

CZECHOSLOVAKIA

BERAN, J.; SPOVICEK, Z.; X-ray Department (Rentgenove Oddeleni) Head (Vedouci) Dr J. VYSKOCIL, and Department of Pediatrics of Newborn (Detsko-Kojenecke Oddeleni) Head (Vedouci) Dr Z. SPOVICEK, Okresni Hospital (Nemocnice), Liberec.

"Occlusion of Cerebral Arteries in Childhood."

Prague, Ceskoslovenska Neurologie, Vol 29, No 1, Jul 66, pp 276-279

CZECHOSLOVAKIA

HRBEK, Jan; KOMENDA, S.; SIROKA, A.; ~~BERAN, J.~~; BIRKAS, O.; Department of Pathological Physiology and Department of Medical Physics, Medical Faculty, Palacky University, Olomouc. [Original version not given].

"The Effect of Scopolamine and Physostigmine on Artificially Conditioned Verbal Associations."

Prague, Activitas Nervosa Superior, Vol 8, No 4, Nov 66, pp

Psychiatry

5

CZECHOSLOVAKIA

ZAPLETALEK, M.; STRNAD, M.; KOMENDA, S.; VACKOVA, M.; BARBORAKOVA, E.; STEPANOVA, M.; HRBEK, Jan; BERAN, J.; SIROKA, A.; Psychiatric Clinic, Palacky University, Olomouc; Psychiatric Hospital, Sternberk. [Original version not given].

"Alimonazine, Chlordiazepoxide, Meprobamate, and Placebo in Anxious Depression Therapy."

Prague, Activitas Nervosa Superior, Vol 8, No 4, Nov 66, pp 437 - 438

BERAN, KAREL

Chemical Abst.  
Vol. 48  
Apr. 10, 1954  
Biological Chemistry

Formation of ethyl acetate by *Hansenula anomala*. 1.  
Cultivation methods. Arnold Kleinzeller and Karel Beran  
(Vysoká škola chem., Prag, Czech.). *Chem. Listy* 47,  
447-54 (1953).—Cultivation of *H. anomala* on substrate  
contg. 8% glucose and 20% yeast autolyzate yielded 1.56%  
AcOEt, i.e. 32.3% based on glucose. The optimum amt.  
of glucose was 8%, optimum time 7.8 days. M. Hrdlicky



Beran, Karel

BERAN, KAREL

Transglucosylation activity of enzymes prepared from the fungus, *Aspergillus niger* (Mitsunobu, Beran and Hrdlka, Czech. Acad. Sci. Prague, *Collection Microbiol. T. 2*, 1967) (1968). Incubation of solutions with amt. of 4.0 mg per ml of (I) (cf. C.A. 60, 4200c) in acetate buffer at 30° for 78 min. yielded considerable amounts of (II). After 18 hrs. only II was found, as the other sugars had been hydrolyzed. Cellulose under similar conditions yielded II and an unidentified oligosaccharide which formed a spot lying between those of sucrose and III on paper chromatograms. Trehalose, maltose, lactose, sucrose, methyl-mannose, methyl-glucose and glucose-1-phosphate did not yield any reducing oligosaccharides. Incubation of 80% sols. of IV yielded normal amounts of reducing oligosaccharides with a 1,3-glycosidic linkage. Formation of reducing oligosaccharides with a 1,3-glycosidic linkage can proceed, in addition to transglucosylation reaction from the

2

Berax, K

3199. New gasometric method for the estimation of sugars by fermentation in the presence of 2:4-dinitrophenol. B. Berax and M. Burja (Biol. Inst. Czech. Acad. Sci., Prague, Czechoslovakia). Coll. Czech. Chem. Commun., 1966, 31 (7), 408-411. —

Approximate quantitative estimation of glucose and maltose are made by measuring the CO<sub>2</sub> produced by fermenting the sugars with yeast in the presence of 2:4-dinitrophenol. When *Saccharomyces cerevisiae* is the yeast employed, the optimum concn. of 2:4-dinitrophenol is  $7.5 \times 10^{-3}$  M. A new form of fermentometer is described that simplifies the procedure and reduces the time of the analysis.

J. H. WILSON

2



CZECHOSLOVAKIA / Chemical Technology. Fermentation      H-27  
Industry.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 79258.

Author : Beran, K., Burger, M., Zelenka, S.

Inst : Not given.

Title : New Data Obtained in the Process of Saccharifi-  
cation of Potato Mash with Amylolytic Prepara-  
tions. Pilot Plant Experiments with Mold Prep-  
arations in Producing Alcohol From Potatoes.

Orig Pub: Ceskosl. Microbiol.. 1956. 1. No 5. 193-203

CZECHOSLOVAKIA / Chemical Technology. Fermentation      H-27  
Industry.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 79258.

Abstract: air-dried. The saccharification of mash with an 8-day old brewing green malt was used as a control. An experimental set-up is described. One hundred forty kilograms of potatoes containing 20% starch was boiled to a pulp in an autoclave in the usual way and then was passed into a brewing tank into which amylolytic preparations in an amount of 17.6% per starch weight were added to the mash.

CZECHOSLOVAKIA / Chemical Technology. Fermentation      H-27  
Industry.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 79258.

