

SEDLACEK, B. A.

CZECHOSLOVAKIA / Chemical Technology. Fats and Oils. H-25  
Waxes. Soaps. Detergents. Flotation  
Agents.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 79175.

Author : Sedlacek, B. A. J.

Inst : Not given.

Title : The Technique of Iodometric Determination of  
Peroxides in Fats.

Orig Pub: Prumysl potraviny, 1955, 6, No 12, 610-611.

Abstract: The determination of peroxides in fats is carried out in the same way as the iodometric determination of  $H_2O_2$ , but with the application of organic solvents (chloroform, acetic acid, carbon tetrachloride). The determination is conducted in a flask equipped with a condenser, the inlet of air is prevented by a Bunsen valve. The reaction takes place in an atmosphere of  $CO_2$ .

Card 1/2

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CZECHOSLOVAKIA / Chemical Technology. Chemical Products H-25  
and Their Application. Fats and Oils.  
Waxes. Soaps. Detergents. Flotation  
Agents.

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 2633.

Author : Sedlacek, B.

Inst : Not given.

Title : Determination of Peroxide by Modified Method of  
Sedlacek.

Orig Pub: Prumysl potravin, 1956, 7, No 1, 35-36.

Abstract: No abstract.

Card 1/1

70

SEDLACEK, BOHUSLAV A.J

Evaluation of certain iodometric methods for the determination of peroxide number in fats and modifications of these methods. Bohuslav A. J. Sedlacek, Rudolf Rybin, Jan M. Raab, and ~~Janos Burtoncek~~ (Zaklad HIG., Prague). *Rozniky Panskoveho Zakladu Hig.* 7, 293-302 (1958) (English summary).—A review of existing methods is followed by

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Best method (as recommended by ...)  
is used with a reflux condenser and Hunsen valve. The  
latter does not permit the entrance of air during cooling.  
The reaction in the distn. flask is carried out in CO<sub>2</sub> atm.  
which is formed from AcOH and NaHCO<sub>3</sub>. In case AcOH  
or CHCl<sub>3</sub> are contaminated with impurities possessing re-  
ducing properties, 1 soln. in CHCl<sub>3</sub> must be added. The  
addn. of the latter soln. should be until the blank tests cor-  
respond to 0.2-0.5 ml. of 0.002N Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub>. Water should  
be prepd. in the same way. Such procedure insures accurate  
results. 16 references. F. L. Hendel

*M. J. J.*

SEDLACEK, BOHUSLAV

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Application. Food Industry. H-28

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 16119.

Author : Sedlacek Bohuslav, Rybin Rudolf

Inst :

Title : Vitaminization of Dry Milk with L-Ascorbic Acid.

Orig Pub: Vyziva lidu, 1956, 11, No 11, 156-158.

Abstract: 200-250 mg l-ascorbic acid (I) and 100 mg Na-citrate are added per liter of milk which is then spray-dried and packed in cardboard boxes. During drying about 10% of the added I are destroyed. On prolonged storage of the vitaminized dry milk no change in milk fats and no taste deterioration take place due to the antioxidant properties of I. The reconstituted milk is recommended for infant feeding.

Card : 1/1

SEDLACEK, B.

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Application. Fats and Oils. Waxes. Soaps and Detergents. Flotation Agents. H-25

Abstr Jour: Ref Zhur-Khin., No 2, 1959, 6159.

Author : Sedlacek, B; Rybin, B; Tichc, A.

Inst :

Title : Determination of Peroxide Numbers and Other Methods of Estimation of Degree of Rancidity of Fats.

Orig Pub: Zh. gigiyeny, epidemiol., mikrobiol. i immunol. (Czechosl.), 1957, 1, No 1, 88-90.

Abstract: Comparative studies of alterations in fats during their storage by various chemical methods and organoleptic estimations were carried out. The following was tested: modified method of determination of peroxide numbers (PNs),

Card : 1/3

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Application. Fats and Oils. Waxes. Soaps and Detergents. Flotation Agents. H-25

Abs Jour: Ref Zhur-Khin., No 2, 1959, 6159.

exception of the deodorized peanut butter, which is rancid at  $PH = 15$ , soybean oil, which is rancid at  $PH = 10$ , and cottonseed oil, which is rancid at  $PH = 5$ . Acidity not always characterizes the degree of rancidity of fats, it is most applicable to the analysis of cow butter. Kreis's test is important only, if the result is positive. Schmalzuss's test is useful for the establishing of a strong rancidity, and Keren's [transliteration from Russian] test is not very reliable. Colorimetric methods yielded good results. - A. Yemel'yanov.

Card : 3/3

SEDLACEK, E.

Comparison of the colorimetric rhodanide method with two iodometric methods to determine peroxide numbers in fats. p.258.  
(Prumysl Potravin, Vol. 8, No. 5, 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) IC. Vol. 6, No. 9, Sept. 1957. Uncl.



CZECHOSLOVAKIA / Chemical Technology. Chemical Prod- H-25  
ucts and Their Applications. Fats  
and Oils. Waxes. Soaps and Deterg-  
ents. Flotation Agents.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 9873.

Author : Sodlcek, B.

Inst :

Not given.

Title : Hygienic Evaluation of Rancidity in Fats and  
Some Food Products Containing Fats.

Orig Pub: Coskosl. hig., 1958, 3, No 2-3, 194-196.

Abstract: It was found that the peroxide number, acid  
number, and calorimetric determination by the  
use of thiobarbituric acid and diphenylhydra-  
zine are useful not only to determine the degree  
of rancidity of the more important fats, but  
also for the evaluation of the degree of rancid-

Card 1/2

EXCERPTA MEDICA Sec 17 Vol 5/10 Public Health Oct 59

3190. FORTIFICATION OF MILK POWDER WITH ASCORBIC ACID - Sedlá-  
ček B. Inst. of Hyg., Prague - J. HYG. EPIDEM. MICROBIOL. IMMUNOL.  
(Prague) 1958, 11/3 (383-384)

Results of this investigation have proved that fortification of milk powder with  
L-ascorbic acid is rational, because the utilization of ascorbic acid administered  
in this form is good and losses during production and proper storage are small.

BENES, V.; SEDIACEK, B.A.J.

Study of the toxicity of oxidized oils. J. Hyg. Epidem., Praha 3 no.1;  
96-105 1959.

1. Hygiene-Institut, Prag. V. Benes, Ustav hygieny, Praha 12, Srobarova  
48. Czechoslovakia.

(OILS, toxicity  
oxidized oils (Ger))

SEDLACEK, B.

Interaction of albumins. XX. Interrupted heat denaturation of human serum albumin. Coll Cz Chem 25 no.4:1008-1019 Ap '60. (EEAI 9:12)

1. Physikalisch-chemische Abteilung, Chemisches Institut,  
Tschechoslowakische Akademie der Wissenschaften, Prag.  
(Albumins) (Denaturation) (Serum albumin)

MUNK, P.; KRATOCHVIL, P.; SEDLACEK, B.

Interaction of albumins. XIV. Effect of external conditions on thermal denaturation and aggregation of human serum albumin. Coll Cz chem 26 no.2:352-369 F '61. (EEAI 10:9)

1. Institut für makromolekulare Chemie, Tschechoslowakische Akademie der Wissenschaften, Prag.

(Serum albumin)

KRATOCHVIL, P.; MUNK, P.; SEDLACEK, B.

