Cosmochemistry. Geochemistry. Hydrochemistry.

Abs. Jour. : Ref Zhur-Khimiya, No 6, 1959 19022

Author : Zyka, V.
Institut. :
Title : Hydrochemistry and Genesis of Hydrogen-Sulfide Springs of the Gottwaldovska Region.

Orig Pub. : Geol. sbor., 1958, 9, No 1, 129-157

Abstract : A hydrochemical study has made it possible to differentiate two types of waters: I. Sodium-hydrocarbonate type of high mineralization (M). II. C[illegible]ium-hydrocarbonate type of lower M. Data of 18 chemical analyses are included. Group I (mg/liter): dry residue at 180° 1113.6-4429.6, I 0.3-2.0, Br 0.7-4.1, H_2S 0.7-28.5, pH > 7. Group II: dry residue 288.2-1052.6, pH > 7; H_2S is present sometimes in small amounts. Waters of group I are waters of petroleum deposits, the chemism of which is affected to some extent by waters of infiltration. Group II -- their chemical composition is correlated with the presence of bitumen in the sedimentary rocks. Distribution of these 2 types of waters

Card: 1/2

D

Country : Czechoslovakia
Category : Cosmochemistry. Geochemistry. Hydrochemistry.

19022

Abs. Jour. : Ref Zhur-Khimiya, No 6, 1959

Author :
Institut. :
Title :

Orig. Pub. :

Abstract : is shown on the appended map. About 20 analyses of water are listed. -- L. Flerova.

Card: 2/2

D-13

TRELICKA, Zdenek, inz.; ZYKA, Vaclav, inz.

Contribution to the geochemistry of gold. Sbor VSB Ostrava 10 no. 1/2:11-22 '64.

1. Institute of Mineral Raw Materials, Kutna Hora. Submitted February 1963.

ZYKA, Vaclav, RNDr., kandidat geologicko-mineralogickych ved

Do not look for difficulties, but for ways of performing the tasks. Geol pruzkum 6 no. 3:74-76 Mr '64.

1. Institute of Mineral Raw Materials, Kutna Hora.

NOVOTNY, J.; ZYKA, V.; KUDELASEK, Vl., dr.

Contribution to the chemism of Algonkian schists. Sbor VSB Ostrava 8 no.4:445-462 '62.

1. Ustav nerostnych surovin, Kutna Hora; Vysoka skola banska, Ostrava.

ZYKA, Vaclav, RNDr., kandidat geologicko-mineralogickych ved

Anomaly of the zinc content in mineral waters in the Bohemian limestone formations. Geolog pruzkum 5 no.2:49-50 F '63.

1. Ustav nerostnych surovin, Kutna Hora.

ZÝKA, V.

Czechoslovakia

Institute of Raw Materials -- Kutna Hora (Ústav nerostných surovin -- Kutná Hora)

Prague, Věstník ústředního ústavu Geologického, No 6, 1962, pp 455-457

"Interesting trace elements in the magnesium carbonate mineral waters in the Mariánské Lazně area (western Bohemia)."

COUNTRY : Czechoslovakia D
CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No. 85929

AUTHOR : Zyka, V.
INST. :
TITLE : Geochemical Zoning of Mineral Waters of Central Europe

ORIG. PUB. : Geol. sb., 1958, 9, No 2, 265-299

ABSTRACT : There have been determined 9 principal hydrochemical types of mineral waters of Central Europe: HCO_3 - Ca, SO_4 - Ca, SO_4 - Fe, HCO_3 - Na, Cl - Na, Cl - Ca, Cl - Mg, SO_4 - Na, SO_4 - Mg. Their occurence in connection with geological environment is reviewed. Bibliography 108 references. -- V. Konshin.

CARD:

COUNTRY : Hungary D
CATEGORY :

ABS. JOUR. : RZKhim., No. 22 1959, No. 78247

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : is the cause for the appearance of polymetallic and sulfide deposits which up to the present have been considered to be of hydrothermal origin. The majority of known native sulfur deposits were formed by the biogenic reduction of sulfates in oil field waters. The mixing of sodium-bicarbonate oil field waters with calcium-sulfate waters has led to the formation of tremendous travertine deposits at many points.

G. Volkov

CARD: 2/2 82

ADAM, I.; DOLEZHAL, Ya.; ZYKA, Ya.

Use of hydroxy acids in polarographic analysis. Report 2: Determination of manganese in a sulfosalicylate medium. Zhur.anal. khim. 16 no.5:592-595 S-O '61. (MIRA 14:9)

1. Karlov University, Prague, Czechoslovakia.
(Manganese--Analysis) (Salicylic acid) (Polarography)

ZYKA, Ya.

Hydroquinone as a reagent in reductometric titration. Zav.lab. 27 no.9:1075-1079 '61. (MIRA 14:9)

1. Kafedra analiticheskoy khimii Karlova universitata, Praga.
(Hydroquinone) (Electrochemical analysis)

RYBACEK,J.; DOLEZAL,J.; ZYKA, J.,prof. dr.mr. (Praha 2, Albertov 2030).

Reductometric determination of aromatic nitro compounds with ferrous sulfate in alkaline triethanolamine. Cesk. farm. 14 no.2:59-64 F '65.

1. Katedra analyticke chemie prirodovedecke fakulty Karlovy University, Praha.

BERKA,A.; JIROVEC, J.; ZYKA,J., prof. dr. mr. (Praha 2, Albertov 2030)

Determination of organic compounds by oxidation with permanganate. I. Determination of some monosaccharides. Cesk. farm. 14 no.2: 64-67 F '65.

1. Katedra analyticke chemie prirodovedecke fakulty Karlovy University, Praha.

JANATA, J.; ZYKA, J.

Application of coulometry in constant current to measure velocity constants. Coll Cz Chem 30 no.5:1723-1727 My '65.

1. Institut fur analytische Chemie, Karlsuniversitat, Prague.
Submitted April 10, 1964.

BUZKOVA, V.; MOLDAN, B.; ZYKA, J.

Mass analytic determination of iodide and bromide through lead (IV) acetate solutions. Coll Cz Chem 30 no.1:28-33 Ja '65.

1. Institut fur analytische Chemie, Karlsuniversitat und Zentralinstitut fur Geologie, Prague. Submitted December 3, 1963.

BERKA, A.; DOLEZAL, J.; ZYKA, J.

Analytical examination of the reaction between hexacyanoferrates (III) and hydroquinone. Coll Cz Chem 30 no.2:695-607 F '65.

1. Institute fur analytische Chemie, Karls-Universitat, Prague.
Submitted April 6, 1964.

ZYKA, J.

"Analysis of kalium" by Hans Tollert. Reviewed by J. Zyka. Coll Cz Chem 29 no.5:1332-1333 My '64.

ADAMEK, P.; DOLEZAL, J.; ZYKA, J.

Contribution to the theory of polarometric titrations based on oxidation-reduction reactions. Coll Cz Chem 28 no.8:2131-2137 Ag '63.

1. Abteilung fur Instrumentalanalyse, Technische Hochschule fur Chemie, und Institut fur analytische Chemie, Karlsuniversitat, Prag.

CZECHOSLOVAKIA

HORAK, P.; ZYKA, J.; Research Institute for Botanical Drugs, Chair of Analytical Chemistry at Charles University [Vyzkumny Ustav Prirodnich Leciv, Katedra Analyticke Chemie Karlovy University], Prague.

"Indirect Photometric Determination of Alkaloids after Chromatographic Separation. IV. The Chromatographic Separation of Tropane Alkaloids."

Prague, Ceskoslovenska Farmacie, Vol 12, No 8, 1963, pp 394-398

Abstract: Octanol was used as stationary and ammonia as mobile phase. 1-2% admixture may be determinod, there is no loss of alkaloids. Hyosciamine cannot be separated from atropine. Detail instructions for the analysis are given, using amounts of 10-50 micrograms of the analyzed substance. The authors used the method for a successful separation of 14 opium alkaloids.
3 Figures, 16 Western, 2 Czech references.

1/1

BERKA, A.; FARA, M.; ZYKA, J.

Determination of glycerine in pharmaceutical preparations.
Cesk. farm. 12 no.7:366-367 S '63.

1. Katedra analyticke chemie Karlovy university, Praha.
(GLYCERINE) (CHEMISTRY, PHARMACEUTICAL)

ZYKA, J.

"Analysis of potassium; classic and modern separation and determination methods with critical comparison of their efficiency" by Hans Tollert. Reviewed by J. Zyka. Chem listy 57 no.11:1197-1198 N '63.