Abstract: for 72 hours. In control experiments 15.9% of malt was added (per weight of the starch) and the saccharification was carried out for one hour at 49°C. The saccharification of potato mash with the mixture of *Asp. niger* and *Asp. oryzae* or with *Asp. niger* proceeded without any difficulties, and more rapidly than in the control experiments. The mash, in which the saccharification was

10  
Mechanism of the action of  
Effect of temperature of  
by fungal enzyme per  
and Burg (Col. abs.  
1959). Hydrolysis  
gives maltose (II), glucose (III),  
maltotriose (IV) which shows  
action (V) produces mostly D  
showing the action of  $\alpha$ -amylase  
the formation of fermentable sugars.  
I and 450 cal./mole for V. (1959)  
55°; the ratios of the enzyme activities  
to the activities at 20° are 6.0 and 2.34 for I and V.

usiness of Aspergillus Niger.  
the activation of starch hy-  
perations. (Kunitz Burger  
id, Prague). Chou Lidy  
starch with A. niger (I)  
and, at higher temps., small  
e, and traces of panose and  
the action of maltase. A.  
less III, and still less II.  
Activation energies for  
are 13,650 cal./mole for  
optimum temps. are 65° and  
to the activities at optimum temps.

12-11-67 NAF/

The mechanism of action of maltase of *Aspergillus niger*.  
 M. Hudlický and Karel Berg (Czechoslovakia). *Chem. Listy* 50, 1821-4 (1956).  
 et. C.A. 50, 1821-4 (1956). Maltase was found responsible for the  
 formation of oligosaccharides containing  $\beta$ -glucosidic bonds.  
 The optimum temp. of this reaction is 55°. An enzymic  
 prep. from *A. niger* forms parose and humaltose, and  
 traces of maltotriose; that of *A. oryzae* forms maltotriose,  
 and in further stages, parose and humaltose. Presence of  
 a special enzyme is made responsible for the formation of  
 maltotriose by transglucosylation of maltose is suggested.  
 M. Hudlický

CZECHOSLOVAKIA / Farm Animals: General Problems.

Q-1

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54705.

Author : Beran K., Burger M., Zelenka S.

Inst : ~~NOT given.~~

Title : New Findings in the Use of Fungous Amylolytic Preparations for the Saccharification of Potato Mash.

Orig Pub: Folia biol. (Ceskosl.), 1957, 3, No 2, 89-100.

BERN, K.

"Formation of ethyl acetate by yeasts of the yeast Hansenula anomala. II.  
Effect of trace elements, vitamins, and casein hydrolyzates. III.  
Metabolic curves and partial carbon balance of esters. In German."

p. 132 (COLLECTION OF CZECHOSLOVAK MEDICAL COMMUNICATIONS. SBORNÍK  
ČESKOSLOVATSKÝCH LÉKÁRSKÝCH PRÁCE. -- Praha, Czechoslovakia.)  
Vol. 22, No. 1, Feb. 1957

BERAN, K.; HOSPODKA, J.; HAUBA, L.

The effect of start wort on the initial period of baker's yeast fermentation. Folia microbiol 6 no.2:86-93 '61. (YEAI 10:5)

1. Department of Microbiology, Institute of Biology, Czechoslovak Academy of Sciences and United Distilleries, Prague 6.  
(WORT) (YEAST) (FERMENTATION)



MALEK, I.; BERAN, K.

Continuous cultivation of microorganisms. A review. Folia microbiol.  
7 no.6:388-411 '62.

1. Department of Technical Microbiology, Institute of Microbiology,  
Czechoslovak Academy of Sciences, Prague 6.  
(BACTERIOLOGICAL TECHNIQS)

BERAN, Karel

The 2d International Symposium on the Continuous Culture of  
Microorganisms. Vestnik CSAV 71 no.5:523-528 '62.

STREIBLOVA, Eva ; BERAN, K.

Types of Multiplication Scars in Yeasts, Demonstrated by Fluorescence  
Microscopy. Folia microbiol. 8 no. 4:221-7 J1. '63

1. Department of Technical Microbiology, Institute of Microbiology,  
Czechoslovak Academy of Sciences, Prague 6  
(YEASTS) (SACCHAROMYCES) (MICROSCOPY, FLUORESCENCE)

LIEBLOVA, Jitka; BERAN, K.; STREIBLOVA, Eva

Fractionation of a population of *Saccharomyces cerevisiae* yeasts  
by centrifugation in a Dextran gradient. Folia microbiol. (Praha)  
9 no.4:205-213 15 Je '64

1. Department of Technical Microbiology, Institute of Micro-  
biology, Czechoslovak Academy of Sciences, Prague 6.

REHACEK, J.; BERAN, K.

Effect of orotic acid on growth and far synthesis in the yeast  
*Rhodotorula gracilis*. Folia microbiol. (Praha) 9 no.4:214-217  
15 Je'64

1. Department of Technical Microbiology, Institute of Micro-  
biology, Czechoslovak Academy of Sciences, Prague 6.

HIRAN, F.; STREIBLOVA, Eva; FOKORNY, V.

Ultrastructure of the surface of multiple scars in *Saccharomyces ludwigii*. *Folia microbiol. (Praha)* 9 no.4:358-360 W 1964.