Interaction of albumins. XXVII. Study of the effect of temperature and pH on the thermal denaturation of human serum albumin by means of isoelectric precipitation. Coll Cz chem 26 no.6:1499-1504  
Je '61.

1. Institut für makromolekulare Chemie, Tschechoslowakische Akademie der Wissenschaften, Prag.

(Serum albumin) (Precipitation(Chemistry))

SEDLACEK, B.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences, Prague

Sources: Prague, Collection of Czechoslovak Chemical Communications, Vol 26, No 11, November 1961, pp 2806-2812

Data: "On Protein Interactions. XXIX. Kinetics of Aggregation of Denatured Proteins."

Authors:

KRATOCHVIL, P  
MUNK, P  
SEDLACEK, B

MUNK, P.; KRATOCHVIL, P.; SEDLACEK, B.

Behavior of macromolecules in solution. Part 2; Relation between viscosity, molecular weight, and radius of gyration. Coll Cz Chem 26 no.12:2992-3002 D '61.

1. Institute of Macromolecular Chemistry, Csechoslovak Academy of Science, Prague.



ZAJIC, Boris, inz.; SEDLACEK, Bohuslav A.J., RNDr., C.Sc.

Changes in the fat content of debittered groundnuts processed for their use in confectionery. Prum potravin 13 no.4:211-213 Ap '62.

1. Vyzkumne pracoviste narodniho podniku Ceske cokoladovny, Praha (for Zajic). 2. Ustav pro vyzkum vyzivy lidu, Praha (for Sedlacek).

PLACER, Z.; SEDLACEK, B.; ROUBAL, Z.; SLABOCHOVA, Z.; HROMADKOVA, V.

The problem of fats from the biochemical viewpoint. Cesk. gastroent.  
vyz. 16 no.3/4:171-177 Ap '62.

1. Ustav pro vyzkum vyzivy lidu v Praze, reditel doc. MUDr. J. Masek,  
DrSc.

(NUTRITION)

(ADIPOSE TISSUE)

(LIPID METABOLISM)

KRATOCHVÍL, P; MUNK, P; ŠTOKROVÁ, S; ŠPONAR, J; SEDLÁČEK, B.

Czechoslovakia

Institute of Macromolecular Chemistry and Institute of  
Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Science -- Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications,  
No 4, 1963, pp 972-983

"Protein Interactions. XXXVIII. Retardation of Aggrega-  
tion of Heat-Denatured Human Serum Albumin by  
Previous Heating."

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KRATOCHVIL, P.; MUNK, P.; STOKROVA, S.; SPONAR, J.; SEDLACEK, B.

Protein interactions. Pt. 38. Coll Cz Chem 28 no.4:972-984  
Ap '63.

1. Institute of Macromolecular Chemistry and Institute of  
Organic Chemistry and Biochemistry, Czechoslovak Academy of  
Sciences, Prague.

SEDLACEK, B.A.J.; VAVRIKOVA, J.; ZVOLANKOVA, K.

Problems of excessive heating of fats in communal catering. Cesk.  
hyg. 10 no.1&12-26 F '65.

1. Ustav pro vyzkum vyzivy lidu, Praha.

CZECHOSLOVAKIA

SEDLACEK, B; VAVRIKOVA, J; ZVOLANKOVA, K.

Institute for Nutritional Research (Ustav pro vyzkum  
vyzivy lidu), Prague (for all)

Prague, Ceskoslovenska Hygiena, No 1, 1965, pp 18-26

"Problems of Excessive Heating of Fats in Communal  
Catering."

CA

Atomic weights of the lead in the galenite from Jáchymov and Blasený Hory. J. H. Křepelka, B. Sedláček, and A. Svoboda. *Chem. Listy* 36, 263-6(1942).—The galenite was dissolved in  $HNO_3$ , filtered, and crystd. The nitrate was pptd. as a basic lead carbonate. This was dissolved in  $HNO_3$  and pptd. with  $HCl$ . After 4 crystals, the  $PbCl_2$  was dried in a desiccator and fused in a stream of  $HCl$  that was flushed with  $N_2$  and air. The ratios  $PbCl_2:2Ag$  and  $PbCl_2:2AgCl$  were detd. by a pptn. according to Richards method. Mol. wts. of the Pb from Jáchymov and Blasený Hory galenites were 207.213 and 207.211, resp. Milan Hudický

SEDIACEK, BLAHO SLAV

Chemical Abst.  
Vol. 48  
Apr. 10, 1954  
General and Physical Chemistry

Light scattering. Determination of molecular weight, size, shape, and interaction of particles. Blahoslav Sedláček (Czech. Akad. Vyd. Prague, Czech.). *Chem. Listy* 47, 772-92, 908-41(1953).—A review with 330 references.

M. Hudlický



SEDLMEK, B.

Chemical Abst.  
Vol. 48 No. 8  
Apr. 25, 1954  
General and Physical Chemistry

Light scattering. I. Some factors in the measurement of light scattering in cylindrical cells. *Ruboslav Sedláček (Univ. of Chem. CSAY, Prague, Czechoslovakia) J. Polym. Sci. 17, 1113-19 (1955).*—Expressions are derived for correction factors in the measurement of light scattering in cylindrical cells for parallel and convergent beams. Cylindrical cells can be used especially for the measurement of reduced intensities and the dissymetry. The accuracy of comparative measurements is satisfactory. II. A universal visual instrument. *Ibid. 1120-6.*—A simple app. was constructed by mounting a special device on a conventional Pulfrich photometer. This app. permits the measurement of the radiation envelope from 20 to 140° and can be adapted to depolarization measurements. Exptl. results on *human serum albumin* and  $\gamma$ -globulin agree with published data. III. Measurement of the reduced intensity of liquid standards. *Ibid. 1591-7.*—The Rayleigh consts. of  $\text{CCl}_4$ ,  $\text{C}_6\text{H}_6$ , and  $\text{CS}_2$  were measured for the wave length 4358 and 5460 Å. at 20° by an abs. visual method, by use of cylindrical cells and the app. described in part II. Uncorrected results are in good agreement (within 10%) with older data; results corrected for reflection of primary beams and for divergency of beams of scattered light (due to the difference between  $n$  of measured sample and of environment) approach values given by Carr and Zimm [*C.A.* 45, 6911c]. These results prove that the main discrepancies between the old and new data are primarily due to divergency of rays of scattered light. IV. A photographic instrument for measuring light scattering. *Ibid. 1885-8.*—A simple app. with two modifications is described: a com. photographic app. is fixed to the rotary arm of a circular stand with a scale that permits the comparative measurement of the intensity distribution of the scattered light from 50° to 140°. Instead of the photographic app., a special camera with a strip of film that almost completely surrounds the specimen can be used. The app. is also suitable for the calibration of cells. B. Hrdla

SEDLACEK, B.

Light scattering. Part 3. Determination of the Rayleigh constants of liquid standards [in English with summary in Russian]. Sbor. Chekh. khim. rab. 19 no.2:202-209 Ap '54. (MLRA 7:6)

1. Department of Physical Chemistry, Institute of Organic Chemistry, Czechoslovak Academy of Science, Prague. (Light--Scattering)

SEEMER, B.

