

SCHUIZ, K.; HERAK, M.

Adsorption of thorium on silver halides and silver thiocyanate sols.  
In English. p. 127.

periodical: CROATICA CHEMICA ACTA.

SCIENCE

No. 2, 1958.

SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4  
April 1959, Uncl.

SCHNYZ, F.

Thermodynamics of complexation processes. XIII. Systematic comparison of complexation values for various cations on negative silver halogenide sols. In English.

p. 61 (Croatian Chemical Acts. Vol. 28, no. 2, 1950. Zagreb, Yugoslavia)

Monthly Index of East European Accessions (EEA) 10. Vol. 7, no. 2,  
February 1958

Schubert, K. L.

Chem

The negative activity limit of stability and the coagulation values of the silver halides. M. Mrlin, F. Platinan, E. R. Schulte, and B. Tefak (Univ. Zagreb, Croatia, Yugoslavia). *J. Phys. Chem.* 60, 1478-8 (1956); cf. Tefak, *C.A.* 49, 14429c. The neg. activity limit of stability (cf. *C.A.* 49, 9341b; 48, 10402b) was detd. for the  $AgCl$ ,  $AgBr$ , and  $AgI$  pts. systems at various concns. of neutral electrolytes ( $NaNO_3$ ,  $Ba(NO_3)_2$ ,  $La(NO_3)_3$ ) in the range from  $10^{-1}$  to  $10^{-4}$  value of  $pAg$  0.2, which is equal to the value in the system. The activity limits of the 3 halides were practically the same at the region of  $NaNO_3$  concn. from 0.1 to 0.0001 N. The activity limit shifted toward higher  $pAg$  values with increasing concn. of the neutral electrolyte and no continuous change into the coagulation values was observed. The coagulation values were practically independent of  $pAg$ . The points,  $-\log[Na^+] = 1$ ,  $pAg = 8$ ;  $-\log[Ba^{++}] = 2.0$ ,  $pAg = 7.2$ ; and  $-\log[La^{+++}] = 4.1$ ,  $pAg = 5.8$ , can be considered as the intersections of the coagulation value lines with the lines of activity limit.

Henry Leitch, Jr.

EMA

SCHULZ, K.F.

10/1/58

THE DETERMINATION OF THE CHARGE OF SOME INORGANIC THORIUM COMPLEXES WITH THE ION EXCHANGE METHOD. K. F. Schulz and M. J. Herak (Yugoslav Academy of Sciences and Arts and Inst. Rudjer Boskovic, Zagreb, Croatia). *Croat. Chem. Acta* 29, No. 1, 49-52 (1957).

The charges of complex thorium chloride ion in solutions with NaCl, HCl, LiCl, KCl, MgCl<sub>2</sub>, and CaCl<sub>2</sub> have been determined by means of an ion exchange technique. (T.R.H.)

6

am yll

SCHULZ, K. F.

Adsorption of thorium on silver halides and silver thiocyanate sols. K. F. Schulz and M. J. Herak (Inst. "Rugjer Boskovic," Zagreb, Yugoslavia). *Croat. Chem. Acta* 30, 127-33 (1958) (in English).—In a study of the mechanism of charge reversal of lyophobic sols by highly charged counterions, the adsorption of Th on freshly prepd. coagulated pos. and neg. sols of AgCl, AgBr, AgI, and AgSCN was detd. Sols were prepd. by mixing 5 ml. of AgNO<sub>3</sub> soln. and 5 ml. of a soln. contg. halide or thiocyanate, resp., and NaNO<sub>3</sub> or Na<sub>2</sub>SO<sub>4</sub> in a concn. sufficient to coagulate the sol (0.01 to 0.2N). Concn. of AgNO<sub>3</sub> soln. contg. halide or thiocyanate components were detd. according to the pos. or neg. character of the sols used. In all but one expt. the amt. of solid phase was 0.001M, and all systems contained an excess (up to 40 times) of Ag<sup>+</sup> (pos. sols) or halide and thiocyanate ions, resp. (neg. sols). Th(NO<sub>3</sub>)<sub>4</sub> was added to the soln. of that pptg. component which was in excess. It contained some radioactive Th<sup>232</sup> isolated from UO<sub>2</sub>(NO<sub>3</sub>)<sub>2</sub> by a method of Dyrsen (C.A. 45, 960b). Final concn. of Th in soln. was  $1 \times 10^{-4}N$ , except in some cases where the effect of Th concn. was studied. The ppt. was sepd. from soln. by centrifuging and activities were measured in the aliquot vol. of the supernatant. A linear function between concn. of Th and counted nos. of impulses was obtained. The activity of the system was always detd. against a standard soln., contg. all electrolytic components as systems under investigation except pptg. component not in excess. Activities were measured 30 min. and 24 hrs. after prepn. of the system (except in one series of expts. where time dependence of Th adsorption was studied), but without any difference. The adsorption of Th on pos. sols increased with excess of stabilizing (Ag) ions, so that nearly 100% of the added amt. of Th was adsorbed at an excess of 0.030M. There was no difference in adsorption for pos. AgI sols coagulated with NaNO<sub>3</sub> or Na<sub>2</sub>SO<sub>4</sub>. For neg. sols, where a greater adsorption was expected, it was much lower than for pos. sols with the same amt. of solid phase and the same

concn. of stabilizing ions. Neg. sols showed no adsorption in the presence of Na<sub>2</sub>SO<sub>4</sub>; this indicated a strong influence of the accompanying ion (NO<sub>3</sub><sup>-</sup> or SO<sub>4</sub><sup>2-</sup>, resp.) on the coagulating electrolytes. Because of the great influence of acidity on pptn. of Ag halides in presence of Th (Tezak, et al., C.A. 45, 6899f), the adsorption at different pH values (from 1 to 4.5) was detd. The higher the pH, the greater was the adsorption on pos. sols, and at pH 4 the adsorption amounted to nearly 100% with respect to the added amt. of Th. On neg. sols adsorption took place only at pH > 3 in the presence of NaNO<sub>3</sub> and not at all in the presence of

Na<sub>2</sub>SO<sub>4</sub>. The influence of pH is in accordance with the proposed mechanism for the charge reversal of lyophobic sols by highly charged counterions. In strongly acid solns. pos. charged Th complexes are not formed and neg. sols do not change the charge. The influence of sulfate ions can be connected with their influence on charge reversal of sols by Th ions. In presence of nitrate ions the charge of the sol is changed by addn. of  $8 \times 10^{-4}N$  Th(NO<sub>3</sub>)<sub>4</sub>, but in presence of sulfate ions at 0.01N Th(NO<sub>3</sub>)<sub>4</sub>, which indicates that Th builds rather stable sulfate complexes, whereas nitrate complexes are less stable. Sols of AgCl, AgBr, and AgI showed very similar behavior, but adsorption on AgSCN sol was much lower and began at a greater concn. of Ag<sup>+</sup>. The amt. of adsorbed Th increased with its concn. in soln., and for pos. AgI sol (prepd. from 0.001N KI and 0.04N AgNO<sub>3</sub>, and coagulated with 0.2N NaNO<sub>3</sub>) reached a const. value of  $8 \times 10^{-4}$  moles/l. at  $1 \times 10^{-4}N$  Th(NO<sub>3</sub>)<sub>4</sub>. At const. amt. of Th in soln., and at const. pH and excess of Ag ions the adsorption on pos. AgI increased with increasing amt. of solid phase up to a point close to the total amt. of Th added. The time dependence of adsorption was investigated. The equil. was established after 5 min. or even earlier, which could not be detd. with certainty, since 5 min. were needed to prep. the systems for measurements.