HORAK, P.; ZYKA, J.

Indirect photometric determination of alkaloids after chromatographic separation. I. Precipitation of alkaloids using thallium complexes. Cesk. farm. 17 no.6:286-288 Jl '63.

1. Vyzkumny ustav prirodnich leciv, Praha, - Katedra analyticke chemie Karlovy University, Praha.
(ALKALOIDS) (THALLIUM) (CHROMATOGRAPHY)
(ATROPINE) (BELLADONNA) (SCOPOLAMINE)
(COCAINE) (PHOTOMETRY)

HORAK, P.; ZYKA, J.

Indirect photometric determination of alkaloids after chromatographic separation. II. Photometric determination of thallium with crystal violet. Cesk. farm. 17 no.6:289-293 Jl '63.

1. Vyzkumny ustav prirodnich leciv, Praha - Katedra analyticke chemie Karlovy university, Praha.
(THALLIUM) (GENTIAN VIOLET) (CHROMATOGRAPHY)
(PHOTOMETRY)

CZECHOSLOVAKIA

ADAMEK, P; DOLEZAL, J; ZYKA, J.

1. Department of Instrumental Analysis of the Technical Higher School of Chemistry, Prague; 2. Institute of Analytic Chemistry of Charles University, Prague

Prague, Collection of Czechoslovak Chemical Communications, Vol 8, 1963, pp 2131-2137

"Report on the Theory upon which the Oxydation-Reduction Reaction-Polarometric Titration is Based."

HORAK, P., Research Institute for Natural Drugs (Vyzkumny ustav prirodnich leciv), Prague, and ZYKA, J., Chair of Analytic Chemistry (Katedra analyticke chemie), Charles University, Prague.

"Indirect Photometric Determination After Chromatographic Separation. III. Detection and Extraction of Alkaloids."

Prague, Ceskoslovenska Farmacie, Vol XII, No 7, September 63, pp 359-362.

Abstract [Authors' English summary, modified]: A complex of thallium salt with iodine and iodide (thallium concentration being 0.005 M) was used for detecting alkaloids on paper chromatograms. Results showed a low variation and the alkaloid precipitation was quantitative. The technique of the method is described. The method may be used for determining 10 to 60 µg of tropane alkaloids on paper (photometric determination of the thallium components by means of crystal violet after oxidation with bromide). Three references, including 2 Czech.

1/1

2

KOTOUCEK, M.; DOLEZAL, J.; ZYKA, J. CSSR

Institute of Organic, Analytical and Physical Chemistry, Palacky University, Olomouc, and Institute of Analytical Chemistry, Charles University, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 2, 1963 pp 521-524

"Selective Proof and Volumetric Determination of Gold"

(3)

KOTOUCEK, M.; DOLEZAL, J.; ZYKA, J.

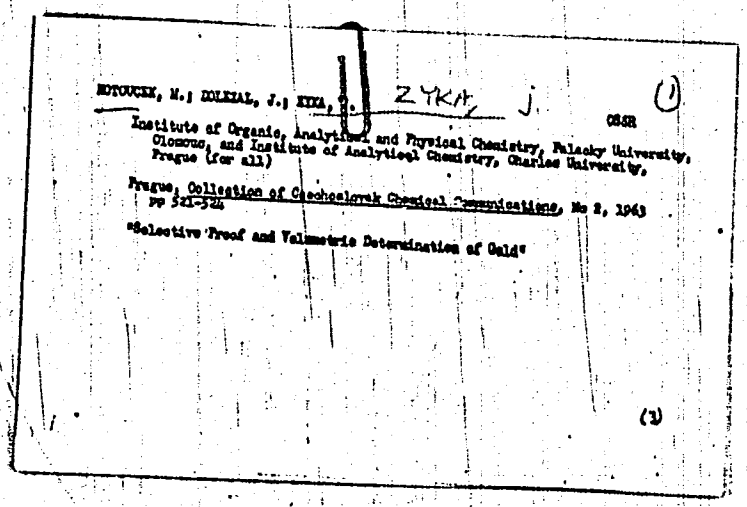
Selective test and volumetric gold determination.
Coll Cz Chem 28 no.2:521-524 F '63.

1. Institut fur organische, anlaytische und physikalische Chemie, Palcky-Universitat, Olomouc und Institut fur analytische Chemie, Karlsuniversitat, Prag.

KRACMAR, J.; ZYKA, J.

Analytical study of anticholinergics of the carboxylic acid ester group. II. Other methods of determination of 2-(diisoprppylamino)-ethyl xanthrene-O-carboxylate methobromide and 2-diethylaminoethyl xanthrene-9-carboxylate methobromide. Cesk. farm. 11 no.9:459-463 N '62.
(METHANTHELINE) (CHEMISTRY, PHARMACEUTICAL)

ZYKA, J.



MUTOUCEK, M.; ZOLTZAL, J.; ZYKA, J. (1)

Institute of Organic, Analytical and Physical Chemistry, Palacky University, Olomouc, and Institute of Analytical Chemistry, Charles University, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 8, 1963
pp 521-524

"Selective Proof and Volumetric Determination of Gold"

(2)

CZECHOSLOVAKIA

HORAK, P., Magister of Pharmacy, Candidate of Sciences, Research Institute for Natural Medicines (Vyzkumny ustav prirodnich leciv), Prague, and ZYKA, J., Chair of Analytic Chemistry (Katedra analyticke chemie), Charles University, Prague.

"Indirect Photometric Determination of Alkaloids after Chromatographic Separation. I. Precipitation of Alkaloids by Means of Thallium Complexes"

Prague, Ceskoslovenska Farmacie, Vol XII, No 6, July 1963, pp 286-289.

Abstract [Authors' English summary, modified]: A precipitation reagent of optimal composition can be prepared from one part of 0.1 N thallium sulfate and three parts of 0.1 N iodine in a 0.15 M potassium iodine solution. It precipitates alkaloids in a neutral or acid medium. Precipitates of the tropane alkaloids, which can be prepared in a crystalline form, are relatively water-soluble, and the sensitivity of the reagent is in conformity with the sensitivity of other alkaloids precipitation reagents. In view of the properties of alkaloid precipitates and the sensitive color reaction of thallium it is possible to use this precipitation reagent for an indirect determination of small quantities of alkaloids. Seven references, including 2 Russian.

ZYKA, J.

"Qualitative analytic chemistry" by A. Okac. Reviewed by J. Zyka.
Coll Cz chem 27 no.10:2472-2473 O '62.

DOLEZAL J.; NOVOZAMSKY, I.; ZYKA, J.

Indirect complexometric determination of sodium. Coll Cz Chem 27 no.8: 1830-1834 Ag '62.

1. Institut fur analytische Chemie, Karls-Universitat, Prag.

CZECHOSLOVAKIA

J. KRACHMER and J. KIKA, State Drug Control Institute, and Department of Analytical Chemistry, Charles University (Katedra analytické chemie Karlovy University) Prague.

"Analytical Study of Anticholinergics of the Carboxylic Acid Esters Group. Part 2. Other Methods of Determination of Propantheline and Methantheline."

Prague, Geskoslovenska Farmacie, Vol 11, No 9, Sept 1962; pp 439-463.

Abstract [English summary modified]: Elution in ion exchange resin, with distilled water; potentiometric titration; UV spectrophotometry; latter is best for determination of the 2 drugs in tablets; titration in non-aqueous medium best for substances. Three graphs, 3 Czech periodical and 7 pharmacopeial references.

1/1

KRACMAR, J.; ZYKA, J.

Analytical studies on anticholinergics from the group of carboxylic acid esters. I. Ultraviolet spectrophotometry of 2-di-isopropylaminoethylxanthene-9-carboxylate methobromide and 2-di-ethylaminoethylxanthene-9-carboxylate methobromide. Cesk. farm. 10 no.9:440-455 '61.

1. Statni ustav pro kontrolu leciv, Praha Katedra analyticke chemie Karlovy university, Praha.
(METHANTHELINE chem)

ZYKA, J.

Chile, cy

(27)

and A. ANDRZEJAK of the Institute of Chemical Technology at A. Mickiewicz University in POZNAN, Poland; pp 979-986.

28. "On Terpenes. Part CXXXV. Composition of the Oil from the Leaves of Lindera strychnifolia F., Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 987-993 (English article). O. MOTL and V. LUKES,

29. "On Proteins. Part LXIX. The Primary Structure of Sperm Whale Myoglobin in View of the General Principles Governing the Structure of Proteins," F. SORM, Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 994-1000 (English article).