SEEMER, B.; BARTL, P.

Calcein. XVII. Determination of the molecular weight of glycoalbumin.  
p. 127. (Collection of Czechoslovak Chemical Communication. Praha. Vol. 19, no. 4,  
Aug. 1954)  
SO: Monthly Index of European Literature (MEL), 10, Vol. 4, No. 6,  
June 1954, Wash.

SEDLACEK, Blahoslav

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

Proteins. XXII. Determination of the molecular weight of chymotrypsinogen. Pavel Bartl and Blahoslav Sedláček (Ustav org. chem. CSAV, Prague, Czech.). *Chem. Listy* 48, 1-6(1954); cf. *C.A.* 48, 4032g. The mol. wt. of chymotrypsinogen (I) has been found to be 24,500 by osmotic pressure measurements, and 20,000 by light-scattering measurements. In the pH range 1.4-8.1, at ionic strength approx. 0.1, and in the concn. range of 1 from 1 to 15 g./l., the mol. wt. of I is approx. const. The soins. were filtered through Jena-glass filter G 5. With unfiltered soins. the osmotic pressure measurements show an anomalous concn. dependence which suggests the dissoc. of I. B. Ede~~sa~~

SEDLACEK, B.

Proteins. XXIII. Determination of the molecular weight of trypsinogen by light scattering. B. Sedláček (Ústav org. chem. ČSAV, Prague, Czech.). *Chem. Listy* 48, 274-8(1954); cf. *C.A.* 48, 5235e.—The mol. wt. of trypsinogen (I) contg. less than 15% of active trypsin has been detd. at pH 3.8 in the concn. range 0-10 mg./l. The mol. wt. at 20° is 27,000, at 30-40° (after 5-min. heating at 60°) is 23,500. This is ascribed to the heat dissocn. of trypsin into the monomer, the mol. wt. of which is close to that of I; therefore the lower value is supposed to be characteristic of I. E. Erdős

SELLACEK, B.

2 5

✓ Preparation of optically pure solvents and solutions. B.  
Selláček (Ústav org. chem. CSAV, Prague, Czech).  
Chem. Listy 48, 770-1(1954). Simple and easily manip-  
ulated auxiliary devices for light-scattering measurements  
are described. The cells are cleaned by countercurrent H<sub>2</sub>O-  
vapor condensation and closed before use by means of a cello-  
phane sheet which is perforated on addn. of the sample.  
The liquids are filtered through the Jena glass filter G 5  
under pressure or vacuum. E. Erdős

EDLACE, B.

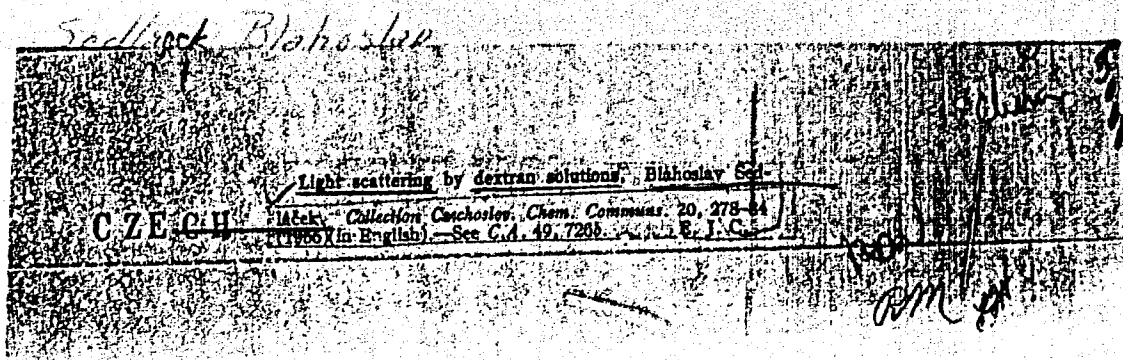
"Viruses. II. Electron Microscopic Study of the Rous-sarcoma Virus. III. Size and Shape of Particles in Solutions of Rous-sarcoma Virus by Light Scattering", P. 793, (GENETICKÁ LISTY, Vol. 48, No. 6, June 1954, Praha, Czech.)

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

SEDLACEK, I.

Light scattering by dextran solutions. Blahoslav Sedlacek (Ustav org. chem. CSAV, Prague). *Chem. Zvesti* 46, 1291-6 (1954). The mol. weights of six dextran fractions have been detd. by the transversal light-scattering method:  $\bar{M}_w = 1 \times 10^4 - 350 \times 10^6$ . The concn. dependence of  $R_{90}$  and of  $R_{135}/R_{45}$  shows that there is a mutual orientation of individual particles. The "negative" dissymmetry ( $s < 1$ ,  $q < 0$ ) confirms the presence of an external destructive interference. The dissymmetry measurements at three wave lengths show that for the highest fraction a rodlike model applies. E. Rrd0c





CZECH

Turbidimetric control of macromolecular fractions. Bl-  
hoslav Sedláček (Ústav org. chem. CSAV, Prague). Chem.  
Listy 49, 483-4 (1956). -- Simplified light-scattering methods  
suitable for industrial labs. are suggested for mol.-wt. detns.,  
particle-size detns. of high-mol. substances, and for the detn.  
of the degree of assocn. The methods make possible a  
rapid control of the properties of individual fractions and a  
semiquant. estimate of their purity. E. Erdős

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SEDLACEK, BLOHOSLAV

CZECH

Proteins. XXXII. The molecular weight of chymo-  
trypsin. Pavel Bartl, Břehoslav Sedláček, and Vladimír  
Kučera (Ústav org. chem. CSAV, Prague). *Chem. Listy*  
49, 460-5 (1955); cf. *C.A.* 49, 8340s. The mol. wts. of  $\alpha$ -  
chymotrypsin (I) and of  $\gamma$ -chymotrypsin (II) were detd.  
osmometrically as 24,000 and 23,500, resp., and by the light-  
scattering method as 27,000 and 25,000, resp. The concn-  
dependences indicate the dissoci. of the chymotrypsin par-  
ticles. The mol. wt. of the I monomer was calcd. as approx.  
23,000. E. Erdős.

Sedlacek, Blahoslav.

6

✓ Light scattering. V. Extrapolation methods. Blahoslav Sedlacek (Chem. Instav. ČSAV, Prague). Chem. Zvesti 40, 821-8 (1953); cf. C.A. 48, 4234. Two extrapolation methods are suggested. The refraction method requires only the detn. of  $n$  and wave-length dependencies of  $n$ ; in the other method only the detn. of the reduced intensity as a function of the observation angle is needed. B. H.