1. Department of Technical Microbiology and Laboratory of Electron Microscopy, Institute of Microbiology, Czechoslovak Academy of Sciences, Prague 6.

BERAN, Karel; HOLEC, Stanislav (Praha, CSRS)

Development of the construction of apartment houses in  
Czechoslovakia. Przegł budowl i bud mieszk: 35 no.8:339-341  
Ag'63.

89372

Z/038/60/000/011/001/006  
1201/A026

2/1200

AUTHOR:

Beran, Jaroslav

TITLE:

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

PERIODICAL:

Jaderná energie, 1960, No. 11, pp. 361 - 366

TEXT:

The purpose of this paper is to calculate, under simplified conditions, the dependence on time of the corrosion-product concentration in the



89372

Z/038/60/000/011/001/006  
A201/A026

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

= correction for the deposition of corrosion products in the circuit defined as the imaginary quantity of gas which is 100% purified by the deposition, (tons/hour):  $\eta =$

= efficiency of the cleaning station defined by the expression  $\eta = \frac{G_2}{G_1}$ , where  $G_2$  is the imaginary quantity of gas which is 100% purified in the cleaning station per hour;  $c$  = concentration of corrosion products in the gas behind the steam generator (kg/ton);  $c'$  = concentration of corrosion products in the gas behind the cleaning station and before the blending with the main gas stream (kg/ton)

89372

Z/038/60/000/011/001/006  
A201/A026

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

entire gas content to pass through the circuit, i.e. during one gas cycle. The gas-cycle time is given by the equation

$$T = \frac{A}{G_1} \quad (1).$$

After this period the concentration increases rapidly and then remains constant for another cycle. Table 1 lists the expression for the dust concentration in the gas for the first three periods and the n-period. All these expressions have been

89372

Z/038/60/000/011/001/006  
A201/A026

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

Since  $\alpha$  is less than 1, the expression  $\sum_{k=n-1}^{\infty} \alpha^k$  is the sum of a convergent geometrical series in which the first member is 1 and  $q = \alpha$ . Consequently, equation (3) can be modified to

$$c_n = \frac{K}{G_1} \frac{1 - \alpha^n}{1 - \alpha} \quad (3a)$$

In case that  $n \rightarrow \infty$ , the concentration approaches the limit value  $c_{\infty}$  which is

89372

Z/038/60/000/011/001/006

A201/AC26

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

By a similar procedure we can obtain expressions for the corrosion-product concentration behind the cleaning station and before the blending of both streams; after the blending of both streams before Point 3; and behind Point 3. Equations (5), (6), (7) define the limit values of these concentrations

$$c_{\text{lim}}^I = \frac{K}{G_1} \frac{1}{1 - \alpha} (1 - \eta) \quad (5)$$

$$c_{\text{lim}}^{II} = \frac{K}{\alpha} \frac{1}{1 - \eta \frac{G_2}{\alpha}} \quad (6)$$

89372

Z/038/50/000/011/001/006  
A201/A026

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

$$n = \frac{\log \left( 1 - \frac{p}{100} \right)}{\log \alpha} \quad (8)$$

where p is the percentage of the limiting dust concentration in the gas behind the steam generator. Since the time which elapses from the beginning of the time-dependence investigation until the beginning of the n-period  $\tau_n$ , is a multiple of the

89372  
Z/038/60/000/011/001/005  
A201/A026

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

To illustrate the significance of the equation (10), a curve of the dependence  $\varphi^0$  on  $p$  is shown in Figure 2 for values chosen arbitrarily:  $G_1 = 1,000$  tons/hour;  $G_2 = 60$  tons/hour;  $Z = 20$  tons/hour;  $A = 100$  tons;  $\eta_1 = 1$ . Figure 3 shows the time graph of  $p$  during several initial cycles of the primary-circuit coolant. It can be seen from these diagrams that at the chosen parameters the limit concentration is reached within a few hours. (Editor: V. Rýpar) There are 3 figures and 1 table.

ASSOCIATION: Leninovy závody (Lenin Works) in Plzeň

89372

Z/038/60/000/011/001/006  
A201/A025

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

Figure 1: Schematic diagram of the primary circuit.

1-Reactor, 2-steam generator, 3-point at which dust is deposited, 4-gas cleaning station

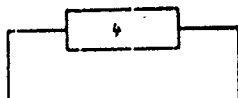
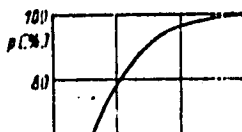


Figure 2: Dependence of dust concentration on time



X

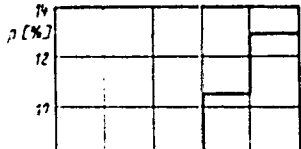
89372

Z/038/60/000/011/001/006

A201/11026

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

Figure 3: Dependence of dust concentration on the number of cycles of the coolant gas content





89372

Z/038/60/000/011/001/006  
A201/1.026

On the Problem of Pollution of the Primary-Circuit Gas by Corrosion Products

Table 1: (Column 1) time period, (Column 2) number of periods, (Column 3) dust concentration

T - IT	n	$c_1 = c_1^n + c_1 = (n + 1) c_1$ $c_2' = (1 - q) c_1 = (1 - q) (n + 1) c_1$ $c_2'' = \left(1 - q \frac{a_2}{a_1}\right) c_1 = \left(1 - q \frac{a_2}{a_1}\right) (n + 1) c_1$
--------	---	--

BERAN, Ladislav

"Introduction to the theory of lattices" by Gabor Szasz.  
Reviewed by Ladislav Beran. Pokroky mat fyz astr 8 no.6:  
349 '63.