J. Kratochvil

SCHULZ, K.F.

5

The refractive-index increment of dextran for the molecular-weight determination by light scattering. V. M. Zebec, G. J. Delejić, J. Kratochvil, and K. F. Schulz (Univ. Zagreb, Yugoslavia). *Croat. Chem. Acta* 30: 251-5 (1958) (in English).—On comparing published data for the increment,  $dn/dc$ , of dextran in water, considerable differences were noted at wave length 548 m $\mu$ . These differences may cause

serious errors in calc. mol. wts. of dextran from light-scattering measurements. The following values for  $dn/dc$  were found (in cc./g.): 0.1518  $\pm$  0.0013 for 436 m $\mu$ , 0.1481  $\pm$  0.0013 for 546 m $\mu$ , and 0.1478  $\pm$  0.0013 for 578 m $\mu$ . These values agree very closely with the mean values published in the literature. I. Kratochvil.

C.F.K.

COUNTRY : Poland  
CATEGORY :  
ABST. JOUR. : RZKhim., No. 22 1959, No. 77828  
AUTHOR : Krause, A. and Schulz, L.  
INST. : Not given  
TITLE : On the Activating Effect of Calcium When Used as  
a Component in Multicomponent Catalysts  
ORIG. PUB. : Roczniki Chem, 32, No 5, 1191-1193 (1958)  
ABSTRACT : The authors have shown that the addition of Ca  
as  $\text{Ca}(\text{OH})_2$  has a promoting effect on the catalytic  
activity of mixtures of the hydroxides  $\text{Fe}(\text{OH})_3$   
and  $\text{Cu}(\text{OH})_2$  in the decomposition of  $\text{H}_2\text{O}_2$  at  $37^\circ$ .  
O. Fioletnyuk

CARD: 1/1

CERMAK, V.; HANUS, V.; HLADEK, L.; HERMAN, Z.; PACAK, M.; SCHULZ, L.

A mass spectrometer for precise determination of the ratio of deuterium to hydrogen in hydrogen gas in the region of natural deuterium concentrations. Coll Cz Chem 27 no.7:1633-1638 JI '62.

1. Institute of Physical chemistry, Czechoslovak Academy of Sciences, Prague.



SLADKOVSKY, Karel, inz.; SCHULZ, Richard

Automatic control for emergency service of steam counter-pressure  
turbines. Energetika Cz 11 no.2:77-80 F '61.

S/285/63/000/002/005/012  
A052/A126

AUTHOR: Schulz, Richard

TITLE: A method of turbine frequency control

PERIODICAL: Referativnyy zhurnal. Otdel'nyy vypusk. 49. Turbostroyeniye, no. 2, 1963, 8 - 9, abstract 2.49.50 P. (Czech. pat., cl. 14c, 8/04, no. 100874, September 15, 1961)

TEXT: In the patented method for steam-turbine frequency control the control system is built of the frequency regulator, the synchronizer and a turbine revolution regulator which is the control valve of the turbine. The turbine is connected to a capacitor from which a correcting signal is supplied. Further, changes of frequency or of the steam pressure can serve as control pulses. During normal operation no signal is supplied by the capacitor to the frequency regulator from which a pulse (or a sum of input pulses) is supplied to the control elements of the turbine (synchronizer, valve) carrying out a corresponding change in the turbine operation. A key diagram of the control system is given. There is 1 figure.  
[Abstracter's note: Complete translation.] S. Filippovich

Card 1/1

SCHULZ, Tibor, Dr.; WEISS, Jenő, Dr.; HALMAGHI, Virgil, Dr.

Clinical significance of mycids. *Borogygy. vener. szemle* 11 no.6:  
220-225 Nov-Dec 57.

1. A Sibiu--Nagyszebeni Egyesített Bergyógyászati Kórház (Igazgató:  
Dr. Schulz Tibor) közleménye.

(RINGWORM

mycids, clin. significance (Hum))

SCHULZ, Tibor

A few words on chronic eczema. *Borgyogy. vener. szemle* 13 no.2:  
67-71 Apr 59.

1. A Sibiu-Nagyszebeni (Romania) 1. szamu Allami Korhaz (Igazgato:  
Dr. I. Andras) Borgyogyaszati Osztalyanak kozlemenye.  
(ECZEMA, etiol. & pathogen.  
chronic eczema (Hun))

SCHULZE, E.; KELEMEN, L.; GONCI, S.

Comparative analysis of the stitched cotton wadding. p. 415.

MAGYAR TEXTILTECHNIKA. (Textilipari Muszaki es Tudomanyos Egyesulet)  
Budapest, Hungary. Vol. 11, no. 10, Oct. 1959.

Monthly List of East European Accessions (EEAI; LC. Vol. 8, no.12, Dec. 1959.

Uncl.

BAK, Lorant, dr.; GONCI, Sandorne; SCHULZE, Ernone

Testing the wearing properties of some goods of the hosiery industry.  
Magy textil 13 no.2:79-85 F '61.

1. Textilipari Minosegellenorzo Intezet. 2. Textilipari Muszaki es  
Tudomanyos Egyesulet(for Bak).

LENGYEL, Istvan; BATOR, Elemerne; Schulze, Ernone

Wearing tests of blended fabrics made of wool and synthetic fibers. Magy textil 1/1, no.4:165-170 Aug '62

1. Textilipari Minosegellonozzo Intezet.

BAK, Lorant, dr.; GONCI, Sandorne; SCHULZE, Ernone

Durability tests of polyamide stockings. Magy textil 16  
no.1:13-22 Ja'64.

1. Textilipari Minisegellenorzo Intezet. 2. "Magyar Textiltechmi-  
ka" szerkeszto bizottsagi tagja (for Bak).



SCHULZE, W., prof., dr., inż.

Concrete as a large size element. Cement wapno gips 16 no.11:347-356  
'61.

1. Wyższa Szkoła Budownictwa, Lipsk.

SCHULZE-MANITIUS, H.

Ivan Petrovich Pavlov, 1849-1936. Ory. hetil. 102 no.12:559-564  
19 Mr '61.

(BIOGRAPHIES)

SCHUMACHER, E.

Photomechanical work methods in the service of cartography. p. 100.  
GEODEZIA ES KARTOGRAFIA. (Allami Foldmeresi es Terkepeszeti Hivatal)  
Budapest. Vol. 8, no. 2, 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress.  
Vol. 5, No. 11, November 1956.

SCHUMACHER, Gebhard, dr; BIRMANAC, Dusan, dr

Intravenous stimulation therapy in gynecology. Med. glas. 15 no.12/12a:  
478-480 D '61.

1. Univerzitetska ginekoloska klinika u Tubingen-u (Upravnik: prof.  
dr H. Roemer)

(GYNECOLOGY ther) (POLYSACCHARIDES ther)

SCHUMADLOVA, A.

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their I-29  
Application. Leather. Fur. Gelatin. Tanning Agents.  
Technical Proteins

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 14052

Author : Schumadlova A., Valenta F.