SEDLACEK, BIAKOSIAY

V Properties of semipermeable cellophane membranes.  
CA Pavel Bartl and Blahoslav Sedláček (Chem. Instav CSAV, Prague). Chem. Listy 49, 328-33 (1955).—The cellophane membranes were studied by the turbidimetric method and the results are compared with the standard-flow method. The optical ds. are proportional to the vol. of the pores. Thus, a rapid control of membranes and especially of their swelling is possible. B. Erdős

AV  
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SEDLACEK, BLAHOŠLAV

6

Protein XXXIV. The molecular weight of trypsin  
 Blahoslav Sedláček and Pavel Bartl (Chemický ústav CSAV, ČH  
 Průmysl Chem. Listy 49, 900-1001 (1955); cf. C.A. 49,  
 13374d. The mol. wt. of trypsin has been determined by light-  
 scattering and osmotic pressure measurements. The  
 concn. dependence of the quantity  $K_c/R_{90}$  is influenced by  
 the nature of the buffer soln. and by the temp. The mol.  
 wt. of the trypsin "monomer" is probably 21,000. B. Breda

Handwritten initials and a signature, possibly "Breda" or similar, written in dark ink.

BLAH  
SEDLACEK, BLAHO SLAV

✓ Protein interactions. IV. Inhibition of  $\alpha$ -chymotrypsin by diisopropyl fluorophosphate and chloramphenicol. Pavel Bartl and Blahoslav Sedláček (Chemický ústav CSAV, Prague). *Chem. Listy* 49, 1017-20(1955); cf. *C.A.* 49, 1112i. — From osmotic-pressure and light-scattering measurements on solns. of  $\alpha$ -chymotrypsin (I) inhibited by diisopropyl fluorophosphate, substrate assocn. with I is shown to be suppressed irreversibly. The inhibition by chloramphenicol is reversible and the assocn. of I with substrate is suppressed to an extent related to the dissocn. const. of the complex, inhibited protein-inhibitor. E. Rade

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SEDLACEK, B.

Light scattering by dextran solutions. In English. p. 278

Vol. 20, no. 2, Apr. 1955  
SBORNIK SCHEKHOSLOVATSKIKH KHMICHESKIKH RABOT  
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, April 1956



SEILACEK, B.

SEILACEK, B. Proteins. XXXIV. Determination of molecular weight of  
trypsin. In Russian. p. 17. Vol. 21, no. 1, Feb. 1956.  
SBOBNIK CHEKHOLOVATSKIKH KHMICHESKIKH RABOT. COLLECTION  
OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS.

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

B. SEDLACEK

*Handwritten:* [Signature]  
Light-scattering extrapolation methods. H. Sedláček.  
Collection Czech. Chem. Commun. 21, 467-72 (1964) (in  
English).—See C.A. 50, 8312g. *Handwritten:* B. I. C. /

*Handwritten:* SL

SEDLACEK, B.

6

✓ Light scattering. VI. Some notes on extrapolation  
 methods used in light-scattering studies. B. Sedláček  
 (Čsl. akad. věd, Prague). *Chem. Listy* 50, 103-0 (1956);  
 C.A. 49, 13717a. — Foundations of the extrapolation  
 method previously reported (*loc. cit.*) are elaborated.  
 VII. Turbidimetric determination of the refractive index  
 of colloidal particles. J. Matoušek and B. Sedláček.  
*Ibid.* 156-7. — A new method based on the Heller relation  
 (C.A. 39, 4787<sup>a</sup>) is proposed that requires only the knowledge  
 of turbidity in 2 solvents and their indexes of refraction.  
 B. Brdůs

SH  
PH

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PM  
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*SEPIA C. B.*

*1000*

Light scattering. VIII. Angle-extrapolation procedure for particle-size determination by the method of known dilution. B. Sedláček (Chem. ústav CSAV, Fys. chem. oddělení, Praha). *Chem. Listy* 50, 302-5 (1950); cf. C.A. 50, 4587h. The method given previously (cf. C.A. 43, 13717a; Zimm, C.A. 43, 1027d) is extended. E. Erdős

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SEDLACEK, B.

Med

✓ Aggregation of bilirubin in some solvent-precipitant systems. Milan Jirsa and Blahoslav Sedlacek (Sátulák, nemoenice, Prague). *Chem. Listy* 50, 620-2 (1956).--By the light-scattering method the degree of aggregation of bilirubin in dioxane-water medium was studied in connection with the intensity of the diazo reaction; it is supposed that the diazo reaction is due to the low-mol. form of bilirubin. h

B. Prilba

2

SEDLACEK, B.

Protein interactions. VII. Investigation of thermal denaturation of human serum albumin by the angular extrapolation lightscattering method. p. 867. (Chemicke Listy, Praha. Vol. 50, no. 6, June 1956.)

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

Sedlacek, B. ; Rybin, R.

Sedlacek, B. ; Rybin, R. Determining oxidation changes in lard by the colorimetric method with 2-thiobarbituric acid. p. 44.

Vol. 8, no. 1, 1957  
PRUMYSL POTRAVIN  
TECHNOLOGY  
Czechoslovakia

So. East European Accessions, Vol. 6, No. 5, May 1957

SEDLACEK, B.

SCIENCE

Periodical COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SBORNIK CHEKHOSLOVATSKIKH KHMICHESKIKH RABOT. Vol. 23, no. 1, Jan. 1958.

SEDLACEK, B. Protein interactions. VII. Investigation of thermal denaturation of human serum albumin by the angular extrapolation light-scattering method. In German. p. 30.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.



CZ/8-52(92)-10-2/39

AUTHOR: Sedláček, Blahoslav

TITLE: On the Interaction of Proteins.XI. (O interakcích bílkovin.XI) The Interaction of Trypsin and Serum Albumen which has been Denatured by Heat (Interakce trypsin-serumalbumin denaturovaný teplem)

PERIODICAL: Chemické Listy, 1953, Vol.52(92), Nr 10, pp 1351 - 1355 (Czechoslovakia)

ABSTRACT: During a recent investigation of the physical and chemical properties of trypsin (Ref.1), it was found that trypsin, which under normal conditions is present in the form of a dimer in the solution, is dissociated at slightly increased temperatures, and is substantially found in the form of the monomer at 30°C. At this temperature trypsin has the maximum capacity to degrade proteins. It is known that at higher temperatures trypsin gradually loses its activity which, however, it regains on cooling. L. Gorini (Ref.2) stated that only denatured albumen can be degraded by trypsin. The authors investigated this reaction by light dispersion, especially by using the method of dissymmetry which gives a very good indication on changes in the size of the particles. The purity of the human serum albumen in a veronal-acetate buffer was

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CZ/8-52(82)-10-2/39

On the Interaction of Proteins.XI. The Interaction of Trypsin and Serum Albumen which has been Denatured by Heat

practically 100%. The trypsin was recrystallised several times and purified. Both compounds were filtered through a Jena crucible, and the filtrate denatured by heat. The trypsin solution was added in small quantities to the albumen solution at 35°C; this avoided any changes in the concentration of the proteins and the pH value. The intensity of the dispersed light was measured on a visual apparatus (Ref.4) at wave lengths of 5460 Å. The values of dissymmetry were defined by measuring the values  $R_{45}$  and  $R_{135}$ . It was found that during the enzymatic degradation of human serum albumen, not only a degradative reaction takes place, but aggregates are formed, the size of which exceeds the dimensions of the particles present in the solution of the heat aggregated albumen. This process is largely reversible; the heating of the solution to 80°C causes disaggregation of the particles which form again large aggregates on heating and prolonged standing. This operation was repeated five times, and the process still found to be reversible. The whole aggregation process only requires