30. "On Proteins. Part LXX. Analysis of the Primary Structure of Horse Heart Cytochrome C," F. SORM, Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 1001-1008 (English article).

31. "Dependence of DNA Hydrolysis, by DNase II, on the Nativity of DNA," J. SKOPEK and Z. SORMOVA of the Institute of Organic Chemistry and Biochemistry, at the Czechoslovak Academy of Sciences, Prague; pp 1009-1013 (English article).

32. "Contributions to the Contents of Arsenic Acids at Higher Temperatures," A. BLAZEK, V. CASLAVSKA and V. FOJT. From the Metallurgical Institute of the Czechoslovak Academy of Sciences, and the Inorganic Chemistry Institute of Charles University, Prague; pp 1014-1018.

33. "The Ferrite of Bivalent Cobalt, Obtained with the Wet Process, and Its Roentgenographic Study," J. VAVRA and J. CASLAVSKY. From the Research Institute for Sound and Picture Reproduction Engineering, Prague; and the Metallurgical Institute of the Czechoslovak Academy of Sciences, Prague; pp 1018-1020.

34. "The Polarography of the Anhydride and Monomethylamide of Maleic Acid," M. MATRKOVA, A. NEMECKOVA and F. SANTAVY of the Chemical Institute at Palacky University in Olomouc; pp 1021-1024.

35. "The Coulometric Micro Determination of Hydrogen in Compounds," J. SOUCEK, Research Institute for Macromolecular Chemistry, Brno; pp 1024-1028.

36. "The Direct Titration of Nitrites with Tetravalent Lead Acetate," A. MORALES of Santiago University, Chile, and J. ZYKA of the In-

(27)

Prague, Collection of Czechoslovak Chemical Communications, Vol 27, No 4, April 1962, (continued)

stitute for Analytical Chemistry at Charles University, Prague; pp 1029-1030.

37. "Oxidimetric Determination of Trivalent Cerium Salts with Periodate," J. DOLEZAL, B. [illegible] and J. ZYKA of the Institute for Analytical Chemistry at Charles University, Prague; pp1031-1033.

38. "Organic Quantitative Analyses. Part XXXI. The Micro Determination of Carbon in Organic Substances by Means of Measuring the Electric Conductivity and by Using Co_3O_4 as a Combustion Catalyst," M. VECERA, J. LAKOMY and L. LEHAR of the Research Institute for Organic Syntheses, Pardubice-Rybitvi; pp 1033-1037.

39. "Methods of Separating Natural Substances. Part V. The Determination of Morphine in Extracts from Poppy Shells," F. HORAK, J. HOLUBEK, V. HOMBA and Z. CEKAN, Research Institute for Natural Drugs, Prague; pp 1037-1042.

40. "Spectrophotometric Determination of Haptoglobin with the Modified Connel and Smithies Method," J. PINKERA of the Transfusion Station at the [Medical] Faculty in Brno; pp 1043-1045.

41. "Gas-Fluid Chromatography. The Relation between the Desired Elution Volumes and the Molecular Refraction of Organic Compounds," L. N. VOROSTEV, Chair of Organic Technology at the Chemical-Technological Institute in Prague; pp 1045-1048.

42. "Photooxidation of an Unidentified Component of Wood Acetone. Part II. Determination of the Ratios of the Isomers of Coproporphyrin I and III, Following Paper-Chromatographic Separation," V. HOLECEK, Institute for Work Hygiene and Occupational Diseases, Prague; pp 1049-1053.

43. "Nucleic Acid Components and Their Analogues. Part XVII. Reaction of Uracil and of Its Aza Analogues with Ethylene Carbonate," M. PROCHAS and J. GUT, Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 1054-1056 (English article).

44. "Synthesis of 5-Desoxy-uridin," J. SMRT, Department of Organic Syntheses at the Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague; pp 1056-1058.

45. "Plant Substances. Part XIII. Tanacetin, the Bitter Principle of Tanacetum vulgare L.," M. SUCHY, Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague; pp 1058-1060 (English article).

ZYKA, J.

(27)

Prague, Collection of Czechoslovak Chemical Communications, Vol 27, No 4, April 1962, (continued)

stitute for Analytical Chemistry at Charles University, Prague; pp 1029-1030.

37. "Oxidimetric Determination of Trivalent Cerium Salts with Periodate," J. [illegible]AL, S. [illegible] and J. ZYKA of the Institute for Analytical Chemistry at Charles University, Prague; pp1031-1033.

38. "Organic Quantitative Analyses. Part XXXI. The Micro Determination of Carbon in Organic Substances by Means of Measuring the Electric Conductivity and by Using Co_3O_4 as a Combustion Catalyst," M. VE-CERA, J. [illegible] and L. LEZAN of the Research Institute for Organic Syntheses, [illegible]; pp 1033-1037.

39. "Methods of Separating Natural Substances. Part V. The Determination of Morphine in Extracts from Poppy Shells," P. HORAK, J. HOLUB-EK, V. [illegible] and Z. [illegible], Research Institute for Natural Drugs, Prague; pp 1037-1042.

40. "Spectrophotometric Determination of Haptoglobin with the Modified Connel and Smithies Method," J. PINTERA of the Transfusion Station at the [Medical] Faculty in Brno; pp 1043-1045.

41. "Gas-Fluid Chromatography. The Relation between the Desired Elution Volumes and the Molecular Refraction of Organic Compounds," L. N. [illegible], Chair of Organic Technology at the Chemical-Technological Institute in Prague; pp 1045-1048.

42. "Photooxidation of an Unidentified Component of Wood Acetone. Part II. Determination of the Ratios of the Isomers of Coproporphyrin I and III, Following Paper-Chromatographic Separation," V. HOLECEK, Institute for Work Hygiene and Occupational Diseases, Prague; pp 1049-1053.

43. "Nucleic Acid Components and Their Analogues. Part XVII. Reaction of Uracil and of Its Aza Analogues with Ethylene Carbonate," M. PRYSTAS and J. GUT, Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 1054-1056 (English article).

44. "Synthesis of 5-Desoxy-uridin," J. S[illegible], Department of Organic Syntheses at the Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague; pp 1056-1058.

45. "Plant Substances. Part XIII. Tanacetin, the Bitter Principle of Tanacetum vulgare L.," M. SUCHY, Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague; pp 1058-1060 (English article).

ADAM, I.; DOLEZHAL, Ya. [Doležal, J.]; ZYKA, Ya. [Zyka, J.]

Use of hydroxy acids in polarographic analysis. Report No. 1: Half-wave potentials of certain ions in solutions of sodium salts of lactic, malic, and salicylic acids. Zhur. anal. khim. 16 no. 4:395-398 Jl-Ag '61. (MIRA 14:7)

1. Charles University, Prague, Czechoslovakia.
(Polarography) (Acids, Organic)

CHANG YE-SIYA; DOLEZHALL, Yan [Dolezal, J.]; ZYKA, Yaroslav, [Zyka, J.]

Potentiometric determination of cobalt with ferricyanide in a glutamic acid medium. Zhur.anal.khim. 16 no.3:308-312 My-Je '61. (MIRA 14:6)

1. Karlov universitet, Praga (Chekhoslovakiya)
(Cobalt--Analysis)
(Potentiometric analysis)

CANG JE-SIA; DOLEZAL, J.; ZYKA, J.

Use of amino compounds in the polarography of inorganic substances. Part 9: Polargraphic behavior of zinc in the environment of glutamic acid. Coll Cz Chem 26 no.7:1768-1774 Jl '61.

1. Institut fur analytische Chemie, Karlsuniversitat, Prag.

(Amino compounds) (Zinc) (Glutamic acid)

CHANG JE-SIA; DOLEZAL, J.; ZYKA, J.

Use of amino compounds in the polarography of inorganic compounds. VIII. Polarographic behavior of bi- and trivalent cobalt in glutamic-acid medium. Coll Cz Chem 25 no.12:3143-3152 D '60.
(EEAI 10:9)

1. Institut fur analytische Chemie, Karlsuniversitat, Prag.

(Amines) (Polarigraph and polarography) (Cobalt)
(Glutamic acid)

CZECHOSLOVAKIA

CUAN, Sun-Pao; DOLEZAL, J.; KALVODA, R.; ZYKA, J.