Title : Standardization in the Leather Industry

Orig Pub : Normalisace, 1956, No 4, 76-78

Abstract : The great relative importance of leather and shoe manufacture, in the Czechoslovak national economy and export, is pointed out. Successful operation is greatly dependent upon quality of raw materials which is determined by agricultural conditions. An important prerequisite of the quality of hides and leather is standardization. The scope and future prospects of this work are set forth. Particular difficulties are involved in standardization of sorting, for which a system is outlined that is based on two criteria: a) nature of grain

Card 1/2

- 433 -

Card 2/2

- 434 -

HUNGARY/Chemical Technology - Chemical Products and Their  
Application. Refining Solid Fuel Minerals.

H-22

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 58614  
Author : Schwertner Janos, Schumicky Imre  
Inst : -  
Title : Preparation and Enrichment of Coal in the Dunay  
Metallurgical Combine.

Abs Jour : Kohasz. lapok, 1957, 12, No 8-9, 359-364

Abstract : A detailed description of the starting period of the  
coal-enrichment unit of the combine. The coal comes  
from the Pech and Komlo deposits with an ash content  
22-29%; projected ash content after enrichment ~10%.  
Enrichment is accomplished, according to the plan of  
Soviet engineers, in jigging machines for the fraction  
>1 mm, and in flotation machines for the fraction <  
1 mm. The floatreagent (1.2 kg/T) is kerosene or gas  
oil, as a collector, and amyl alcohol as a frothing  
agent.

Card 1/1

SCHUMICKY, Imre, okleveles gepeszmernok

Automation problems of coal dressing plants. Bany lap  
97 no. 5: 331-333 My '64.

1. Mining Designing Institute, Budapest.

PORA, Ferenc, okleveles mernok; RAPP, Tamas; BORBAS, Nandor; NAGY BIRO, Sando; HLYYANSZKY, Istvan, dr. SCHUMICZKY, Imre; KERTESZ, Gabor; SIMEK, Rezso, okleveles vegyeszmernok; JANCSON, Tibor; TOTH, Istvan; AUERSWALD, Janos; KLAFFL, Gyula; CSERNAVOLGYI, Laszlo.

Production and utilization of natural gas. Energia es atom  
17 no.1:11-15 Ja'64.

1. Orszagos Koolaj- es Gazipari Troszt (for Pora, Kertesz, Auerswald and Klaffl).
2. Voros Csillag Trakrogyar (for Borbas).
3. Fovarosi Gazmuvek (for Nagy Biro).; 4. Asvanyolajforgalmi Vallalat (for Hlinyanszky).
5. Dunai Vasmu (for Schumiczky).
6. VEGYTERV (for Simek and Csernavolgyi).



KOTA, Lajos, okleveles bányagepészmérnök; SCHUMICKY, Imre, okleveles  
gepészmérnök

An account of the Freiburg international meeting on "Dry  
dressing and water." Bány lap 97 no.111773-774 N 164.

1. Mining Designing Institute, Budapest.

SCHUMICKY, Imre, okleveles gépészmérnök

Selection of dressing technology for the Komlo hard coal.  
Bany lap 98 no.1:13-19 Ja '65.

1. Mining Designing Institute, Budapest.

VIDA, Miklos; KORANYI, Gyorgy, dr.; SZILAGYI, Antal; DESTEK, Endre;  
FERENCZ, Mihaly; DITZ, Erno; DIGSZECHY, Daniel, dr.; SCHUNK, Rudolf;  
SIKLOSI, Jozsef; RETEZAR, Arpad

Research, planning, and education in the gas industry. Energia es  
atom 13 no.3:112-116 Mr '60.

L 35271-66

ACC NR: AP6024802

SOURCE CODE: CZ/0049/66/000/003/0183/0193

AUTHOR: Pribela, Alexander (Engineer; Bratislava); Schunova, Vlasta--Shunova, V. <sup>1/6</sup>  
(Engineer; Bratislava) <sub>B</sub>

ORG: Department of Chemistry and of Sugar and Food Technology, Slovak Technical University, Bratislava (Katedra chemie a technologie sacharidov a potravín Slovenskej vysokej školy technickej)

TITLE: Chromatographic determination of organic acids in fruit

SOURCE: Biologia, no. 3, 1966, 183-193

TOPIC TAGS: food chemistry, organic acid, paper chromatography, titrimetry

ABSTRACT: The acids were absorbed in a column filled with Dowex 1 anion exchanger, impurities washed out by distilled water and a 6M solution of formic acid. Individual fractions were separated by paper chromatography; the developing solution consisted of tertiary amyl alcohol, n-butanol, and 98% formic acid and water in proportions of 5:15:6:6, containing 0.02% of bromphenol blue. Oxalic acid which interferes with this type of determination is separated by this method. The total content of the acids was determined by titration. The evaluation of individual acids is made directly from the chromatographic paper by an objective densitometer. Content of various acids in several kinds of fruit is given. Orig. art. has: 7 figures and 3 tables. [JPRS: 35,814]

SUB CODE: 06 / SUBM DATE: 22Oct65 / ORIG REF: 004 / SOV REF: 001 / OTH REF: 016  
Card 1/1 *lll*

SCHUREK, O.

SCHUREK, O. Jet engines with a high efficiency. p. 16.

No. 1, 1957  
KRIDLA VLASTI  
TECHNOLOGY  
Czechoslovakia

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

37565

S/262/62/000/005/011/013

1007/1207

26.2152

Authors: ~~Schurek, Oldřich,~~  
Novotný, Vladislav

Title: SURFACE-DISCHARGE SPARK PLUGS

Periodical: *Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovye ustanovki*, no. 5, 1962, 95, abstract 42.5.454  
(Czech. patent, class 46f, 13, no. 97576, 15.XII.60)

Text: Ignition of the combustible mixture in the combustion chamber of a gas turbine is usually done by means of high-voltage spark plugs which, as a result of scaling, are rapidly damaged and thus make frequent restarting difficult, particularly at a great heights. Suggestion is made to use surface-discharge spark plugs fed from a low-voltage source. Such plugs, having no scale formation and a long service life, may be mounted near the fuel injection nozzles. The surface -discharge spark plugs ensure ignition of the basic fuel jet thus eliminating the use of special starting injectors, electromagnetic valves and remote control of the starting process. This in turn leads to reduction of the engine weight and permits a reliable starting of the engine even at heights up to 9000 m and speeds of 500 km/hr.

[Abstractor's note: Complete translation.]

Card 1/1

40606

S/262/62/000/014/006/016  
1007/1207

25.2.52

AUTHOR: Schúrek, Oldřich and Köhler, Václav

TITLE: Surface-discharge spark plugs for gas-turbine starting

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 14, 1962, 27, abstract 42.14.169 (Czech patent, class 46 f, 13, no. 97575, December 15, 1960)

TEXT: A surface-discharge spark plug is proposed for gas-turbine starting. The spark plug described does not lead to deposits and ensures reliable ignition of the fuel mixture atomized by the main fuel nozzle. As a result, starting nozzles working on lighter fuel and other starting equipment need not be installed.

[Abstracter's note: Complete translation.]

Card 1/1

SCHUREK, C.

PHASE I BOOK EXPLOITATION

z/6284

Jerie, Jan, ed., Engineer, Doctor, Corresponding Member of the Czechoslovak Academy of Sciences

Základní problémy ve stavbě spalovacích turbin (Basic Problems in the Construction of Gas Turbines [collection of articles]). Prague, Nakl. ČAV, 1962. 627 p. 1600 copies printed.

Sponsoring Agency: Československá akademie věd.

Ed. of Publishing House: Marie Moravcová; Tech. Ed.: František Kondický.