118

CA

Artificially iodinated proteins II. Preparation of  
 iodinated casein M. Hatan, T. A. Kistur and Z. Patai  
 (Charles Univ., Prague) *Collection Czechoslov. Chem. Commun.* 63  
 1318 (1968) English summary. By using a modification  
 of Remick and Turner's method, casein was successfully  
 hydrolyzed by treatment with 1.2N NaOH in 1.5%

CA

11 B

*Paper chromatography of vitamin B<sub>12</sub>. Miroslav Dvornik and  
Miloslav Šicho (Pharm. Works, Prague, Czechoslovakia).  
Lody 63, 134-6 (1951). Vitamin B<sub>12</sub> in the paper chromatogram  
was transformed to thiochrome by treatment with NaOH and  
K<sub>2</sub>Fe(CN)<sub>6</sub> and was detected by ultraviolet radiation (blue  
fluorescence). R<sub>f</sub> values for thiochrome in various solvents  
are listed: BuOH-H<sub>2</sub>O 0.05, BuOH-AcOH-H<sub>2</sub>O 0.16, C<sub>2</sub>H<sub>5</sub>N-H<sub>2</sub>O  
0.78, C<sub>2</sub>H<sub>5</sub>N-BuOH-H<sub>2</sub>O 0.51, collidine-lutidine-H<sub>2</sub>O 0.31, and PhOH-H<sub>2</sub>O 0.0.*

KOSTIR, J. V.; HYBAR, D. J.; OULEHLA, B.; HALL, I. M.; BRYAN, M.

Chromatographic determination of ergotamine and ergotoxine. Cesk.  
farm. 1 no. 11-12:621-625 1952. (CJML 24:1)

1. Of the Research Institute for Pharmacy and Biochemistry and of  
Biochemistry of Charles University, Prague.

*BERAN, M*

Czechoslovakia/Analytical Chemistry - Analysis of Organic Substances 4-3

Abs Jour : Referat Chem - Hladova, 1-3, 1957, 3012

Author : Semensky, M. and Beran, M.

Inst : Not given

Title : Ergot Alkaloids. II. Comparison of Neutral and Acid Salts of ergotamine and Tryptamine, Used in the Production of Certain Pharmaceutical Preparations.

Orig. Publ.: **Cesk. farm. 4 no.2 pp 85-86 Mar 55.**

Abstract : A comparative study has been made of normal ergotamine tartrate meeting the requirements of the German Pharmacopoeia, normal ergotamine tartrate meeting the requirements of the British Pharmacopoeia, and a synthetic compound normal ergotamine

BEFAN, M.; VOLF, M.

"Recalculation of the thermal dilatation coefficient for another temperature interval. p.

279."

SIIKATY. Praha, Czechoslovakia. Vol. 2, no. 3, 1958.

BERAN, M.

"Glass with a silicon dioxide content of more than 96 per cent; its products and use."

p. 10 (Sklar A Keramik) Vol. 8, no. 1, Jan. 1958.  
Prague, Czechoslovakia





CZECHOSLOVAKIA

BERAN, M. and SEMOSKY, N. Pharmaceutical and Biochemical  
Research Institute, Prague. (Vyzkumny ustav pro farmaci a bi-  
chemii, Praha.)

Ergot Alkaloids, XXIII. A contribution to the Preparation of  
Ergosine.

Prague, Ceskoslovenska Farmacie, vol 11, No 10, Dec 66, pp 533-  
534.

LAPITSKIY, A.V.; GELETSEANU, I.; BERAN, M.

Complex formation of thorium with some hydroxycarboxylic  
acids. Radiokhimiya 4, no.6:672-677 '62. (MIRA 16:1)  
(Thorium compounds) (Acids, Organic) (Ion exchange)

EWI(m)/BDS--AFFTC/ASD--ES

L 10779-63

ACCESSION NR: AP3003778

Z/1000/63/028/006/1603/1606

AUTHOR: Havelka, S.; Beran, M.

TITLE: Radiometric determination of plutonium in the organic phases of the Purex processes in the presence of a large excess of uranium

SOURCE: Collection of Czechoslovak chemical communications, v. 20, no. 6, 1963, 1603-1606

TOPIC TAGS: Purex process, Maack method, analysis, plutonium, uranium.

53  
52

L 10779-63

ACCESSION NR: AP3003778

the presence of 0.2 M  $\text{HNO}_3$  and 0.35 M  $\text{O}_2(\text{NO}_3)_2$ , oxidation with a sodium nitrite solution, and extraction into a 0.5-M phenyltrifluoroacetone solution in xylene. The method makes it possible to determine Pu in  $10^{-6}$  M solutions with an accuracy of  $\pm 3\%$ . Orig. art. has: 1 figure.