1. Institute for Analytic Chemistry, Karlova Univ. (Institut fur analytische Chemie, Karlsuniversität); 2. J. Heyrovsky Polarographic Institute, Czechoslovak Academy of Sciences (Polarographisches Institut J. Heyrovsky, Tschechslowakische Akademie der Wissenschaften), Prague

Prague, Collection of Czechoslovak Chemical Communications, No 12, Dec 1965,

"Use of oscillographic polarography in quantitative analysis. Part 23: Experiments in melting."

4

ZYKA, VACLAV

Mineralni prameny Gottwaldovskeho kraje.

Gottwaldov, Czechoslovakia, Krajske museum, 1957, 77p.

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

Unclassified.

CATEGORY : Chemical Technology. Chemical Products and Their Applications. Chemical Processing of Natural Gases*

ABS. JOUR. : RZhKhim., No 19, 1959, No. 69235

AUTHOR : Kudelasek, V.; Zyka, V.

INSTITUTE : -

TITLE : Microelements in Czechoslovakian Crude Oils

ORIG. PUB. : Shor. vedec. praci Vysoke skoly banske Ostrave, 1958, 4, No 4, 353-359

ABSTRACT : In addition to C, H, O, S, N, P, Br, I and Mo, the presence of which in the Czechoslovakian crudes could be logically presupposed, mineral ash samples, derived from these crudes, were analyzed spectrometrically revealing the presence of Na, K, Li, Ca, Sr, Ba, Mg Al, Ti, Si, Fe, Mn, Au, Ag, Cu, Pb, Zn, Sn, Cr, Co, Sb, In, Bi, As, Ge, Ni, V, Pd, Be, Pt and Ga. Contents of the above metals in crude oils as well as in the Czechoslovakian asphalts

*and Petroleum. Motor and Rocket Fuels. Lubricants.

Card: 1/2

ZYKA, V.

"Role of oil-field waters in the accumulation and distribution of Chemical elements." In German, p. 435.

ACTA GEOLOGICA. (Magyar Tudomanyos Akademia) Budapest, Hungary, Vol. 5, No. 3/4, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959. Uncl.

ZYKA, V.

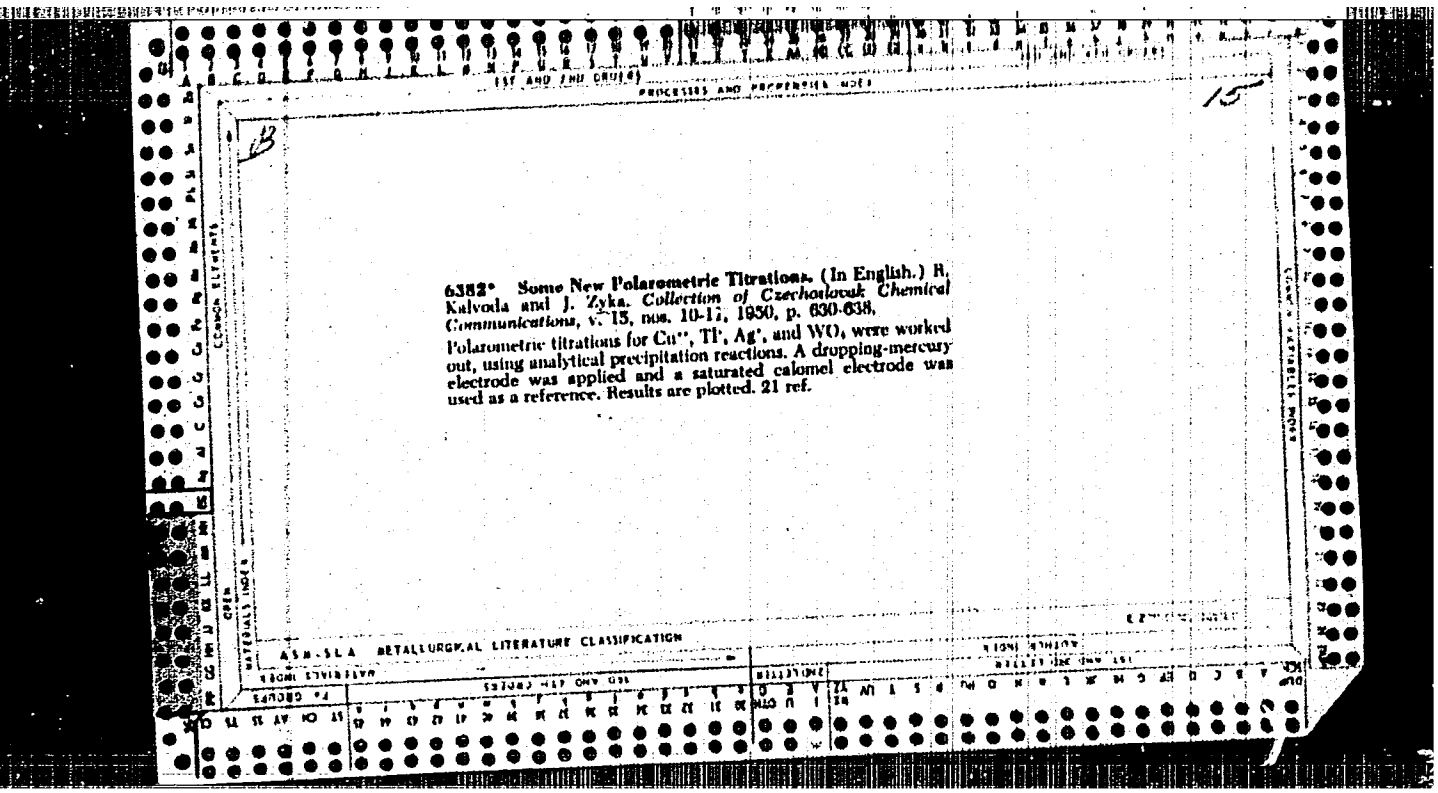
"Hydrogeochemistry and genesis of the hydrogen sulfide springs in the Gottwaldov region."

p. 129 (Geologicky Sbornik, Vol. 9, no. 1, 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9, September 1958

C.A.

Use of polarometric titrations to determine small quantities of morphine. R. Kalvoda and J. Zyka (Charles Univ., Prague). *Casopis Ceskeho Lekarnictva* 92, 134–40(1949).—Morphine can be detd. by oxidation to pseudomorphine with $K_2Cr_2O_7$ and then titrating the unreacted $K_2Cr_2O_7$ with $Pb(NO_3)_2$. This method allows the detn. of morphine over a broader concn. range than does the visual or potentiometric titration. Cf. C.A. 43, 5550d. Oldrich Sebek



6382* Some New Polarometric Titrations. (In English.) R. Kalvoda and J. Zyka. *Collection of Czechoslovak Chemical Communications*, v. 15, nos. 10-11, 1950, p. 630-638.

Polarometric titrations for Cu^{++}, Tl^{+}, Ag^{+}, and WO_4^{--} were worked out, using analytical precipitation reactions. A dropping-mercury electrode was applied and a saturated calomel electrode was used as a reference. Results are plotted. 21 ref.

The polarometric determination of hypnotics as their mercury salts. R. Kalvoda and J. Zýka (Inst. of Pharmaceutical Chem., Charles Univ., Prague, Czech.). *Časopis Českého Lékárnictva* 63, 36–40(1950).—A study was made of the quant. detn. of barbituric acid derivs. (I) by conversion to the Hg salts. Initial work involved back-titrating excess Hg with NH_4 rhodanide soln. Subsequent work showed that direct titration of I with Hg salts was more satisfactory particularly when a recording polarograph was used to detect the equivalence point. Analyses were made successfully on the following compds., either pure or in pharmaceutical prepns.: Phenylethyl-, diethyl-, isopropyl-(2-bromoallyl)-, *sec*-butyl(2-bromoallyl)-, cyclohexenylethyl-, diallyl-, 1-methylethylphenylbarbituric acids, Na isoamylethylbarbiturate, and diphenylhydantoin.

James L. Jezl

ZYKA, J.

JINDRA, A.; KALVODA, R.; ZYKA, J.

Polarometric determination of certain pharmaceutically important substances with para-diazobenzene-sulphonic acid. Cas. cesk. lek. Ved. priloha. 63 no.7-8:106-110 1950. (CIML 20:4)

ZYKA J.

CZECHOSLOVAKIA/Chemistry - Acridine Derivatives Dec 50

"Determination of Some Pharmaceutically Used Acridine Derivatives," A. Blazek, R. Kalvoda, J. Zyka, Inst Anal Chem and Inst Phar Chem, Charles U, Prague.