PURPOSE: The book is intended to familiarize turbine designers with recent developments in the design of gas turbines and to present some research results which may be helpful in designing more efficient turbines.

COVERAGE: The book comprises articles by leading Czechoslovak turbine experts on thermodynamic cycles, flow research in turbine components,

burning of fuel in combustion chambers, axial compressors, and characteristics of turbines manufactured in Czechoslovakia.



Basic Problems in the Construction (Cont.)

z/6284

J. Čamek (State Research Institute for Heat Engineering, Prague). Theoretical Study on the Possibility of Obtaining Flatter Turbine Stage Characteristics  $\eta_u = f(u/c_{ad})$ .

547

I. Zuber (State Research Institute for Heat Engineering, Prague). Experimental and Theoretical Results in the Field of Combustion Chambers

571

J. Baloš (Klement Gottwald First Brno Armament Plant, Brno). A Combustion Chamber for the PBZKG 1-MW Turbine [PBZKG is Czech abbreviation for Gottwald Plant]

589

O. Schürek (Aviation Research and Testing Institute, Letňany). Burning of Fuel in Combustion Chambers of Jet Engines

603

AVAILABLE: Library of Congress

SUBJECT: Aerospace

AD/jsj/jk  
3/21/63

Card 8/8

2/2

SCHUREK, Oldrich, inz.

Some conceptions of the burning process explanation. Zpravodaj  
VZLU 4:27-30 '62.

L 8985-65 EPA/EPA(s)-2/EFT(m)/EPP(e)/T/FCS(f)/EPR Paa-l/Pr-l/Ps-l/Pt-10  
AFTTC/AFETR/ [redacted] AFTTC(p)/RAEM(1) WW/JW/WE

ACCESSION NR: AP4043939

z/0059/63/000/004/0015/0022<sup>13</sup>

AUTHOR: Schurek, Oldrich (Engineer)

TITLE: Effect of some flow properties on the critical conditions of flame stabilization

SOURCE: Letnany. Vyzkumny a zkusebni letecky ustav. Zpravodaj vslu, no. 4(40), 1963, 15-22

TOPIC TAGS: combustion, turbulent combustion, burning velocity, flame stabilization

ABSTRACT: Previous experimental data obtained mainly with gasoline-air mixtures by several Soviet investigators were analyzed to study the effect of pressure, temperature, and fluctuating velocity on the normal and turbulent burning velocities at air-excess factors close to the critical condition of flame stabilization in the regions of lean and rich mixtures. The results showed that the effects of pressure and temperature can be expressed by the same relationships

Card 1/2

L 8985-65  
ACCESSION NR: AP4043939

for laminar and turbulent combustion. With increasing pressure, the burning velocity decreased slightly. The effect of pressure was found to be identical in the entire range of air-excess factors studied. At air-excess factors close to critical the burning velocity increased much more sharply with increasing temperature than in stoichiometric mixtures. The effect of the fluctuating velocity on the turbulent burning velocity was approximately identical in the entire range of air-excess factors studied. Analysis of the effect of the normal on the turbulent burning velocity showed that no single-valued relationship exists between the fluctuating velocity, the normal burning velocity, and the turbulent burning velocity. Orig. art. has: 11 figures.

ASSOCIATION: none

SUBMITTED: 00

ATD PRESS: 3105

ENCL: 00

SUB CODE: FP

NO REF SOV: 006

OTHER: 001

Card 2/2

SCHUREK, Oldrich, ins. CSc.

Calculation of the pressure loss of jet engine combustion chambers. Zpravodaj VZLU no.4:39-46. '64.

L 54927-65

EPF(c)/EWP(1)/EWP(f)/EPR/T/EWP(t)/EWP(b)/EWA(c) Paa-4/Pr-4/  
Ps-4 IJP(c) JD/LW/WE

CZ/0059/64/000/006/0011/0020

ACCESSION NR: AP5015919

AUTHOR: Schurek, O. (Engineer) (Candidate of sciences)

TITLE: The combustion of atomized fuel in a combustion chamber

43  
B

SOURCE: Letnany. Vyzkumny a zkusebni letecky ustav. Zpravodaj VZLU, no. 6, 1964, 11-20

TOPIC TAGS: combustion, fuel atomization, fuel injection, fuel injector, combustion chamber, fuel atomizer

ABSTRACT: Experiments on the atomization of liquid fuel (Czechoslovak PL-4 jet fuel) with a two-orifice nozzle atomizer and a rotating cup atomizer were conducted, and the results were evaluated together with literature data to study the optimum characteristics of atomizers for aviation turbine combustion chambers. The experiments with the rotating cup atomizer were conducted in a test assembly consisting of an air-turbine driven flat cup into which the fuel was fed through two nozzles and atomized by centrifugal ejection through orifices in the cup. The radial droplet size distribution was determined photographically with MgO-coated plates. Relationships were obtained for the mean droplet size, the onset of jet break-up, and the combustion efficiency, as a function of revolutions (up to 36,000 rpm). For

Card 1/.3

L 54927-65

ACCESSION NR: AP5015919

practical use, a fuel injection system is considered in which the fuel is injected through the hollow turbine shaft. To eliminate lowering the shaft strength another system was developed where a sleeve with orifices is mounted on the shaft and the fuel is fed into the sleeve through two external nozzles. The following conclusions were drawn: The effects of the air and fuel pressure are similar for both the nozzle and rotating cup atomizers. With increasing fuel pressure (revolutions) and air pressure, the mean droplet diameter decreases. The quality of atomization improves with increasing diameter of the cup. The number and diameter of orifices in the cup had no effect on the droplet size under the conditions studied. In experiments with rotating cup atomization in an annular combustion chamber, it was found that two operating regions exist—one in which the combustion efficiency is strongly dependent on the mean droplet diameter and another in which a decrease in droplet diameter beginning from a given value has no further effect of the efficiency. In the region where atomization is comparatively coarse, calculation of the flame sheath has to be carried out on the basis of a two-phase system, i.e., liquid fuel-gaseous oxygen. Measurements of the temperature fields were also made. Orig. art. has: 20 figures. [PV]

ASSOCIATION: none

Card 2/3

L 54927-65

ACCESSION NR: AF5015919

SUBMITTED: 00

ENCL: 00

SUB CODE: FP, PR

NO REF SOV: 002

OTHER: 008

ATD PRESS: 4028

Card 3/3



L 57440-65 EPA/EWP(f)/EPR Paa-4/Ps-4 WW

ACCESSION NR: AP5015842

CZ/0059/64/000/004/0039/0042

AUTHOR: Schurek, O. (Engineer, Candidate of sciences)

27  
B

TITLE: Measuring the pressure loss in flow engine combustion chambers

SOURCE: Letnany. Vyzkumny a zkusebni letecky ustav. Zpravodaj VZLU, no. 4, 1964,  
39-42

TOPIC TAGS: combustion chamber, flow engine, pressure loss, air flow, air injection

ABSTRACT: Flow coefficients are derived for air injected into combustion chambers by air streams directed parallel to and at right angles to the perforated metal jacket. Experiments are described with apparatus consisting of two parallel tubes intersected by a plate 1.2 mm thick with holes drilled in varying ratios of diameter to total plate area. Air flow was regulable and the pressure was gauged before and after passing through the perforated plate. Ten sizes of perforation were tested beginning at 5 mm diameter, and a graph relates sizes to the coefficient of air flow through the openings at five graduated velocities. Calculations are given and formulas derived for all phases of the experiments, and the conclusion is reached that pressure loss cannot be reduced by raising the ratio of aperture diameter to jacket thickness. Similar tests with the air flow directed parallel to the perforated jacket demonstrated a flow coefficient about 5% higher than when

Card 1/2

L 57440-65

ACCESSION NR: AP5015842

the air stream was directed at right angles to the jacket, which agrees roughly with tests made in operating combustion chambers. Orig. art. has: 7 figures and 9 formulas.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PR

NO REF SOV: 001

OTHER: 001

*Feb*  
Card 2/2

SCHURER, LIBOR  
CZECHOSLOVAKIA/Chemistry of High-Molecular Substances.