ASSOCIATION: Institut für Kernforschung, Tschechoslowakische Akademie der Wissenschaften, Rez bei Prag (Institut for Nuclear Research, Czechoslovak Academy of Sciences)

  
CZECHOSLOVAKIA

BERAN, M.; HAVELKA, S.

Institute of Nuclear Research of the Czechoslovak Academy  
of Sciences (Institut für Kernforschung, Tschechoslowakische  
Akademie der Wissenschaften), Rez bei Prague (for both)

Prague, Collection of Czechoslovak Chemical Communications,  
No 9, 1963, pp 2510-2512

BERAN, Milos; HAVELKA, Stanislav

Reduction reextraction of plutonium with uranium sulfate and  
aminosulfonate from 30 per cent tributylphosphate solution.  
Jaderna energie 9 no.5:158 My '63.

1. Ustav jaderného výzkumu, Československá akademie věd, Řez  
u Prahy.

ACCESSION NR: AP4035366

Z/0034/64/000/005/0379/0379

AUTHOR: Kirs, M. (Engineer, Candidate of sciences); Beran, M. (Graduate chemist);  
Calotka, R. (Graduate chemist); Havelka, S. (Engineer, Candidate of sciences)

TITLE: Method of extractive separation of uranium, plutonium and zirconium

SOURCE: Hutnicko listy, no. 5, 1964, 379

TOPIC TAGS: extractive separation, uranium, plutonium, zirconium, nitrate,  
nitric acid, masking agent, polyphenol, hydroxyl group, carbonyl group, sulfon



ACCESSION NR: AP4035366

With the use of the same concentrations of masking agents, the procedure according to the invention yields 3--10 times more effective separation of the above-mentioned elements than with the oxalic acid heretofore used.

ASSOCIATION: none

SUBMITTED: 23Mar63

DATE ACQ: 20May64

ENCL: 00

SUB CODE: GC

NO REF SOV: 000

OTHER: 000

SMID, M.; BERAN, M.

Ergot pigments. Cesk. farm. 14 no.1:21-25    Ja '65

1. Vyzkumny ustav pro farmacii a biochemii, Praha.

Beran, O.

Beran, O. Preparations for the winter season in building and construction. p. 441.

Vol. 4, no. 12, Dec. 1956

POZEMNI STAVBY

TECHNOLOGY

Czechoslovakia

BERAN, O.

The tasks of mechanization in the building industry.

F. 1 (Mechanizace) Vol 4, No. 1, Jan. 1957, Czechoslovakia

BIERAN, Oldrich

Fulfillment of our tasks in the building industry through industrialization. Nova technika no.4:1,5-148 Ap '60.

1. Ministr stavebnictvi.

BERAN, Odrich

---

The main task in the construction industries is the control of effectiveness. Inz stavby 9 no.9:321-324. S '61.

1. Ministr vystavby.

BERAN, Fremysl

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

13  
⑥

Polarographic and potentiometric study of some noble metals. IV. Polarographic behavior of gold and palladium in solutions of ethylenediamine tartrate. Právník, Jaroslav Čihák, Jan Doležal, Vladimír Šimon, and Jaroslav Zita (Karlova univ., Prague, Czech. Slov. Univ. 47, 1900-14 (1953); *C. C. A.* 44, 3122).—The half-wave potential of complex Au<sup>3+</sup> ions depends on the concn. of ethylenediamine tartrate. The tartrate anion does not take part in the Au<sup>3+</sup> complex (D formation). I is suppressed by the presence of Cl<sup>-</sup> ions. The *v<sub>1/2</sub>* of complex Pd<sup>2+</sup> ions is -0.65 v. against the satd. Hg<sub>2</sub>Cl<sub>2</sub> electrode. The formation of the Pd<sup>2+</sup> 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, N, Mo, U, Fe, Cr, Co, Ni, Mn, and Zn in various mixts. of ethylenediamine tartrate with the complexes I, II, and IV (*C. C. A.* 44, 10906) is summarized in a table of half-wave potentials and in a chart of polarographic spectra. Au, Pd, and other complexes

BERAN, P.

~~Detection of gold in the presence of palladium, platinum,  
and other metals. J. Bolezal and P. Beran. *Chem. Listy* 44: 418 (1944)  
Univ. Prague, Czech. *Chem. Listy* 44: 418 (1944)~~  
A blue-violet or red-violet ppt. of Au is formed by treating  
Au<sup>+++</sup> with a soln. prepd. by dissolving 8.85 g. ascorbic  
acid, 0.1 g. complexon III, and 1 ml. HClO<sub>4</sub> in one l. H<sub>2</sub>O.  
Addn. of 0.1M complexon prior to the application of the re-  
ducing reagent is necessary to detect Au in the presence of  
Pt or Pd which otherwise would be reduced and volatilized as  
ferrocene. M. Hradky



BERAN, PREMYSL

CZECHOSLOVAKIA/Physical Chemistry - Electrochemistry

B-12

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 3973

Author : Beran Premysl, Dolesal Jan

Title : Polarographic and Polarometric Study of Some Precious Metals. VII. On Polarographic Behavior of Platinum.