"Casopis Ceskeho Lekarnictva" Vol LXIII, No 9-12, pp 138-145

Developed polarometric detn methods for these substances in pure state and in tablet form, using 0.05 mol $K_2Cr_2O_7$ pptg soln mercury drop cathode and satd calomel anode with equal parts of water and acetic acid buffer soln (pH 4.8). Detd Atebrin, Rivanol, and Trypaflavin in this manner. Ploarographic examn of Atebrin, Trypaflavin, Proflavin, and Rivanol in pH 4.8 buffer soln provided reproducible waves for quant detn in concn of 10^{-5} to 10^{-3} mol in pure and in tablet form.

181T12

ZYKA J.

CZECHOSLOVAKIA/Chemistry - Analytical; Dec 50
Alkaloids

15

"Polarometric Titrations for Determination of Alkaloid Salts," P. Kalvoda, J. Zyka, Inst Phar Chem, Charles U, Prague.

"Casopis Ceskeho Lekarnictva" Vol LXIII, No 9-12, pp 219-221

Developed polarometric method for detn of mixt of alkaloid sulfates and chlorides. Used silver nitrate and lead nitrate solns for titration. Employed mercury drop electrode. Method is particularly suitable

181T15

CZECHOSLOVAKIA/Chemistry - Analytical; Dec 50
Alkaloids (Contd)

for detn of mixts of sulfate and chloride of same alkaloid and of anaesthetics in therapeutic preprns.

181T15

ZYKA, J.

KALVODA, R.; ZYKA, J.

Possibilities of determination of salol in combination with thymol and chloride of pilocarpine in combination with chloride of novocaine. Cas.cesk.lek. 63 no.11:123-125 15 June 50. (CLML 19:4)

1. Of the Institute of Pharmaceutical Chemistry, Charles University.

ZYKA, J.

New antibiotics, chloromycetin, aureomycin, and iridomyrmecin.
Cas. cesk. lek. 63 no.15:172-173 15 Aug. 1950. (CLML 20:1)

Polarographic determination of the purity of *p*-aminosalicylic acid. R. Kalvoda and I. Zýka (Charles Univ., Prague). *Radiometer Polarographica* 1, 73-6(1951).—Mix 1 ml. of an 0.1 to 0.2% soln. of *p*-aminosalicylic acid with 1 ml. of 1% H_2SO_4 and 8 ml. of water. Cool and diazotize with 0.5 ml. of a 1% soln. of KNO_2. After 3 min. add 5 ml. of a 10% soln. of K_2CO_3, and after another 2 min. add 10 drops of 0.5% soln. of gelatin. Polarograph after removing dissolved O with N. The diazotized *m*-aminophenol forms a compd. whose polarographic wave ($e/2$ = −0.09 v. *vs.* the satd. calomel electrode) is proportional to the content of *m*-aminophenol. *p*-Aminosalicylic acid is converted to β-resorcylic acid and a wave appears which may be due to nitroso-β-resorcylic acid (prior to the *m*-aminophenol wave, $e/2$ not given). 5-Aminosalicylic acid yields two readily measured waves with half-wave potentials = −0.149 and −0.772 *vs.* satd. calomel electrode. Gerald Reed

ZYKA, J. Czechoslovakia CA:47:11663

with R. KALVODA

Charles Univ., Prague

"Polarometric determination of hypnotics (barbituric acid derivatives) by means of mercury salts."

Sbornik Mezinarod. Polarog. Sjezdu Praze, 1st Congr. 1951, Pt. III, Proc., 550-4 (in Czech)

CA 7

New polarometric titrations. II. Determination of thallium with potassium iodide and potassium dichromate. R. Kalvoda and J. Zýka (Charles Univ., Prague, Czech.). *Chem. Listy* 45, 82–3(1951); cf. *C.A.* 45, 5550h.—Tl was detd. by the polarometric titration with KI (a) or $K_2Cr_2O_7$ (b) with e.m.f. −0.6 to −0.7 v. as follows: (a) Mix the 0.01–0.001 *M* Tl soln. with KNO_3 and acetone to make a vol. of 10 ml. which is 0.5 *N* in KNO_3 and contains 30% acetone. Add 0.2 ml. of 0.5% gelatin soln., introduce N_2 for 10 min. through the sample and then titrate with 0.1–0.05 *M* KI. (b) Shake up the sample which is 0.01–0.001 *M* in Tl to 50 ml., add 10% acetone, and 0.5 *N* KNO_3. **III. Determination of silver with thiocyanate, ferrocyanate, and nitroprusside.** *Ibid.* 83–4.—The polarometric titration of Ag was carried out with 0.1 *M* KSCN, $K_4[Fe(CN)_6]$, and $Na_2[Fe(CN)_5NO]$ at −0.3 to −0.5 v. The samples were made up to 50 ml. with the resulting concns. 0.05–0.0005 *M* Ag and 0.1 *N* KNO_3. **IV. Determination of tungstate with lead nitrate.** *Ibid.* 84–5.—WO_4^{--} was detd. by the polarometric titration with 0.1–0.001 *M* $Pb(NO_3)_2$ at −0.1 v. The concn. of WO_4^{--} in the sample contg. 50% EtOH and 50% 0.1 *M* KNO_3 was 0.05–0.0001 *M*.

M. Hudlický

1951

CA

11

Application of dead stop titrations in pharmaceutical analysis. I. Titration with potassium bromate. R. Kalvoda and J. Zýka (Charles Univ., Prague, Czech.). *Chem. Listy* 45, 461–2 (1951).—Electrometric titration with 0.1 *N*-$KBrO_3$ was carried out with Pt electrodes and an elec. potential of 10 mv. Increase of current at the end of the titration was indicated by a galvanometer. Content of As_2O_3 in Fowler's soln., and of Sb in K Sb tartrate were dtd. in HCl soln. Ascorbic acid and dihydroxycodeinone were successfully titrated, whereas the method failed in the case of *p*-aminosalicylic acid, resorcinol, and other phenols.

M. Hudlický

C 11

17

Polarographic estimation of purity of p-aminosalicylic acid. R. Kalvoda and J. Zýka (Univ. Prague). *Casopis. Lékaru. Ceskych.* 1, 21–6 (1952).—A method for the detn. of m-aminophenol (I), a toxic product produced by the decarboxylation of p-aminosalicylic acid (II), is worked out. By diazotization, II is converted to β-resorcylic acid (III); and diazotized I in alk. medium is converted to a compd., the diffusion current of which can be measured. The height of this current corresponds to the concn. of I and is not influenced by the presence of III. Another polarographic method is described for the detection of the therapeutic inactive δ-aminosalicylic acid.

Dagmar Hubálková

CA

17

The use of polarometric titrations in pharmaceutical analysis. III. The determination of glycerophosphates by means of lead nitrate. R. Kalvoda and J. Zýka (Univ. Prague). *Českoslov. farm.* 1, 98–100(1952); cf. C.A. 46, 4171c.—The described method is based on the pptn. of glycerophosphate with a 0.1 *M* soln. of $Pb(NO_3)_2$ in 30% acetone made alk. to thymolphthalein. Dagmar Hubíková

JINDRA, A.; PALKOVA, M.; ZYKA, J.

Electrophotometric studies on certain antipyretics; determination of antipyrine. Cesk. farm. 1 no.8:350-355 Sept 1952. (CIML 23:2)

1. Of the Institute of Pharmaceutical Chemistry of Charles University, Prague.

KALVODA, R.; ZYKA, J.