I

Abs Jour: Ref Zhur-Khin., No 13, 1958, 45486.

Author : Paty Libor, Schurer Prenysl.

Inst : *Charles Univ Prague Cech.*

Title : Determination of Vapor Tension of Some High-Molecular Substances with a Highly Sensitive Radiometric Manometer.

Orig Pub: Ceskosl. casop. fys., 1957, 7, No 5, 557-564.

Abstract: The vapor tension (VT) of seven different fractions of polybutylmethacrylate (I) has been measured at different temperatures, to determine the suitability of these substances for use in vacuum technique. Determinations of VT were carried out in a vacuum unit by means of an improved radiometric manometer of the Knudsen type (Knudsen M., Ann. Phys., 1910, 32, 809), which was found to be very convenient for the purpose involved,

Card : 1/2

71

Schurer, P.

Diatry LB2d

New ultra-high vacuum valve. L. Dát and P. Böhler  
 (Charles Univ., Prague). *Nov. Sci. Instr.* 24, 651-5 (1967).  
 cf. Vogl and Evans, *C.A.* 31, 12500s. Two in-filled valves  
 for use in ultra-high vacuum techniques are described. In-  
 dium was selected because of its adhesion to glass, low m.p.,  
 and small value of vapor pressure. One form of the valve  
 used 23 g. In and required temps. of 200° to open or shut the  
 valve; it sustained prolonged outgassing as high as 600°.  
 The 2nd valve was smaller and suitable for use with app-  
 provided with small furnaces. Its closing passage (45 min.)  
 was only half that of the 1st valve. Vacuums of as high an  
 order as  $10^{-4}$  mm. Hg have been reached with the valves in  
 use.

Robert A. Bledt

SCHUREK, T.

Distr: 4E2c(j)

/ Measurements of vapor pressure of some macromolecular materials by a radiometric manometer of high sensitivity.

7  
2-MAY  
1

Libor Pátý and Plemysl Schüerer (Karlova Univ., Prague). *Czechoslov. J. Phys.* 8, 110-114 (1958) (English summary).

Several macromol. materials (butyl methacrylate fractions) possessing low vapor pressures were studied to det. their suitability for use in high-vacuum systems. Vapor pressures were detd. in special vacuum app. developed by P. and S. and equipped with a radiometric manometer based on the original Knudsen manometer (C.A. 4, 2753) and embodying various improvements to increase the sensitivity. One of these was the use of 9- $\mu$ -diam. quartz suspension wire coated with a thin film of Pt. The entire app. was made of such materials as to permit heating by induction to the temps. required for degassing and obtaining  $7.6 \times 10^{-4}$  mm. Hg vacuum. The phys. const. and dimensions of the app. parts entering as members into the math. expressions for the vapor pressure were of the accuracy permitting vapor-pressure detns. within  $\pm 3.5\%$  error. The app. was calibrated using Hg vapor for lower vacuum range, and the Bayard-Alpert ionization manometer for higher vacuum (*Rev. Sci. Instr.* 21, 571 (1950)). Both methods showed that the radiometric manometer is reliable over the entire respective ranges of pressures. Vapor pressures and their dependence on temp. were detd. by 2 different methods: (1) with the vacuum pump shut off after evacuation, and (2) with the pump going. The results obtained by the 2 methods agreed well. Some of the results of measurements obtained on 7 butyl methacrylate (I) fractions are: vapor pressures  $1.5 \times 10^{-4}$ ,  $1.58 \times 10^{-4}$ ,  $4.08 \times 10^{-4}$ ,  $5.02 \times 10^{-4}$ ,  $7.5 \times 10^{-4}$ ,  $1.62 \times 10^{-4}$ ,  $1.88 \times 10^{-4}$  mm. Hg; respective mol. wts. of the fractions: mixt. of  $10^4$ - $10^5$ ,  $1.5 \times 10^4$ ,  $2.5 \times 10^4$ ,  $3 \times 10^4$ ,  $2.2 \times 10^4$ ,  $1 \times 10^4$ , and  $2.2 \times 10^4$ . Tests at various temps. showed that the vapor pressure of all fractions is fairly const. below  $50^\circ$ ; above that it

cc  
1/2

Libon ~~for~~, ~~Prep~~ of ~~Sol~~ ~~tion~~

increases rapidly. The data show that I, freed of monomer is a suitable material from the point of view of vapor pressure for vacuum systems with pressures above  $1 \times 10^{-4}$  mm. Hg and temps. not over  $60^\circ$ . Some fractions of I have vapor pressures so low that they can be used in systems with pressures of the order of  $10^{-6}$  mm. Hg. The data on their vapor pressures of the individual fractions showed that this, however, may be due to interfering effects of vapor pressures of products of decompn. of I. B. N. Daniloff

CC  
2/2

7  
7-MAY  
1

GR Jaf

SCHURER, P.

Survey of vacuum-stop valves. P. 581

SLABOPROUDY OBZOR (Ministerstvo vseobecného strojírenství, Ministerstvo spojení a Československá vědecko-technická společnost, sekce elektrotechnika) Praha, Czechoslovakia, Vol. 20, no. 9, Sept. 1959

Monthly List of East European Accessions (EEAK), LC. Vol. 9, no. 2, Feb. 1960

Uncl.

SCHURER, Premysl

Molecular sieves, new efficient sorbents for vacuum engineering.  
Slaboproudý obzor 22 no.9:554-559 '61.

1. Katedra elektroniky a vakuové fyziky, Matematicko-fyzikální  
fakulta University Karlovy, Praha.

(Vacuum) (Adsorbents)



Z/009/62/000/008/002/002  
E112/E435

AUTHOR: Schürer, Přemysl

TITLE: Isotherms of water on molecular sieves

PERIODICAL: Chemický průmysl, no.8, 1962, 438-440

TEXT: A method to evaluate the efficiency as desiccants at very low vapour pressures of Czechoslovak molecular sieves 3A, 4A, 5A, 10X and 13X is described. A block diagram of the instrument assembly is shown, comprising: RV - two-step rotary oil pump, DV - Hickmann two-step oil pump, V - cold trap, Im - ionisation manometer, T - tensimeter, Tm - thermocouple manometer, H - comb-shaped manifold, containing tubes, holding a weighed amount of water, MS - container of the molecular sieve: MS is connected to the apparatus by means of a ground-glass joint. Absorption isotherms for water vapours at pressures ranging from  $1 \cdot 10^{-4}$  to  $1 \cdot 10^{-1}$  mm Hg and at temperatures from 25 to 160°C are plotted. Results show that the Czechoslovak products are equal to molecular sieves of foreign origin. It is concluded that molecular sieves are far more efficient desiccants than silica gel and activated aluminas. There are 7 figures.

Card 1/2

Isotherms of water on ...