Card 2/4

07/8-52(82)-10-2/39

On the Interaction of Proteins XI. The Interaction of Trypsin and Serum Albumen which has been Denatured by Heat

up to an hour, and the degradation is practically instantaneous. Values required for illustrating the observed reaction are given in Tables 1 and 2. The authors put forward the following hypothesis: the action of the trypsin causes a degradation of the denatured albumen to increasingly lower (polypeptide) aggregates. During this process some of the bonds are freed and this initiates aggregation of the trypsin-albumen complex. On further heating, these bonds are broken up by the Brownian movement. There is obviously a greater tendency to chaotisation than to arrangement of the particles which agrees with observations made. There are

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On the Interaction of Proteins XI. The Interaction of Trypsin and  
Serum Albumen which has been Denatured by Heat

CZ/8-52(82)-10-2/39

2 Tables and 4 References: 3 Czech. and 1 English.

ASSOCIATION: Fyzikálně chemické oddělení, Chemický ústav, Českosloven-  
ská akademie věd, Praha (Physical Chemistry Department,  
Institute of Chemistry, Czechoslovak Academy of Sciences,  
Prague)

SUBMITTED: 12th November, 1958.

Card 4/4

AUTHORS: Sedláček, B. and Frič, I. CZ /8/52(82)/10-29/39  
TITLE: Dextran.VII. The Values of the Interaction Constant of  
Dextran Determined by Means of the Light Scattering  
Method (O dextransu VII. Hodnoty konstanty interakce  
dextransu stanovené metodou rozptylu světla)  
PERIODICAL: Chemické Listy, 1958, Vol 52(82), Nr 10, pp 2000-2003  
(Czechoslovakia)  
ABSTRACT: The experimental determination of light scattering values  
of certain dextran fractions are carried out. The  
results of a series of determinations and those reported  
by others are discussed and some suggestions are made  
for the divergences such as unhomogeneity of fractions  
and incomplete mixing.  
There are 2 tables, 2 figures and 4 references, 2 of  
which are Czech, 2 Western.  
ASSOCIATION: Fyzikálně chemické oddělení, Chemický ústav,  
Československá akademie věd, Praha (Physical Chemistry  
Division, Institute of Chemistry, Czechoslovak Ac.Sc.,  
Prague)  
SUBMITTED: February 20, 1958

Card 1/1

SEDLACEK, B.

**AUTHORS:** Bartl, P. and Sedláček, B.

**TITLE:** Protein interactions (O interakcích bílkovin) XII. Study of the heat denaturation of human albumin using electron microscopy (Elektronový mikroskopický studie tepelné denaturace lidského serumalbuminu)

**PERIODICAL:** Chemické listy, 1958, Vol 52, Nr 11, PP 2044 - 2047 + 2 plates (Czechoslovakia)

**ABSTRACT:** By means of electron microscope studies it was established that under the given experimental conditions the first physical stage of thermal denaturation of human serum albumin is aggregation of particles into linear chains, the individual segments of which are of a size approaching the dimensions of the molecule of the native albumin; the length of the chain usually does not exceed 2 000 Å and the most frequent length is 800 Å. In addition to straight chains, branched chains were also observed. The second stage of aggregation is agglomeration of the chains into large aggregates which become more compact with the progress of denaturation. The aggregates are of a colloidal form which precipitate from the solution. In the conclusions, it is stated that the electron microscope studies described in this paper

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have fully confirmed earlier results of the author (Ref.1), obtained by the method of light diffraction for systems of particles of human serum albumin aggregated as a result of denaturation by heat. In particular, it was proved, on the one hand, that there is a particular stage of aggregation (segments) into longer chains where aggregation of particles of the chains remains distinguishable even at higher degrees of aggregation and, on the other hand, that the thickness of the particles (chains) remains relatively constant at various degrees of aggregation. Of interest is also the fact that the presence of large particles has been detected during the very first phases of thermal denaturation, which indicates the existence of various types of particles in the native albumin or the considerable influence of denaturation in the interphase solution-air and experimental conditions (pH values, ion forces, ion quality, temperature, duration of the heating, etc.) is likely to yield more detailed information on the process and properties of the products obtained during denaturation

Card 2/3

of albumin by heat. There are 7 figures and 6 references, 3 of which are Czech and 3 English.

**ASSOCIATION:** Právnická chemická oddělení, Chemický ústav, Československá akademie věd, Praha (Physical Chemistry Section, Institute of Chemistry, Czechoslovakian Ac.Sc., Prague)

**SUBMITTED:** March 5, 1958

Card 3/3

CZECHOSLOVAKIA/Optics - Instrument for Optical Analysis.

K

Abs Jour : Ref Zhur Fizika, No 11, 1959, 26337

Author : Kratochvil, Pavel; Sedlacek, Blahoslav

Inst : Czechoslovak Academy of Sciences, Prague, Czechoslovakia

Title : Differential Refractometer

Orig Pub : Chem. listy. 1958, 52, No 12, 2414-2417

Abstract : The distinguishing feature of the proposed design consists of employing the auto-collimation scheme with double passage of the rays through the cuvette, the upper portion of which has a barrier, forming neighboring prisms with a solution and with solvent, and the lower (plane-parallel) is filled with the solvent. This increases the sensitivity, makes the instrument more compact, and by simultaneous observation of the rays passing through the upper and lower parts of the cuvette, there

Card 1/2

SEDLACEK, B.; STOKROVA, S.

"Protein interactions." X. Behavior of human serum albumin in acid solutions;  
an electrophoretic study. In German. p. 1520.

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, Praha, Czech.,  
Vol. 24, No. 5, May 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 6, Sept. 59  
Unclassified



SEDLACEK, E.

"Protein interaction." XI. Interaction between trypsin and serum albumin denatured by heat." In German. p. 1619.

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, Praha, Czech.,  
Vol. 24, No. 5, May 1959

Monthly List of East European Accessions (MEAL), LC, Vol. 8, No. 6, Sept. 59

Unclassified

SEDLACEK, B.; BARTL, P.

"Protein interaction." XII. Electron-microscopic studies of human serum albumin denaturated by heat. In German. P. 1625.

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, Praha, Czech.  
Vol. 24, No. 5, May 1959

Monthly List of East European Accessions (EEAI), IC, Vol. 8, No. 6, Sept. 59

Unclassified

SEDLACEK, B.

Protein interactions XVI. Interaction of chymotrypsin-heat-denatured serum albumin. In German. Coll.Cz.Chem. 24 no.9:3036-3040  
S '59. (REAI 9:5)

1. Physikalisch-chemische Abteilung, Chemisches Institut, Tschechoslowakische Akademie der Wissenschaften, Prag.  
(Proteins) (Chymotrypsin) (Serum albumin)

CZECHOSLOVAKIA/Optics - Physical Optics.

K

Abs Jour : Ref Zhur Fizika, No 2, 1960, 4467

Author : Sedlacek, Blahoslav; Chloubava, Emilie

Inst : Chemical Institute, Czechoslovak Academy of Sciences, Prague, Czechoslovakia

Title : Scattering of Light. X. Photoelectric Instrument for the Measurement of Scattering of Light and for the Investigation of Sedimentation of Particles.