Orig Pub : Chem. listy, 1956, 50, No 3, 349-359; Sb. chekhovl. khim. robot. 1956, 21, No 4, 808-819

CZECHOSLOVAKIA/Physical Chemistry - Electrochemistry

E-12

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 3973

The solution is brought up to 10 ml and subjected to polarography.

Communication VI, see RZhKhim, 1954, 43475.

BERAN, P.

CZECHOSLOVAKIA/Analytical Chemistry - Analysis of Inorganic Substances. E-2

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 14201.

Author : Dolezal J., Beran P.

Inst :

Title : Rapid Methods of Analysis of Metals and Metallic Raw Materials.  
II. Determination of Antimony in Unconcentrated Ore and in Concentrates.

Orig Pub: Sb. chekhosl. khim. rabot, 1957, 22, No 3, 727-731.

*BERAN, P.*

CZECHOSLOVAKIA / Physical Chemistry Electrochemistry. B

Abs Jour: R. f Zhur-Khimiya, No 11, 1958, 35563

Author : Beran Premysl, Dolcikal Jan.

Inst : Not given

Title : Polarographic and Polarometric Study of Certain  
Precious Metals. VIII. Oscillographic Behavior  
of Certain Metals of the Platinum and Gold Group.

CZECHOSLOVAKIA / Physical Chemistry Electrochemistry.      B

Abs Jour: Ref Zhur-Khimiya, No 11, 1958, 35563

Abstract: The depolarization of Au(3+) ions appear most clearly in one M. NaOH. In order to locate Pd ions together with Ir ions it is most suitable to approach one M of an ethylene diamine sulfate solution. The depolarization of Pt(2+) in this solution gives rise to a sharp peak on the anode section of the curve, while Pt(4+) shows only trace of such a peak. Similar peaks can also be

CZECHOSLOVAKIA / Physical Chemistry Electrochemistry.    B

Abs Jour: Ref Zhur-Khimiya, No 11, 1958, 35563

Abstract: of hydrogen. Two waves can be noted on the polarographic curves in acid solutions. The sum altitude of the two waves corresponds to the 2-electron reaction  $[Rh(3+) \rightarrow Rh(+)]$ . The wave corresponding to the segregation of the  $(Rh(+)) \rightarrow$

BERAN, P  
CZECHOSLOVAKIA/Analytic Chemistry. Analysis of Inorganic      E  
Substances.

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73730.

Author : Premysl Beran, Jan Dolezal.

Inst :

Title : Application of Oscillographic Polarography to  
Quantitative Analysis. VIII. Determination of  
Palladium, Rhodium and Iridium Using Ethylene-  
diamine Sulfate as Electrolyte.

Orig Pub: Chem. listy, 1957, 51, No 12, 2243-2246.

CZECHOSLOVAKIA/*Analytic Chemistry. Analysis of Inorganic  
Substances.*

E

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73730.

taneous presence, as well as in the presence of  
Pt and Au. The ratios, at which these metals can  
still be determined in a mixture are as follows:  
Ir : Rh = 1 : 1, and Pt (Rh or Ir) : Au = 1 : 100.  
See report VII in RZhKhim, 1958, 49943.



COUNTRY : Czechoslovakia  
AUTHOR : J. Sedláček, J. Sedláček, J. Sedláček  
ASS. JOUR. : Radiat. Environ. Biophys., 1977, No. 2, 150-155  
ARTICLE : 150-155  
TITLE : Use of Radioanalytic Polarography in Qualitative Analysis. VIII. Determination of Palladium, Rhodium and Iridium, with the Use of  
REF. PUB. : Collect. Czechoslov. chem. commun., 1958, 23, No. 1, 1-15

COUNTRY : Czechoslovakia E-2  
 CATEGORY :  
 ANAL. JOUR. : RZKO-m., No. 1959, No. 4(157)  
 AUTHOR : Beran, P.; Tolenzal, J.  
 TITLE : Use of Oscillographic Polarography in Quantitative Analysis. IX. Detection and Determination of Rhodium in Presence of Platinum. \*  
 ORIG. REP. : Chem. Listy, 1958, 52, No 12, 2103-2104; Collect. Czechosl. Chem. Commun., 1959, 24, ..  
 ABSTRACT : It was found that in 0.1 M HCl and 0.6 M HCl solutions, in the presence of Rh ions, characteristic  $(dE/dt)_{max}$  curves are observed at the anode portion of (dE/dt)-E curves.

COUNTRY : Czechoslovakia  
CATEGORY :

E-2

ABS. JOUR. : RZKhin., no. 1959, No. 36157

AUTHOR :  
INVT. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Communication VIII see RZKhin., 1958,  
No 22, 73730; 1959, No 7, 23068.

Petr Zuman.

BERAN, P.; VLCEK, A.A.

Polarographic control of substitution reactions of inorganic complexes.  
I. Reaction of  $\text{AuCl}_4$  ions with ethylenediamine. In German. Coll. Cz. Chem.  
24 no.11:3572-3578 N '51. (ZAI 9:5)

1. Institut für analytische Chemie, Karlsuniversität und Polarographisches Institut, Tschechoslowakische Akademie der Wissenschaften, Prag.  
(Polarograph and polarography) (Inorganic compounds) (Ions)  
(Ethylenediamine) (Gold chlorides)

BERAN, Premysl

"Oscillopolarographic Behavior of Platinum Metals," Chemicke Zvesti, Bratislava, No. 11-12, Nov-Dec 60, p. 735.