Z/009/62/000/008/002/002  
E112/E435

ASSOCIATION: Katedra elektroniky a vakuové fyziky, Karlova  
universita, Praha (Chair of Electronics and Vacuum  
Physics, Charles University, Prague)

SUBMITTED: June 26, 1961

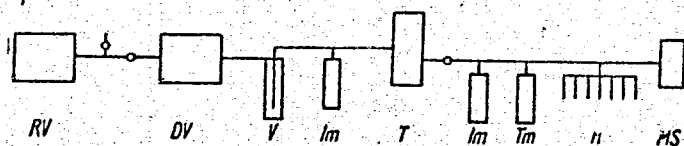


Fig.1. Block diagram of vacuum equipment.

Card 2/2

L 20239-66

ACC NR: AP6010317

SOURCE CODE: CZ/0037/65/000/006/0499/0512

AUTHOR: Schurer, Premysl

3/  
B

ORG: Department of Electronics and Vacuum Physics, Faculty of Mathematics and Physics, Charles University, Prague (Katedra elektroniky a vakuove fyziky, matematicko-fyzikalni fakulty, Karlovy university)

TITLE: Study of the surface sorption of molecules of means of infrared spectroscopy

SOURCE: Ceskoslovensky casopis pro fysiku, no. 6, 1965, 499-512

TOPIC TAGS: IR spectroscopy, sorption, adsorption, chemisorption, molecule, molecular interaction

ABSTRACT: The article discusses the application of infrared spectroscopy for studying the vibration of adsorbed molecules, which may provide valuable information on the disturbance of molecules caused by surface forces during physical adsorption, the disturbance of the surface by adsorbed molecules or new chemical units produced during chemisorption. After outlining the different trends and methods of using infrared spectroscopy for direct investigation of the interaction of gas molecules with a solid, the paper gives the experimental results achieved in this field up to now. [JPRS]

Card1/1 SUB CODE:20,07 / SUBM DATE:31Mar64/ORIG REF:001 /OTH REF:037 / SOV REF:012

SGHURESOVA, Eva

Measurement of internal friction of whiskers. Časopis fyz 14  
no.2:151-153 '62

1. Katedra fyziky fakulty strojní, České vysoké učení tech-  
nické, Praha.

SCHUREROVA, Eva

Effect of dislocations on internal damping. Cs cas fys 13  
no.2:151-169 '63.

1. Katedrafyziky fakulty strojni, Ceske vysoke uceni technicke,  
Praha.

ACCESSION NR: AP4022284

Z/0037/64/000/002/0151/0153

AUTHOR: Schurerova, Eva

TITLE: Measurement of the internal friction of crystal whiskers

SOURCE: Ceskoslovensky casopis pro fysiku, no. 2, 1964, 151-153

TOPIC TAGS: crystal, whisker, internal friction, Fe, Cu, W, Si, electromagnetic measurement

ABSTRACT: The author presents the results of measurements of the internal friction of iron, copper, tungsten and silicon whiskers electromagnetically with a torsional pendulum apparatus. Lower values were obtained than previously reported in the literature, obtained differently. The author concludes that detailed studies of the dependence of internal friction on the perfection, diameter and cross section of the crystal are necessary if comparisons are to be made. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Katedra fyziky fakulty strojni CVUT, Prague  
(Department of Physics, Engineering Faculty, CVUT)

Card 1/2

SCHUROV, S.

"Automatic removal of dust from the dry filter of the DT-54 tractor."

MECHANISACE ZEMEDLSTVI, Praha, Czechoslovakia, Vol. 5, No. 20, October 1955.

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

Unclassified.

SCHUSTER, F.

"Some examples of the up-to-date use of gas power in households and in industry; also, remarks by J. Urai and L. Dobo."

p. 380 (Energia Es Atomtechnika) Vol. 10, no. 8/10, Dec. 1957  
Budapest, Hungary

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958



BURLACU, Gh.; CORCAU, M.; SCHUSTER, R.; MEREP, E.

Investigations on the specific dynamic action of norvaline, leucine, norleucine, asparagine, serine, lysine, tryptophan, and phenylalanine in poultry. *Studia cerc biol s. zool* 17 no.1: 57-64 '65.

1. Laboratory of Animal Morphology, "Traian Savulescu" Institute of Biology. Submitted August 27, 1964.

KEDVES, Ferenc; SCHUSZTER, Ferenc

Light diffraction on circular obstacle or aperture. Fiz  
szemle 13 no.9:276-279 S. 1963.

1. Eotvos Lorand Tudományegyetem Kísérleti Fizikai Tanszeka.

00000

Schuster, Jan. Contributions à la géométrie du triangle et du tétraèdre. Věstník Královské České Společnosti Nauk. Třída Matemat. Přírodověd 1947, no. 4, 7 pp. (1948). (Czech. French summary)

In a triangle it is possible to derive, by means of a simple geometric construction, from a point  $P$  with normal coordinates  $(\alpha, \beta, \gamma)$  a point  $P(aa, b\beta, c\gamma)$ . By repeating or inverting this process points  $P_n(a^n\alpha, b^n\beta, c^n\gamma)$  and  $P_{-n}(a^{-n}\alpha, b^{-n}\beta, c^{-n}\gamma)$  are found. Permutation of the coordinates of  $P$  gives five other points, which together with  $P$  lie on a conic. These results can be partially extended for a tetrahedron.

H. A. Lauwerier (Amsterdam)

Source: Mathematical Reviews,

Vol

No.

SMJ  
JST

SCHUSTER, J. H.  
Schuster, Jan. Contribution à la géométrie du tétraèdre. *Věstník Královské České Společnosti Nauk. Třída Matemat.-Přirodověd.* 1948, no. 16, 15 pp. (1949). (Czech. French summary)

If two equal vectors, opposite in sense, are taken on each edge of a tetrahedron, their resultants through each vertex lie on lines belonging to the same regulus of an hyperboloid of one sheet circumscribed about the tetrahedron. Other properties of those vectors are considered. The author obtains solutions of such classical problems as the conditions that the four lines through the vertices of a tetrahedron shall be hyperbolic, etc. There are no bibliographical references other than to an earlier paper of the author [same journal 1947, no. 4 (1948); these Rev. 9, 525]. *N. A. Court.*

Source: *Mathematical Reviews,*

Vol 12 No. 4

SCHUSTER, JAN

Math

Projective geometry

Schuster, Jan. On a projective generalization of the chordal line. Casopis Pěst. Mat. 80 (1955), 202-205. (Czech)

Verfasser untersucht, wie der Punkt  $S(x_0, y_0, z_0)$  der projektiven Ebene gewählt werden muß, damit seine Polaren  $q_k$  ( $k=1, 2$ ) bezüglich der beiden Kegelschnitte  $l_k$ :

$$Ax^2 + 2Bxy + Cy^2 + 2a_kxz + 2b_kxz + \beta_kz^2 = 0 \quad (k=1, 2)$$

diese Kegelschnitte in Punkten schneiden, die ihrerseits wieder auf Kegelschnitten eines vorgegebenen Systems  $\Sigma$  liegen. Die homogenen Koordinaten  $x, y, z$  sind dabei so gewählt, daß die Basis-Punkte des Systems  $\Sigma$  auf der Geraden  $z=0$  liegen. Jede der Polaren  $q_k$  bildet mit  $z=0$  einen zerfallenden Kegelschnitt und zusammen mit dem entsprechenden  $l_k$  ( $je$ ) ein Kegelschnittsbündel  $\sigma_k$ . Die an die Schnittpunkte gestellte Forderung führt notwendig auf die Existenz eines gemeinsamen Kegelschnitts der Büschel  $\sigma_1$  und  $\sigma_2$ . Aus den so entstandenen Beziehungen gewinnt Verfasser als geometrischen Ort der gesuchten Punkte  $S$  eine Gerade, die Projektivchordale der Kegelschnitte  $l_1$  und  $l_2$ . Durch Hinzufügen eines weiteren Kegelschnittes  $l_3$  ergibt sich im allgemeinen ein Tripel von Projektivchordalen mit einem gemeinsamen Punkt (Projektivchordalenzentrum). Im Falle von Kreisen kommt man auf bekannte Beziehungen zurück.