Orig Pub : Chem. listy, 1959, 53, No 5, 531-534

Abstract : The author describes the photoelectric instrument intended for the determination of the reduced intensity in the range of angles of observation from 0° to 160°, the coefficient of dissymmetry, and the depolarization of scattered radiation. The measurements are carried out at wave lengths of 436, 546, and 578 millimicrons at

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CZECHOSLOVAKIA/Optics - Physical Optics.

K

Abs Jour : Ref Zhur Fizika, No 2, 1960, 4467

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001447620001-6

different polarization of the primary beam. With the aid of this instrument it is possible to observe particles in gaseous and liquid media, and also to investigate the dependence of different quantities on the time and the temperature.

Card 2/2

SEDLACEK, B.

Prague; Collection of Czechoslovak Chemical Abstracts, Vol 27, No 4, April 1964. Copyright by the Publishing House of the Czechoslovak Academy of Sciences, 1963.

1. "Polarography of Substances and Related Substances. Part VIII. Absorption Process During the Electroreduction of the Tetrapyrrole Ion." P. SEDLACEK of the Polytechnic Institute of the Czechoslovak Academy of Sciences, Prague and J. KALICKI of the Institute of Physical Analytical Methods, at the Polish Academy of Sciences, Warsaw (original language: institutional news not given); pp 175-176 (English article).
2. "Substitution of Ligands in Macrocyclases. Part IV. Permeability of Ferredoxin." V. KAS of the Institute of Macromolecular Chemistry at Charles University, Prague; pp 115-121.
3. "Substitution of Ligands in Macrocyclases. Part V. Reduced Ferredoxin." V. KAS of the Institute of Macromolecular Chemistry at Charles University, Prague; pp 124-127.
4. "On Protein Interactions. Part XXIII. Study by the Light Scattering Method of the Aggregation of Ribonucleoprotein from the Yeast *Saccharomyces cerevisiae*." P. SEDLACEK and J. KALICKI of the Institute of Macromolecular Chemistry at the Czechoslovak Academy of Sciences, Prague; pp 100-103 (English article).
5. "On Protein Interactions. Part XXIV. Determination of the Solubility of Aggregates of Heat-Denatured Ribonucleoprotein from the Yeast *Saccharomyces cerevisiae*." P. SEDLACEK and J. KALICKI of the Institute of Macromolecular Chemistry at the Czechoslovak Academy of Sciences, Prague; pp 104-107 (English article).
6. "A Study with the Aid of the Distraction Method of the Complexes That May Form Between Osmium Oxide with Alpha-Ketocarboxylic Acids." J. SEDLACEK and V. BUDEK of the Institute of Physical Chemistry, Faculty of Science, Czechoslovak Academy of Sciences, Prague; pp 89-93.
7. "Comprehensive Fractionation of Polychlorinated Biphenyls." J. SEDLACEK and B. HAVRANEC, Institute of Physical Chemistry at the Czechoslovak Academy of Sciences, Prague; pp 81-82.
8. "Separation Methods for Natural Products. Part I. New Counter-current Distribution Procedure." V. PROKAZKA, J. SEDLACEK and Z. CERNY, Institute of Physical Chemistry for Natural Products, Prague; pp 823-831 (English article).

26  
27

1/5

MUNK, P.; KRATOCHVIL, P.; SEDLACEK, B.

Interaction of albumins. XXIII. Thermal denaturation and aggregation of human serum albumin in phosphate buffers. Coll Cz chem 25 no.10: 2611-2621 0 '60. (EEAF 10:9)

1. Institut für makromolekulare Chemie, Tschechoslowakische Akademie der Wissenschaften, Prag.

(Serum albumin) (Phosphates) (Buffer substances)  
(Albumins)

SEDLACEK, B.A.S.

CSER

SEDLACEK, B.A.S.

Institute for Research of Popular Nutrition (Ustav pro vyzkum vyzivy lidu),  
Prague

Prague, Ceskoslovenska Hygiena, No 3, 1963, pp 178-180

"Contribution to the Identification and Division of Antioxidants"

SELLACEK, Bohuslav A.J., RNDr. CSc.

Methods of detecting changes in fats caused by autoxidation  
and heating. From potraviny 15 no.11;561-563 N '64.

1. Institute of Nutrition, Prague.



SEDLACEK, B.A.J. (Praha 10, Bulharska 12).

Endogenous food contaminants formed during autoxidation and thermal polymerisation of fats. Cesk. hyg. 10 no.3:252-254 My '65.

1. Ustav pro vyzkum vyzivy lidu, Praha.

Sedlacek, F.

Development of the CO<sub>2</sub> process in the VEB Steelworks  
Sitz-Rasberg, F. Sedlacek. *Giesserei*, 2, 124-30 (1950);  
abstracted in *J. Iron Steel Inst. (London)*, 185 (1) 128 (1957).  
Examples are given of the successful application of the molding  
process employing sand with sodium silicate binders hardened  
with carbon dioxide. The elimination of pinholes by preheating  
is discussed.

Notes

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3

L 30934-66 ENT(m)

ACC NR: AP6023140

SOURCE CODE: CZ/0060/65/000/005/0221/0226

AUTHOR: Sodlacok, Frantisek (Lieutenant colonel; Doctor of medicine)

17  
B

ORG: Roontgenologic Department, Military Hospital, SNP /headed by Lieutenant colonel  
Doctor of medicine Vlastimil Hajek, Ruzomberok (Rentgenologicke oddeleni Vojenske  
nemocnice SNP)

TITLE: Personal dosimetry at an x-ray department

SOURCE: Vojenske zdravotnicke listy, no. 5, 1965, 221-226

TOPIC TAGS: irradiation dosimetry, radiology

ABSTRACT: The amount of time spent at an x-ray center is not a good indication of the amount of radiation to which a worker was exposed. Doctors working with x-ray rarely are subjected to amounts of radiation exceeding safe limits. The most dangerous work is in perimyelography, splenoportography, and irrigoscopy. Both a film and a pocket dosimeter are good indication of the amount of exposure. Film dosimetry is very reliable. The work is based on a one-year practical test at an x-ray center. The method is very reliable. Orig. art. has: 8 figures and 1 table. [JPRS]

SUB CODE: 06, 18 / SUBM DATE: none / ORIG REF: 010

Card 1/1 CC

UDC: 616-001.26-057(614.25)-084.898.5-085.535

SEDLACEK, J.

Trichloroacetic acid and alsten in the treatment of corneal serpig-  
nous ulcer. *Cesk.ofth.* 7 no.5:340-342 1951. (CLML 21:1)

1. Of the Eye Clinic of Masaryk University, Brno (Head--Prof.Bohuslav  
Slavik,M.D.).

SEDLACEK, J.

Halometric method of measuring the average diameter of erythrocytes.  
Chekh.fiziol. vol.1. no.3:243-247 S '52. (MLRA 7:4)

1. Institut gigiyeny i mikrobiologii universiteta im. Palatskogo,  
Olomouts. (Blood--Corpuscles and platelets)

SEMLACK, J.

"E 499 electric locomotive."

Elektrotechnik, Praha, Vol 9, No 1, Jan 1954, p. 20

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

SKRIVAN, J.; SEDLACEK, J.; PINKAVA, J.