Use of polarometric titration in pharmacological analysis; mercurimetric determination of salicylates. Cesk. farm. 1 no.9:515-518 1952.
(CIML 23:4)

1. Of the Institute of Pharmacological Chemistry of Charles University, Prague.

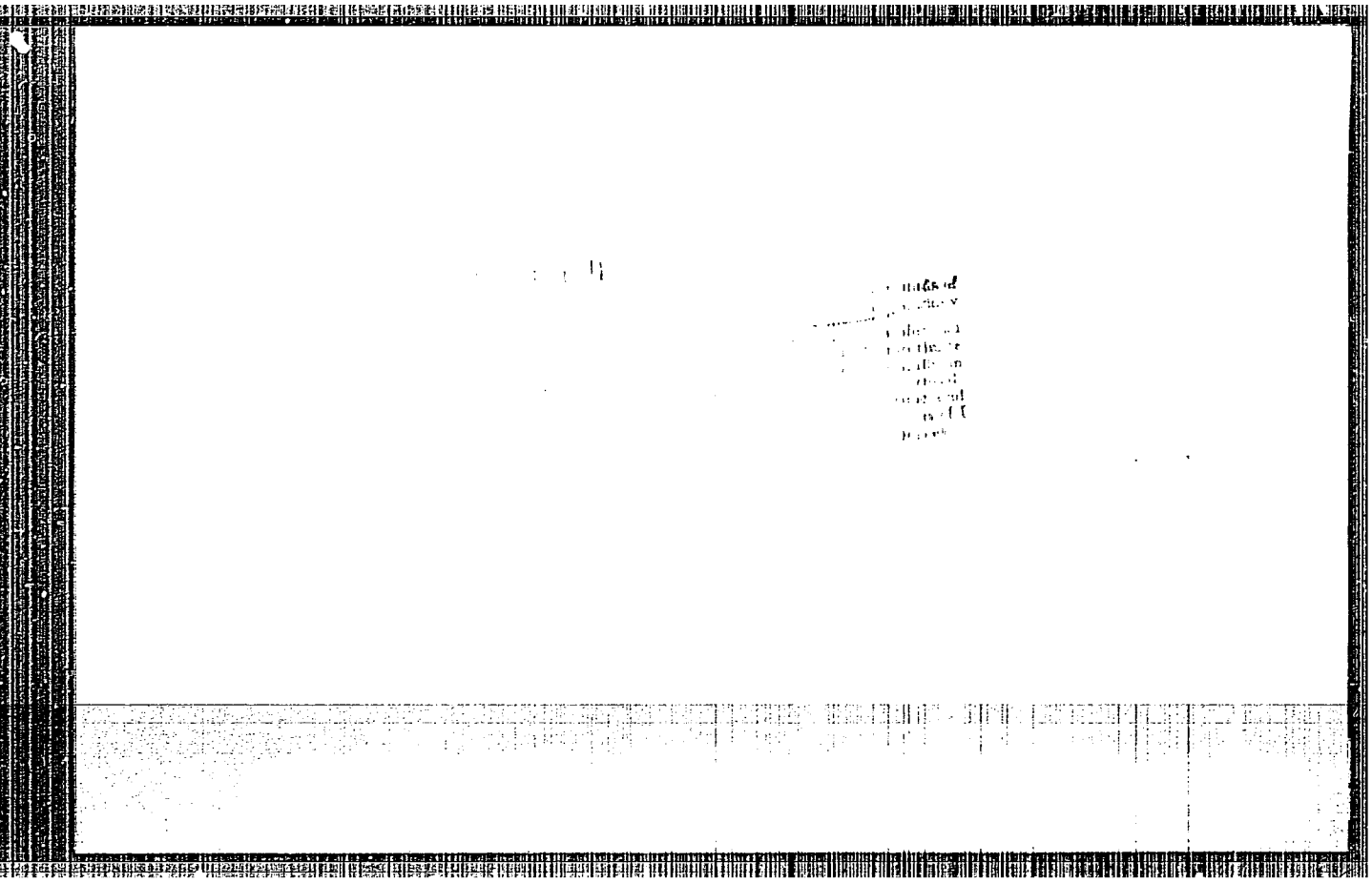
ZYKA, JAROSLAW Czechoslovakia CA:47:11664

with ROBERT KALVODA

Karls-Univ., Prague.

"Polarographic titrations in pharmaceutical analysis and control."

Pharmazie 7, 535-42 (1952)



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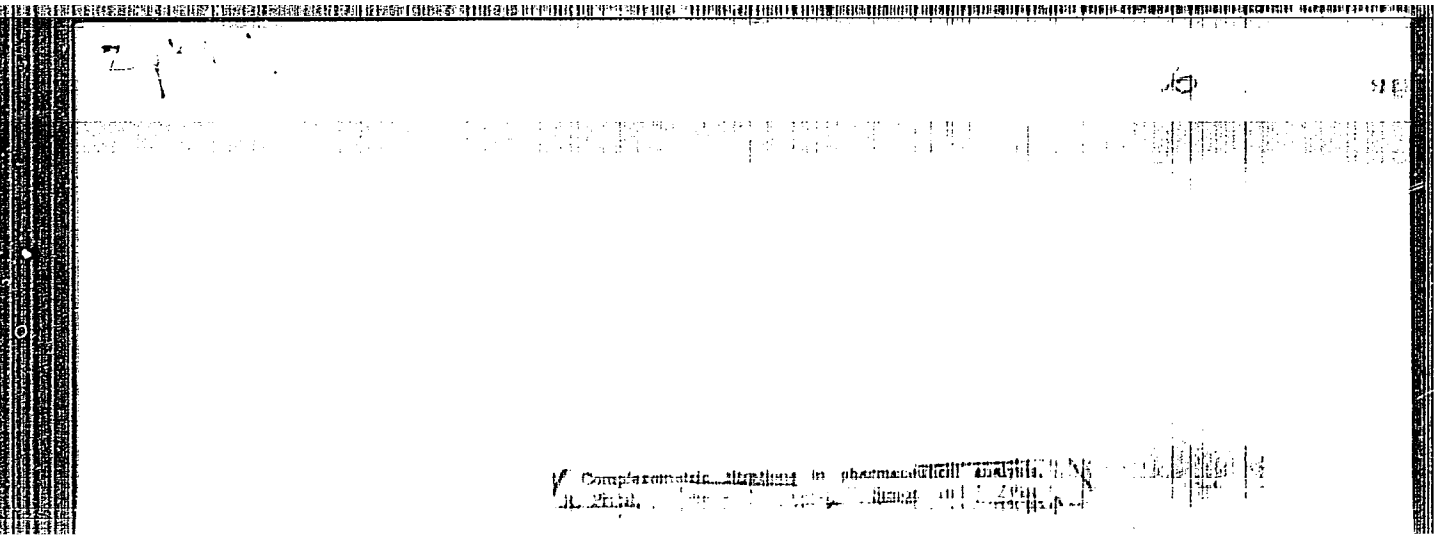
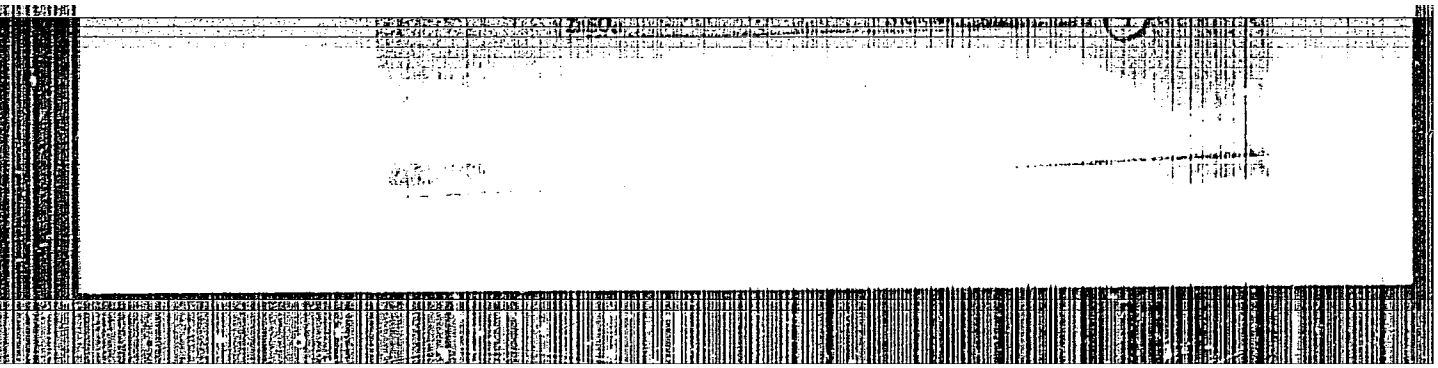
CA 17

Application of polarometric titrations in pharmaceutical analysis. I. Mercurimetric estimation of antipyrine. R. Kalvoda and J. Zýka (Charles Univ., Prague, Czech.). *Chem. Listy* 46, 59(1952).—The estn. of antipyrine is based on measurement of a diffusion current produced by excess of $Hg(ClO_4)_2$ during the titration with 0.05 *N* $Hg(ClO_4)_2$ of antipyrine. The current is measured on the polarograph with a dropping-Hg electrode. The method is suitable for analysis of pharmaceuticals. **II. Estimation of 4-butyl-1,2-diphenyl-3,5 pyrazolidinedione in pharmaceuticals.** *Ibid.* 57.—A sample 0.05-0.3 g. of 4-butyl-1,2-diphenyl-3,5-pyrazolidinedione (Irgapyrine) is neutralized with NaOH, dild. to 40-50 ml., and titrated with 0.05 *N* $Hg(ClO_4)_2$. Excess of $Hg(ClO_4)_2$ is indicated by the diffusion current measured between dropping-Hg cathode and satd. calomel anode.