Affiliation: Department of Analytical Chemistry, Faculty of Natural Sciences of Charles University, Prague.

BERAN, Premysl; BERKA, Antonin

Determining the sodium hydroxide, sodium carbonate and sodium chromate in the aqueous extract of chromium melt. Chem pruz 13 no.1:20-22 Ja '63.

1. Katedra analytické chemie, Karlova universita, Praha.

BERAN, Premysl, dr.; BURIAN, Milos; DOLEZAL, Jan, doc., dr.

Use of oscillographic polarography in quantitative analysis.  
Pt. 16. Chem zvesti 17 no.7:517-523 '63.

1. Katedra analytické chemie, Karlová university Praha 2,  
Albertov 2030.

BERAN, P.; DOLEZAL, J.; PACAK, P.

Use of oscillographic polarography in quantitative analysis.  
Pt.22. Chem zvesti 18 no.5/6.333-340 '64.

1. Institute of Analytical Chemistry of the Faculty of Natural  
Sciences, Charles University, Prague.



REZ, Evzen; BERAN, Pavel

Automatic submerged arc welding of chambers. Zvaranie 13  
no.11:332-335 N '64.

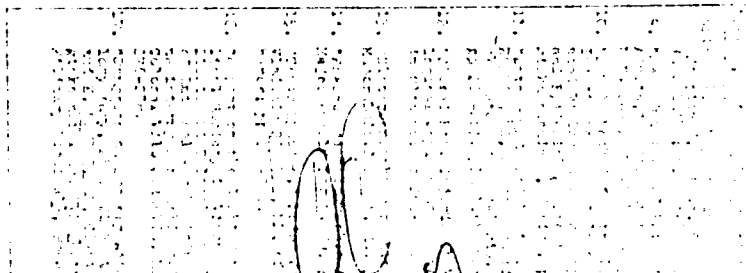
1. První brněnská strojírna, Zavody Klementa Gottwalda, Brno.

BERAN, R.

Electricity, a driving force in industry, p. 20.

TECHNIKA VYKUPU, MLYNARSTVI A PEKARSTVI. (Ministerstvo potravinarskeho  
prumyslu a vykupu zemedelskych vyrobku a Sruseni mlynu a pekaren)  
Praha, Czechoslovakia, Vol. 5, no. 1, Jan. 1959.

BERAN, R.



BERAN, Rudolf, podplukovník, MUDr.

Evaluation of preventive EEG examination for military drivers in our district for a 4-year period. Voj. zdrav. listy 34 no.2: 48-50 kř 165

1. Vojenská nemocnice v Olomouci, nervové oddelení.

ACC NR: AP6023132

SOURCE CCDS: CZ/0060/65/000/005/0189/0192

AUTHOR: Beran, Rudolf

ORG: Department for Diseases of the Nervous System, Military Hospital, Olomouc  
(Vojenska nemocnice, Nervove oddeleni)

TITLE: Evaluation of spinal disorders <sup>22</sup> from the point of view of fitness for military service

SOURCE: Vojenske zdravotnicke listy, no. 5, 1965, 189-192

TOPIC TAGS: physical fitness, military medicine, x ray investigation, bone disease, skeletal mechanics, diagnostic medicine

ACC NR: AP6023132

sible success of a thorough medical treatment and treat those who can be cured  
so that they may serve in the Army after treatment. [Based on author's Eng. abst.]  
[JPRS]

SUB CODE: 06 / SUM DATE: none

BERAN, V.

"Designing core boxes with consideration of static values of wood."

p. 364 (Stevarenstvi) Vol. 5, no. 12, Dec. 1957  
Prague, Czechoslovakia

SRIN, V.

"Gandhi, his ideal and his leadership."

p. 13 (Jagran Samaja, Vol. 4, No. 3, March 1977, India, Chandernagore)



BERAN, V.

A new tool for cutting hard plastics. Slevarenatvi 13 no.2:76  
P '65.

BERAN, V.

"New binder for the production of wooden foundry molds." p. 65.

SLEVARENSTVI. (MINISTERSTVO TEZNEHO STROJIRENSTVI A CESKOSLOVENSKA VEDECKA  
TECHNICKA SPOLECNOST PRO HUTNICTVI A SLEVARENSTVI). Praha, Czechoslovakia,  
Vol. 7, no. 2, Feb. 1959.

BERAN, V.

The use of neoculinic Spofa in eye surgery. *Ceska oftal.* 31  
no.2:90-96. Br '65.

1. Oční klinika lékařské fakulty Karlovy University v Plzni  
(prednosta: prof. dr. R. Knobloch, DrSc.).

EXCERPTA MEDICA Sec 12 Vol 13/6 Ophthalmology June 59

928. EYE COMPLICATIONS IN HODGKIN'S DISEASE - Ocnf komplikace u Hodgkinovy choroby - Beran V1. Ocnf Klin., Pizeň - CSL.OPTHAL. 1958, 14/4 (306-310)

Report on a case of developed Hodgkin's paraganuloma, showing subconjunctival localization of granulomatous tissue, obstruction of lacrimal ducts by granulation tissue, posterior cortical cataract from cachexia, blood effusions into all eyelids and retinal haemorrhages. Histological findings from subconjunctival tissue were not characteristic enough to allow the diagnosis of Hodgkin's disease. The systemic findings, however, may be taken for a manifestation of this disease.