Phase equilibrium in the systems: cyclohexanol-cyclohexanone-glycerine  
and cyclohexanol-cyclohexanone solution of salts of organic acids.  
In Russian. Coll. Cz. Chem. 24 no. 11: 3693-3702 N '59. (MEAI 9:5)

1. Khimiko-tekhnologicheskii institut, Praga. Nyneshniy adres:  
Nauchno-issledovatel'skiy institut tekhniki svyazi, Praga (for  
Skrivan). Nyneshniy adres: Nauchno-issledovatel'skiy institut  
tekhnologii reziny i plastmass, Gottwaldov (for Sedlacek).  
(Phase rule and equilibrium) (Cyclohexanol) (Cyclohexanone)  
(Solutions) (Acids) (Organic compounds) (Salts) (Glycerol)

P/013/60/000/002/001/003  
B124/B220

AUTHOR: Sedlaček, Jiří, Engineer

TITLE: Organochemical industry

PERIODICAL: Chemik, no. 2, 1960, 57-59

TEXT: The main obstacle for the development of the organochemical industry in Czechoslovakia was the insufficiently developed raw material basis and the low industrial capacity. The raw materials used so far were distillation products from bituminous coal tar, by-products obtained from the processing of brown coal at the plants imeni Stalin, ethyl alcohol obtained by fermentation, and carbide. The development of the organochemical industry in Czechoslovakia is based on the utilization of new raw materials, such as petroleum, natural gas, and coke-oven gas. The basis of raw materials required to reach the targets set by the XI Congress of the Communist Party of Czechoslovakia for the production of plastics and synthetic fibers, and for the further development of the Czechoslovakian chemical industry is intended to be created by 1965. The

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Organochemical industry

P/013/60/000/002/001/003  
B124/B220

investment cost will be about 0.7 KČs per 1 KČs gross production, whereas, up to now, the investment cost averaged in the entire chemical industry 1.390 KČs per 1 KČs gross production. About 475,000,000 KČs will be saved per year by utilizing cheaper raw materials. The working productivity has to be increased by about 6 times as compared with the average productivity of the total chemical production in 1958. By 1965, the scarcity of phenols during recent years will be overcome, since plants producing phenols by the sulfonation method with a yearly capacity of 10,000 t, and by the cumene method with a yearly capacity of 20,000 t will be erected; this phenol will be used primarily for the production of caprolactam (15,000 t per year). Moreover, a plant producing ethylene glycol (10,000 t per year) by direct oxidation of ethylene without chlorine, two plants producing synthetic detergents (20,000 t alkyl aryl sulfonates, propylene tetramer, and aliphatic alcohols), a plant producing cheap acetylene, acetic acid, vinyl acetate, and chloroprene rubber, phthalic anhydride by fluidization-oxidation of naphthalene, etc are planned. Mentioned are investigations in the field of  $V_2O_5$  catalysts, special catalyst carriers

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Organochemical industry

P/013/60/000/002/001/003  
B124/B220

for fluidization-oxidation of hydrocarbons, production of maleic anhydride from benzene, multi-purpose utilization of xylene, production of citric acid by fermentation, phthalic acid plasticizers, coal, tar dyes (planned production in 1965: 8,000 t and 25 new types), new auxiliary agents for the textile industry, furane chemistry with a view to produce new resins, production of cyclohexyl amine and aniline by the catalytic method, etc. In the Eastern part of Slovakia a large chemical combine will be erected to process the coke gas recovered in the new metallurgical combine, where also acrylonitrile will be produced for further processing to polyacryl nitrile fibers. Further development is foreseen for the chemical plants at Bratislava, Ustí n./Labem, Spolana at Neratovice, the East-Czech chemical plant Synthesia at Pardubice, Chemka at Stražské, the Moravian chemical plant at Ostrava, the Institute of Organic Synthesis at Rybitví, the Petrochemical Institute at Nováky, the Institute of Agrotechnical Technology at Bratislava, and the Institute of Petroleum and Hydrocarbons at Bratislava. There is 1 figure. ✓

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Organochemical industry

P/013/60/000/002/001/003  
B124/B220

ASSOCIATION: Ministry of the Chemical Industry of the Czechoslovakian  
Republic



Card 4/4

SEDLACEK, J.

Opening tunnels with small cross sections by the aid of a shield; first experiences in Czechoslovakia. p.246.  
(INZENYRSKE STAVBY, Vol. 3, no. 6, June 1955, Praha)

SO: Monthly List of East European Accession, (EEAL), IC, Vol. 4, No. 11, Nov. 1955, Uncl.

SEDLACEK, J.

Development and progress in the construction of tunnel jams. p. 291.

INZENYRSKE STAVEBY. Praha, Czechoslovakia. Vol. 3, no. 11, Nov. 1955.

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

Sedlacek, J.

Shortcomings in our methods for driving mining galleries and ways in which they might be improved. p. 26. INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha. Vol. 4, no. 1, Jan. 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

SEDLACEK, J.

SEDLACEK, J. - A tunnel with a small cross section driven using a shield; further experiences in Czechoslovakia, p. 511  
Vol. 4, no. 11, Nov. 1956  
INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha.

SOURCE: EAST EUROPEAN ACCESSIONS LIST (EEAL) VOL 6 NO 4 APRIL 1957

SEDLACEK, J.

Some new knowledge concerning the mechanization of underground construction in Austria.

P. 115 (Mechanisace) Vol. 4, No. 4, Apr. 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EMAI) LC. No. Vol. 7, No. 1, Jan. 1958



SEDLACEK, J.

SEDLACEK, J. Experiences in underground construction in Austria. p. 92.

Vol. 5, no. 2, Feb. 1957

INZENYRSKE STAVBY

TECHNOLOGY

Czechoslovakia

So: East European Accession, Vol. 6, No. 5, May 1957

SEDLACEK, J.

The driving of the Telecote adit. p.165(Inzenyrske Stavby, Vol. 5 no. 3 March 1957)  
Praha

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6 no. 7, July 1957. Uncl.

SEDLACEK, J.

The construction of underground hydro-electric-power plants in Austria. p. 262.  
(Inzenyrske Stavby, Vol. 5, No. 5, May 1957. Praha, Czechoslovakia)

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

SEDLACEK, J.

Masonry in the construction of water adits in Austria. (Conclusion) p. 363.

(Inženýrské Stavby. Vol. 5, no. 6, June 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

SEDLACEK, J.

Anchorage of the excavation face, a substitute for the present method of provisional wall-casing.

p. 585 (INZENYRSKE STAVBY) Vol. 5, no. 11, Nov. 1957,  
Praha, Czechoslovakia

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

SEDLACEK, J.

10 kv./200 mv.amp. distributing centers in the Electrical Machinery Assembly Plant at Teplice.

p. 11 (Eletrotechnik) Vol. 12, no. 8, Aug. 1957, Praha, Czechoslovakia

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

SEDLACEK, J.

"Present problems in the production of building fittings." p.30

ADRAVOTNI TECHNIKA A VZDUCHOTECHNIKA (Ceskoslovenska akademie ved, Ceskoslovenska vedecka technicka spolecnost pro zdravotni techniku a vzdunotechniku) Praha, Czechoslovakia, Vol. 2, no. 1, 1959

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

Uncl.