M. Hudlický





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ZYKA, J.

Member of the Czechoslovakian Academy of Science prof. Oldrich Tomicek.
Cesk. farm. 2 no.1:3-4 Jan 1953. (CLML 25:1)

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Pharmaceuticals, Cosmetics, and Perfumes

The use of polarimetric titrations in pharmaceutical analysis. VI. The possibility of determination of tartrates by the titration with lead salts. R. Kalvoda and J. Zýka (Univ. Prague). *Českoslov. farm.* 2, 14-15(1953); cf. *C.A.* 47, 5070*i*.—Tartaric acid and some tartrates were polarimetrically titrated with 0.1*N* $Pb(NO_3)_2$, with a dropping Hg electrode as a cathode. D. Hubíková

CIHALIK, J.;DOLEZAL, J.;SIMON, V.;ZYKA, J.

Determination of thiopental with silver nitrate solution. Cesk. farm. 2 no.2:43-47 Feb 1953. (CIML 24:4)

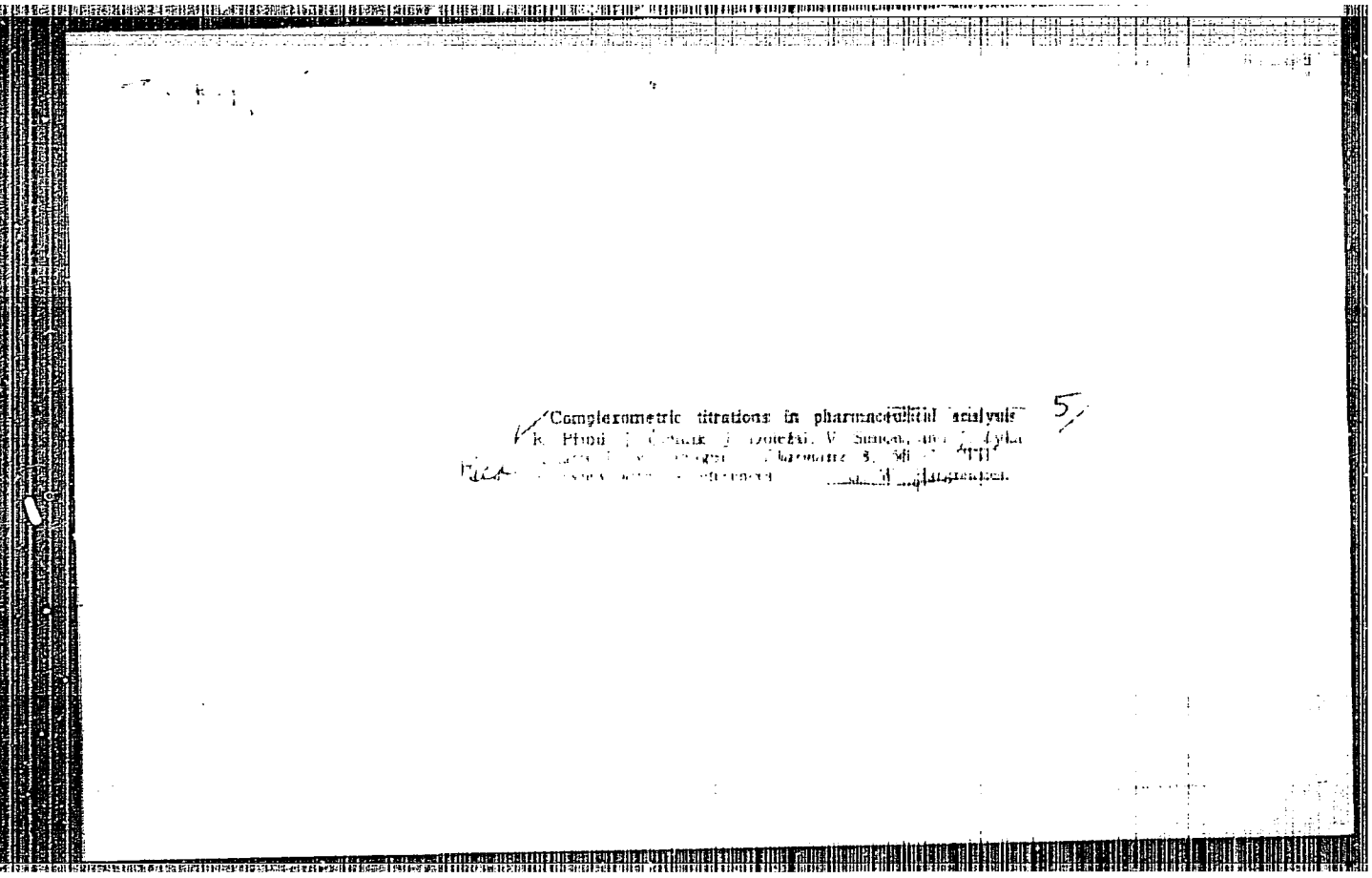
1. Of the Institute of Analytical Chemistry of Charles University, Prague.

BULTAS, Z.; JINDRA, A.; ZYKA, J.

Electrophotometric determination of 8-quinolinol and its pharmaceutical derivatives. Cesk. farm. 2 no.3:80-84 Mar 1953. (CLML 24:4)

1. Of the Institute of Pharmaceutical Chemistry of Charles University, Prague.

Complexometric titration in pharmaceutical analysis. V. Determination of magnesium. K. Pribil, J. Cihalik, J. Doležal, V. Šimon and J. Zýka. *Českosl. Farmac.* 1963, 12 (6), 181–185. (In Czech) *Zh. Khim.* 1954, Abstr. No. 30 359. Magnesium sulphate or chloride is titrated [illegible] the addition of 5 [illegible] are then added. Magnesium [illegible] titrates with [illegible]



Complexometric titrations in pharmaceutical analysis

JAROSLAV, ZYKA

ZYKA, Jaroslav

(6)

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Inorganic Chemistry

Polarographic and polarometric study of some noble metals. III. Complexes formed by palladium and gold in solutions of certain amines. Oldřich Tomíček, Jaroslav Čihalík, Jan Doležal, Vladimír Šimon, and Jaroslav Zýka (Charles Univ., Prague). *Chem. Listy* 47, 303-6 (1953); cf. C.A. 47, 1113c.—The behavior of the Au^{+++} and Pd^{++} ions in Et_2NH, $H_2NCH_2CH_2NH_2$, $NH(CH_2CH_2NH_2)_2$, $N(CH_2CH_2OH)_3$, C_5H_5N, and $H_2NCH_2CH_2NH_2.HOCO(CHOH)_2COOH$ (I) solns. has been studied. For the polarographic detn. of Pd in the presence of Au, the 1 *M* soln. of I is recommended. B. Erdős