M. Pini (Köln)

1  
of

of

SMRTNIK, Viliam; SCHUSTER, Juraj, inz.

Device for measurement of the time stability of increased damping. Cs spoje 8 no.3:13-15 Je '63.

1. Telekomunikacni inspektorat SDK, Bratislava.

SCHUSTER, K.  
(6245)

Institut für Organische Chemie der vormaligen Deutschen Karls-Universität in Prag.  
Über eine Synthese des d,l-Arginins A synthesis of DL-arginine Hoppe-Seyler's Zeitschrift  
für Physiologische Chemie 1948, 283/1-2 (27-30)

Arginine nitrate is obtained in excellent yield via ornithine from the ethyl ester  
of adipic acid. The method is described in detail.

Kraut-Ujpost

So: Excerpta Medica, Vol. II, No. 12, Sec. II, December 1949

SCHUSTER, K.

POLAND/Acoustics - Ultrasonics

J-4

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 6578

Author : Schuster K.

Inst :

Title : New Acoustic-Optical Instruments

Orig Pub : Proc. II conf. ultrason., 1956, Warszawa, PWN, 1957, 209-213

Abstract : The author describes briefly two new ultrasonic defectoscopes (operating at a frequency on the order of 3 mc) produced by the Zeiss Company for metallic plates. The radiator and the article are placed in water, the ultrasonic beam passing through the article is guided by means of a system of acoustic lenses and mirrors under the surface of the water, where it forms a relief image of the object with the distortions due to its acoustic inhomogeneities. The picture is viewed with anoptical system by the knet method. In another instrument (of the Trommler system), it is possible to use, along with the above equipment, also the principle of interference (sound) bands of equal thickness. The band pattern is produced by

Card : 1/2



POLAND/Acoustics - Ultrasonics

J-4

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 6576

a layer of water between its surface and a sheet of foil placed on it, the slope of the foil being used to vary the density and the direction of the bands. A regular pattern becomes distorted in those places that correspond to inhomogeneities in the tested plate. The best results are observed with defects that cause strong sound absorption (for example, air inclusions), but other inhomogeneities are also disclosed.  
-- L.G. Mishchenko

Card : 2/2

78

GHERMAN, Gr., dr.; PAPILIAN, V.V., dr.; SCHUSTER, N., dr.; GRECU, F., chimist

Liver changes caused by alcohol. Med. int., Bucur. 12 no.2:257-268 F '60.

1. Lucrare efectuata in Clinica a II-a medicala (prof. I. Goia);  
Institutul de anatomie patologica si clinica psihiatrica, Cluj.  
(LIVER DISEASES, etiology)  
(ALCDHOLISM, complications)

PREDA, V., prof.; MIHALCA, I.; CRISTEA, M.; ONEA, O.; CRACIUN, O.; STANESCU-CARPEN, E.; MURESANU, D.; SCHUSTER, N.;

Action of the conditions of environment on the development of chick embryo. IX. Influence of permanent light on the metabolic processes of the embryonal liver, kidneys, brain, and heart. Studii biol Cluj 12 no.2:235-251 '61.

1. I.M.F., Cluj, Catedra de biologie - histologie. 2. Membru al Comitetului de redactie, "Studii si cercetari de biologie" - Filiala Cluj - (for Preda).

SCHUSTER, Otto

What the records of the foreman working day in the wool industry enterprises have shown. Prace mzda 11 no.7:321-328 JI '63.

1. Vyzkumny ustav vlnarsky, Brno.

KREJCI, Zdenek; KVOCH, Ladislav; SCHUSTER, Otto

Mechanical processing of data for establishment of output standards. Prace mzda 11 no.9:408-415 S'63.

1. Vyzkumny ustav vlnarsky.

SCHUSTER, Rudolf, dr.

Bronchography. *Ful orr gegegyogy.* no.3:85-93 Aug 55

1. A Budapesti Orvostudományi Egyetem II. számú Sebészeti  
Klinikájának (igazgató: Rubanyi Pál dr. egyet. tanár) közleménye.  
(BRONCHI, radiography)

SCHUSTER, Rudolf, dr.

Tracheobronchial anesthesia without epinephrine. Orv. hetil. 97  
no.9:240-241 26 Feb 56.

1. A Budapesti Orvostudományi Egyetem II. sz. Sebészeti Klinikájának  
(igazgató: Rubanyi Pál d. egyet. tanár) közleménye.

(ANESTHESIA, ENDOTRACHEAL

tracheobronchial, use of local anesthetics without  
epinephrine, results (Hun))

(EPINEPHRINE, anesth. & analgesia  
same)

SCHUSTER, Uwe, chim.

Manufacture of ceramic colors at the Portelaml Factory, Gluj.  
Industria usoara 10 no.2:52-59 F '63.



STOICOVICI, Eugen, prof., dr. in stiinte geologice; CIONTEA, Nicolea, ing.;  
SCHUSTER, Uwe, chim.

Considerations on pyroscopic indicators. Industria usoara  
10 no.12:578-586 D'63.

1. Universitatea "Babes-Bolyai" din Cluj, si seful statiei  
pilot pentru studiul materiilor prime de la Fabrica "Portelanul-  
Cluj (for Stoicovici). 2. Seful serviciului tehnic al  
fabricii "Portelanul"-Cluj (for Ciontea). 3. Tehnolog in  
cadrul Sectorului indicatoare piroscopice si coloranti  
ceramici al fabricii "Portelanul"-Cluj (for Schuster).

L 13233-66

ACC NR: AP6006033

SOURCE CODE: CZ/0053/65/014/004/0290/0290

AUTHOR: Cernohorsky, M.; Schusterova, D.; Cepelik, J.; Muhlbachova, E. 27

ORG: Faculty of General Medicine, Institute of Pharmacology, Charles University, Prague (Farmakologicky ustav fak. vseob. lek. KU) B

TITLE: Properties of some catechol sympathomimetic drugs on lipid mobilization in vitro [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 27 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 290

TOPIC TAGS: nervous system drug, drug effect, pharmacology

ABSTRACT: Effect on nonesterified fatty acid concentration in fatty tissue in vitro of addition of 8 simple aliphatic catecholamine derivatives of norepinephrine; while alpha and beta adrenergic effect differs widely, lipomobilizing effect differed only mildly in these catecholamine analogs. The authors thank Dr. Engelhardt and Dr. Moed for making the materials available for use. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 004

Card 1/1

L 15580-00

ACC NR: AP6006067

SOURCE CODE: CZ/0053/65/014/004/0306/0306

AUTHOR: Muhlbachova, E.; Schusterova, D.; Miszkova, D.; Elisova, K. 28 B

ORG: Institute of Pharmacology, Faculty of General Medicine, Charles University,  
Prague (Farmakologicky ustav fak. vseob. lek. KU)

TITLE: Indirectly acting sympatotropic substances in lipid metabolism [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 26-29 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 306

TOPIC TAGS: biologic metabolism, pharmacology, drug effect, nervous system drug

ABSTRACT: Study of effect of ephedrine, amphetamine and tyramine on the epididymal fatty tissue metabolism in vitro reveals that the "sympatolytic" effect is dose-dependent. Ephedrine even competitively antagonized the norepinephrine lipo-mobilization. Guanethidine, bretylium and phentolamine were used in the study. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002

Card 1/1 HW

L 13224-66

ACC NR: AP6006080

SOURCE CODE: CZ/0053/65/014/004/0311/0312

AUTHOR: Schusterova, D.; Miskova, J.