Czechoslovakia/Fitting Out of Laboratories - Instruments, Their Theory, Construction, and Use, II

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62009

Author: Schwarz, J., Sedlacek, J.

Institution: None

Title: Design of a Modified Kofler Block

Original

Periodical: Zkusenosti s konstrukci modifikavaneho Koflerova bloku, Chem. listy, 1955, 49, No 9, 1395-1397; Czech

Abstract: Description of a simple design of Kofler block for determination of melting points and other purposes. The block is made of duraluminum, provided with electric heater of maximum capacity of 150 watts and permits to measure temperature with thermocouple as well as with mercury thermometer. In former case more accurate results are obtained. The block is mounted on standard microscope stage.

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BOROVICKA, L., inz.; BULAK, J.; HOBST, L., inz. dr.; MLEPISKY, V., inz.;  
PYSNY, T., inz.; SEDLACEK, J., inz.; SOHNANE, V., inz.

Concept of the technical development of engineering constructions.  
Inz stavby 12 no.121 Suppl; Mechanizace no.121 521-547 '64.

CZECHOSLOVAKIA

SEDLACEK, J., LEJSEK, K., SINEK, J; Chair of Pathological Physiology, Chair of Chemistry, Chair of Physiology, Medical Faculty, Charles University (Katedra Patologicke Fysiologie, Katedra Chemie, Katedra Fysiologie Lek. Fak. KU), Hradec Kralove.

"The Influence of Diphosgene and of Anhydrides of N-Carboxy-amino Acids on Breathing of Mitochondrias."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 75-76

Abstract: The influence of diphosgene and of anhydrides of N-carboxyamino acids on the activity of succinate oxydase of mitochondrias of isolated rat liver was investigated. An addition of 0.137 mg of diphosgene in 0.015 ml of 96% ethanol added to 3 ml of a suspension of isolated mitochondria stopped their breathing. Similar addition of 0.1 mg of N-carboxyanhydride of vanillin had no influence on breathing. 2 Czech, 1 East German reference. Submitted at "16 Days of Physiology" at Kosice, 27 Sep, 65.

1/1

SEDLACEK, J.

2488\* Statistical Theory of the Fatigue of Material. Statistická teorie únavy materiálu. (Czech.) J. Sedláček. *Strojiren-stroj*, v. 5, no. 11, Nov. 1955, p. 859-863. *MG*

Determination of slope, shape, and other parameters of curves graphically and analytically. Graphs, table. 9 ref.

SEDLACEK, J.; ZALUDOVA, A.

Mathematical statistics in technical control. p. 48. (Strojirenstvi, Vol. 6, No. 1, Jan 1956, Praha, Czechoslovakia)

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

Sedlacek, J.

Fourth Czechoslovak Olympiad of Mathematics. P. 133  
CASOPIS PRO PESTOVANI MATEMATIKY. (Ceskoslovenska akademie ved.  
Matematicky ustav) Praha  
Vol. 81, no. 1, Apr. 1956

Source: EEAL - LC Vol. 5. No. 10 Oct. 1956

Sedláček, Jiri

Sedláček, Jiri. On systems of diagonals in convex  $n$ -gons. Casopis Pěst. Mat. 81 (1956), 157-161. 1-F/W

Let  $P$  be a convex  $n$ -gon in the plane no three diagonals of which have a common point in the interior of  $P$ . A system  $S_k^{(n)}$  is a set of diagonals with exactly  $k$  points of intersection in  $P$ 's interior and such that addition to  $S_k^{(n)}$  of any further diagonal introduces at least one new point of intersection. Let  $f(k, n)$  be the number of different systems  $S_k^{(n)}$ . It is shown that

$$f(0, n) = \binom{2n-4}{n-2} (n-1), \quad f(1, n) = \frac{1}{2}(n-3)f(0, n),$$

and a more complicated formula is obtained for  $f(2, n)$ . The problem, for which  $k$  there exist systems  $S_k^{(n)}$  and how  $f(k, n)$  can be evaluated, remains unsolved for  $k > 2$ .

F. A. Behrend (Melbourne).

2

11

For

SEDLACEK, J.

Data on an extreme plane graph. p.426.  
(Casopis Pro Pestovani Matematiky. Vol.81, no.4, Nov.1956. Para, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol.6, no.6, June 1957. Uncl.

SEDLACEK, J.

Finitely orientated graphs.

p. 195 (CASOPIS PRO PESTOVANI MATEMATIKY) Vol. 82, no. 2, May 1957,  
Praha, Czechoslovakia

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



Remark on the convex polygon

Sedláček, Jiří. Eine Bemerkung über das konvexe Polygon. Časopis Pěst. Mat. 82 (1957), 349-352. (Czech. Russian and German summaries)

Let  $P$  be a convex  $n$ -gon in the plane no three diagonals of which have a common point in the interior of  $P$ . A system  $S_k^{(n)}$  is a set of diagonals with exactly  $k$  points of intersection in  $P$ 's interior and such that addition to  $S_k^{(n)}$  of any further diagonal introduces at least one new point of intersection. card  $S_k^{(n)}$  denotes the number of elements of the system. The author proves: If  $4 \leq 2k + 2 \leq n$  and  $n - k - 1 \leq c \leq n + k - 3$ , then there exists  $S_k^{(n)}$  with card  $S_k^{(n)} = c$ ; and, conversely, if  $S_k^{(n)}$  exists, then  $n - k - 1 \leq \text{card } S_k^{(n)} \leq n + k - 3$ . This answers some questions raised by the author in an earlier paper [same Časopis 81 (1956), 157-161; MR 19, 161]. F. A. Behrend.

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Geometry

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On the Root-base of Directed Graphs

Fiedler, Miroslav; und Sedláček, Jiří. Über Wurzelbasen von gerichteten Graphen. Casopis Pěst. Mat. 83 (1958), 214-225. (Czech. Russian and German summaries)

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A source of a directed graph is a node on which no edge ends. The central concept of this paper is the *W*-basis of a finite directed graph: a subgroup which embraces all the nodes and all of whose connected components are trees, each of these trees having just one source. Such trees are called *W*-trees. The following results concerning the *W*-bases of finite acyclic graphs and finite well-directed graphs (graphs in which it is possible to go from any given node to any other given node along the edges in the direction of the arrows) are obtained. 1. Let *A* denote an acyclic graph with one or more sources and let *B* denote a subgraph of *A* whose connected components are all *W*-trees. Then *A* has a *W*-basis of which *B* is a subgraph and whose sources are all sources of *A*. 2. If corresponding to each node *w* of a finite directed graph *G* there is a *W*-basis of *G* which has *w* as its only source, then *G* is well-directed. 3. Let *G* denote a well-directed graph and *B* a non-empty subgraph of *G* whose connected components are all *W*-trees. *G* has a *W*-basis which has the same sources as *B* and of which *B* is a subgraph. 4. A directed graph *G* is well-directed if and only if corresponding to each non-empty subset *P* of the nodes of *G* there is a *W*-basis of *G* whose sources are the nodes in *P*. An application of *W*-bases to the theory of determinants is also given.

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SEDLACEK, J.

A problem regarding Euler's graphs. p. 151

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SEDLACEK, J.

"Unit fractions."

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May 1959

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