IF
11-5-54

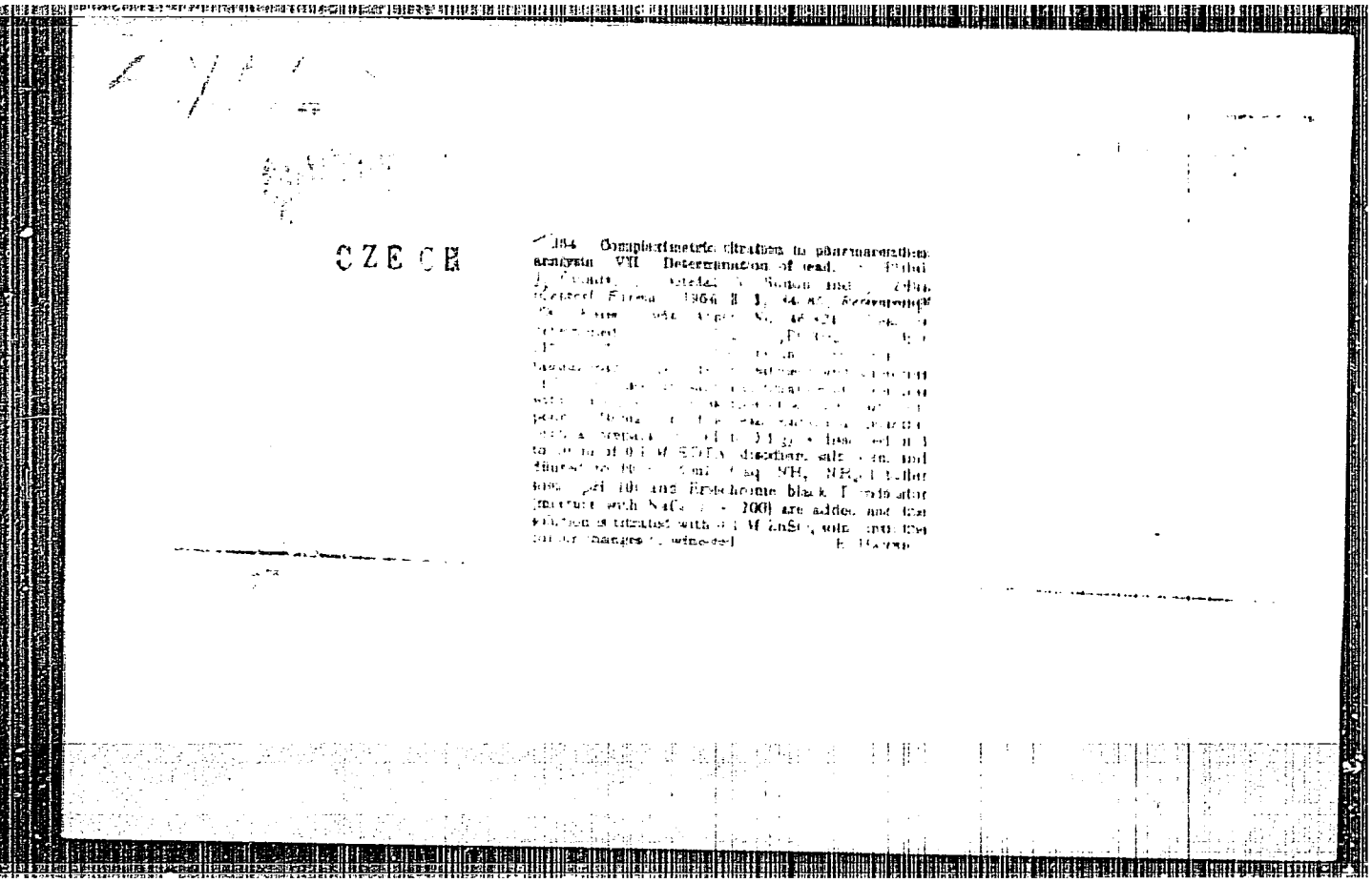
ZYKA, Jaroslav

Chemical Abst.
Vol. 48
Apr. 10, 1954
Electrochemistry

13

Polarographic and polarometric study of some noble metals. IV. Polarographic behavior of gold and palladium in solutions of ethylenediamine tartrate. Přemysl Beran, Jaroslav Čihalík, Jan Doležal, Vladimír Šimon, and Jaroslav Zýka (Karlova univ., Prague, Czech.). *Chem. Listy* 47, 1308-14(1953); cf. *C.A.* 48, 3182e.—The half-wave potential of complex Au^{++} ions depends on the concn. of ethylenediamine tartrate. The tartrate anion does not take part in the Au^{++} complex (I) formation. I is suppressed by the presence of Cl^- ions. The $E_{1/2}$ of complex Pd^{++} ions is −0.65 v. against the satd. Hg_2Cl_2 electrode. The formation of the Pd^{++} complex is substantially faster than that of I. V. Polarographic behavior of gold, palladium, and other metals in complex-forming electrolytes. *Ibid.* 1315-22.—The polarographic behavior of Au, Pd, Pb, Cd, Cu, Bi, As, Sb, Sn, W, Mo, U, Fe, Cr, Co, Ni, Mn, and Zn in various mixts. of ethylenediamine tartrate with the complexons I, II, and IV (*C.A.* 46, 10060d) is summarized in a table of half-wave potentials and in a chart of polarographic spectra. Au, Pd, and other components of dental alloys can be detd. simultaneously. E. Erdős

NF



CZECH

← Tišl, O.

CIHALIK, J.; DOLEZAL, J.; Simon, V.; SERY, V.; ZYKA, J.

Polarometric titration in pharmaceutic analysis. 7. Determination of cyanides in aqua laurocerasi. Cesk. farm. 3 no.4:136-137 Ap '54.

1. Z Ustavu pro chemii analytickou Karlovy university v Praze.
(CYANIDES, determination,
*polarometric titration, in aqua laurocerasi)

32

4141

PRIBIL, R.; CIHALIK, J.; DOLAZAL, J.; SIMON, V.; ZYKA, J.

Complexometric titration in pharmaceutic analysis. VII. Determination of insulin zinc. Cesk. farm. 3 no.7:242-244 Sept 54.

1. Z Ustavu pro chemii analytickou Karlovy university v Praze. Z Vyzkumneho ustavu pro farmacii a biochemii v Praze.
(INSULIN, determination,
zinc insulin, complex titration)

226. Colorimetric determination of Conliben (thiacetazone). F Icha, R Kalvoda and J Lýka (*Českosl. Farmac.*, 1954, 3 [7] 244–246 *Referativnyi Zh. Khim.* 1955 Abstr. No. 7 808). Thiacetazone is hydrolysed with HCl [illegible] aldehyde formed [illegible] 2:4-dinitrophenylhydrazine in methanol. The hydrazone soln. is made alkaline with [illegible] methanolic NaOH soln. and the [illegible] [illegible]

ZYKA, J.

CZECH

Colorimetric determination of formaldehyde and vanillin. R. Kas... and J. Zýka (Charles Univ., Prague). ...ndeta 23, 17... For the determination of HCHO and vanillin the reaction with MeOH soln. of 2,4-dinitrophenylhydrazine (I) has been used. To 1 ml. sample in MeOH (MeOH purified with I) add 1 ml. MeOH, 1 ml. satd. MeOH soln. of I, and 2 drops concd. HCl. Heat the soln. at 50-60° for an hr. After cooling, add 5 ml. 10% KOH soln. in MeOH soln. and 14 ml. MeOH. Measure the resulting wine-red color at 525 mμ. Lambert-Beer's law holds for 10⁻⁵ to 5 × 10⁻⁴ M concn. K. Macek

JAROSLAV ZÝKA

10

(5)

Polarographic and polarometric study of some noble metals. VI. Selective polarographic determination of gold. Jaroslav Čihalík, Jan Doležal, Vladimír Šimon, and Jaroslav Zýka (Karlova Univ., Prague, Czech.). *Chem. Listy* 48, 28–31(1954); cf. *C.A.* 48, 3813*f*.—The 0.6*M*-ethylenediamine tartrate and 0.1*M*-$Na_4P_2O_7$ soln. is a suitable electrolyte for the selective detn. of Au. Some other metals can be detd. simultaneously. A graph of polarographic spectra and a table of half-wave potentials of 22 metals in this soln. are given. E. Erdös—

ZYKA, J.

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(3)

Volumetric determinations in strongly alkaline media. VIII. Titration of the peroxide with potassium ferricyanide. J. Vulterin and J. Zyka (Karlova Univ., Prague, Czech.). *Chem. Listy* 48, 919-21(1954); cf. *C.A.* 44, 9300e; 46, 9782g.—The volumetric detn. of H_2O_2 is based on its oxidation to O with $K_3Fe(CN)_6$ in strongly alk. soln. Approx. 2% soln. of H_2O_2 (0.5 ml.) is filled to 50 ml. with 30% KOH and titrated with 0.1 *N* $K_3Fe(CN)_6$ with potentiometric detn. of the end point. The potential drop is approx. 400 mv., potential of inflexion +150 mv.

M. Hudlický

11-5-54

ZYKA, J.; MICHAL, J.

"Tetraethylthiuram Disulfide As An Analytic Reagent. I. New Specific Reaction for Copper", P. 915, (CHEMICKE LISTY, Vol. 48, No. 6, June 1954, Praha, Czech.)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. 3, March 1955, Uncl.

CZ [illegible]

315 Tetraethylthiuram disulphide as an analytical reagent. II. Photometric determination of [illegible] [illegible] and [illegible] [illegible], 1956, 43 (1), 1011-1040.—The basis of the present method for the photometric determination of Cu in the presence of other metals is the formation of an intense yellow-brown coloration, with an absorption max. at 44[illegible] mμ, when Cu reacts with tetraethylthiuram disulphide (I). In the presence of Hg^{++} an excess of the reagent should be used, for Hg also forms a stable, though colourless, complex with I. Coloured cations, if present in high concn. [illegible] interfere. The following procedure is recommended for the determination of Cu in the presence of an excess of Fe. Removal of Fe [illegible] [illegible]
[illegible]