Zahn - Prague (XII, 5, 8, 16)

BERAN, Vaclav, inz., C.Sc.

Plan for ensuring production of sufficient quantity of  
alfalfa seeds for sowing in Czechoslovakia. Vestnik CSAZV  
9 no.2:96-100 '62.

BERAN, Vaclav, inz., C. Sc.

Effect of sowing time and method on the development and yield of perennial fodder plants. Věstník vyzk. zemědel. 9, no. 11: 503-513 '62.

1. Ústřední výzkumný ústav rostlinné výroby, Praha-Ruzyně.

BERAN, Vaclav

New modeling machines at the Hanover Fair. Slovarenstvi  
11 no.10:450 0 '63.

BERAN, Vaclav

New type belt sander for mold making. Slevarenatvi 11 no.3:124-125  
Mr '63.

1. Zavody V.I. Lenina, Plzen.



BERAN, Vaclav, inz. CSc.

Effect of the undersowing with alfalfa-grass mixtures and the time of their sowing on the yield and quality of the winter wheat cover crop. Rost výroba 10 no. 7:665-674 J1 '64.

Influence of desiccation on the yield and quality of alfalfa seed and the subsequent effect of desiccation on plants. Ibid.:695-708

1. Central Research Institute of Plant Production, Ruzyně.

BERAN, Vladimir

Retinal detachment operated in the ophthalmological clinic in Plzen.  
Cesk. ofth. 15 no.6:453-467 D '59

1. Oční klinika v Plzni, přednosta prof. MUDr. R. Knobloch.  
(RETINAL DETACHMENT surg.)

BERAN, Vladimir

A metal foreign body in the ciliary body present during 39 years  
without irritation or visual disorders. Cesk.ofth.17 no.1:33-35  
Ja '61.

1. Očni klinika v Plzni, přednosta prof. MUDr. R.Knobloch.  
(UVEA for bodies)

BERAN, Vladimir

Expulsive hemorrhage and the cataract. Cesk.ofth.17 no.1:  
45-54 Ja '61.

1. Oční klinika v Plzni, přednosta prof. MUDr. R. Knobloch.  
(CATARACT EXTRACTION compl)  
(WEATHER)

BEPAN, Vladimír

Latent nystagmus. Cesk. oftal. 18 no.3:224-225 My '62.

1. Oční klinika lek. fak. Karlovy university v Pízni, předn. prof.  
MUDr. R. Knobloch, DrSc.  
(NYSTAGMUS diag)

BERAN, V.

Effect of modern treatment of perforating injuries on the terminal function of the eye. *Cesk. oftal.* 20 no.3:219-222 My '64.

1. Očni klinika lékařské fakulty KU [Karlova Universita] v Plzni (prednosta prof. dr. R. Knobloch, DrSc.).

BERAN, Z.

BERAN, Z. Significance of local windbreaks in the 1st century. p. 303.

Vol. 11, no. 10, Dec. 1956  
OCHRANA PŘÍRODY  
AGRICULTURE  
Czechoslovakia

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

2996. EFFECT OF METHIONINE AND ITS DERIVATIVES ON THE ACTIVITY OF ISOLATED MUSCLE (SARTORIUS) (Russian text). Beran Z. *Instit. of Physiol., Czechoslovak Acad. of Scis, Prague - PHYSIOL. BOHEM.* 1958. 7/3 (329-334) Tables 3 Illus. 4

The findings of Koshtoyant et al. on the importance of SH groups in the rhythmic activity of isolated frog muscle were confirmed. Methionine sulphoxide (I) and methionine sulphoximine (II) activated frog muscle which was inexcitable as a result of previous prolonged stimulation (it did not respond to indirect stimulation on rinsing with Ringer's solution). I and II prolonged the period for which muscle responded by contraction to indirect stimulation. Their influence was evident from the increase in amplitude of the contractions, and they prolonged the period for which the muscle reacted to indirect stimulation. Methionine itself does not affect isolated muscle in this way.

Hahn - Prague



1950, 1; 1951, 1; 1952, 1.

Problem of protection of interests of citizens . . . .

1950, 1. (Administrative structure of the Republic)  
Prav, Czechoslovakia - Vol. 10, No. 10, Oct. 1950.

Monthly list of East European newspapers, (1950), No. 10, Vol. 10, No. 10, Dec. 1950  
Uncl.

BERANEK, B.

"Some properties of the second partial derivation according to the vertical variable  $z$  of the scalar field defined through the harmonic function.  $H(x,y,z)$ "

p. 13 (Prace) No. 31/33, 1956  
Prague, Czechoslovakia

BERANEK, B. (Czechoslovakia); KADLECÍK, J. (Czechoslovakia)

Some characteristics of geophysical prospecting in the Neogene strata of the Carpathian basin in Czechoslovakia. Geofiz kozl 13 no.2:163-168 '64.