ORG: Institute of Pharmacology, Faculty of General Medicine, Prague (Farmakologic  
ustav fak. vseob. lek.)

TITLE: Effect of sympathotropic substances of the alpha and beta types of spontaneous activity of rabbit duodenum [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 27 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 311-312

TOPIC TAGS: digestive system, rabbit, nervous system drug, drug effect, pharmacology

ABSTRACT: Study of the effect of epinephrine, norepinephrine and isoprenaline with or without phentolamine or DCI on spontaneous activity of rabbit duodenum in vitro. There was a dose-dependent relationship. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 004

Card 1/19

I 13215-66

ACC NR: AP6006103

SOURCE CODE: CZ/0053/65/014/004/0321/0321

AUTHOR: Wenke, M.; Schusterova, D.; Cernohorsky, M.; Cepelic, J.

ORG: Institute of Pharmacology, FVL, Prague (Farmakologicky ustav FVL)

TITLE: Comparative tracheorelaxant and lipid mobilizing effect of sympathomimetic drugs [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 27 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 321 / 5

TOPIC TAGS: pharmacology, drug effect, nervous system drug, experiment animal, biologic metabolism, respiratory system

ABSTRACT: Seven each of N-substituted derivatives of norepinephrine and noroxedrine were used in an attempt to antagonize histamine spasm of guinea pig trachea in vitro. Whereas the relationship between lipid mobilizing effect of the two types of drugs was linear, that between the tracheal effect was parabolic. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002

Jrn

Card 1/1

L 13337-66

ACC NR: AP6006031

SOURCE CODE: CZ/0053/65/014/004/0289/0289

AUTHOR: Cepelik, J.; Cernohorsky, M.; Schusterova, M.; Wenke, M. 20

ORG: Faculty of General Medicine, Institute of Pharmacology, Charles University, Prague (Farmakologicky ustav fak. vseob. lek. KU)

TITLE: Effect of isoxsuprin on lipid metabolism [This paper was presented during the Twelfth Pharmacologic Days, Brno, 27 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 289

TOPIC TAGS: biologic metabolism, drug effect, pharmacology, biochemistry

ABSTRACT: Study of nonesterified fatty acids mobilization by norepinephrine and levo, dextro and racemic isoxsuprine in vitro and in vivo indicates wide discrepancies between the effect of epididymal fatty tissue and the effect in vivo: Possibly the difference is due to glycosynthetic effects. The authors thank Dr. H. D. Moed for placing the isoxsuprine at their disposal. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 001

jw  
Card 1/1

PAVLAS, Petr; SCHUSTEROVA, Mary

Composition of sugar beet and juices in the 1961/62 campaign.  
Listy cukrovar 79 no.8:200-209 Ag'63

SCHUSZTER, Janos (Budapest); ORLEI, Karoly (Budapest)

Forum of innovators. Ujit lap 15 no.9:62 10 My '63.



SCHUSZTER, L.

TECHNOLOGY

VILLAMOSEAG. (Magyar Elektrotechnikai Egyesulet) Budapest.

SCHUSZTER, L. Installation problems with cablelike insulated wiring. p. 215.

Vol. 6, no. 7, July 1958.

Monthly List of East European Accession (EEAI) LC Vol. 8, No. 3  
March 1959, Unclass.

SCHUSZTER, Lajos

News in the association. Villamossag 9 no.4:109-110 Ap '61.

SCHUSZTER, Lajos

Life in the associations. Villamosag 9 no.5:137-138 My '61.

SCHUSZTER, Lajos

Experiences of the "Youth Conference". Villamosag 9 no.6:  
153-155 Je '61.

CZECHOSLOVAKIA/Laboratory Equipment, Apparatus, Their Theory, Construction and Application.

F.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 46534

Author : Mirko Kalausek, Alexander Schütz, Pavel Lesse

Inst : -

Title : Study of Monomolecular Films. VI. Micropipet for Exact Dosing of Little Amounts of Substances Dissolved in Volatile Solvents.

Orig Pub : Chem. listy, 1957, 51, No 5, 991-993; Collect. Czechosl. chem. communs, 1958, 23, No 3, 533-535

Abstract : A pipet for applying little doses of solutions at the study of monomolecular films is described. In order to remove the solution residue adhering to the pipet wall, the pipet bill is washed with a few drops of the pure solvents from an auxiliary pipet after the first pipet has been emptied. The accuracy of dosing is about 0.2%. See part V in RZhKhim, 1956, 22125.

Card 1/1

Schutz, B.

CZECHOSLOVAKIA/Cultivated Plants - Ornamental.

M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53914

Author : Schutz, D.

Inst : =

Title : *Gymnocalycium Mostii* and Native Species

Orig Pub : Ziva, 1956, 4, No 5, 179-180

Abstract : The Sierra Cordoba Mountains (in the Northern part of Argentina) are the home of many interesting cactus varieties. *G. Mostii* has eight terminal spines and one central barb, its globular body attaining a diameter of 15 cm in cultivation, and it forms sessile white flowers, red in the center. *G. Kurtzianum* was described as a separate species which should be considered a subspecies or even a synonym of *G. Mostii*. *G. hybopleurum* is also similar to this, although lacking the central barb. The most attractive subspecies is *G. polycentrale* Schutz which is distinguished by a considerable number of

Card 1/2

- 165 -

SCHUTZ, B

COLL. : ...  
AUTHOR : ...  
ABD. JOUR. : ...  
TITLE : Characterization of logstocka for ...  
ORIG. NO. : ...  
INSTRUC. : ...

CZECHOSLOVAKIA

MACEK, Z.; SCHUTZ, J.; STYBLOVA, V.; FUCHS, A.; Neurological Clinic, Medical Faculty of Hygiene, Charles University (Neurologicka Klinika Lek. Fak. Hygienicke KU), Prague; Institute of Public Health (UNZ) Spolana, Neratovice; National Enterprise (N.P.) Kaucuk, Kralupy nad Vltavou; Ministry of Chemical Industry (Ministerstvo Chemickeho Prumyslu), Prague.

2 "Organizational and Methodological Problems of Preventive Neurological Care in Chemical Factories."

Prague, Ceskoslovenska Neurologie, Vol 29, No 6, Nov. 66, pp 361 - 364

Abstract: The authors state that at present the specialized preventive health services in the fields of neurology, dermatology, and psychiatry are unsatisfactory. Neurological preventive service in chemical plants should protect first of all against toxic substances. Workers should be examined by a neurologist to see if they are fit to work in given surroundings. Toxic substances, the mechanism of their action on the nervous system, their specific reactions, and suitable diagnosis methods for diseases induced by such substances must be investigated. No references. (Ms. rec. 1 Jun 66).  
1/1

SCHUTZ, J.; Okresni Institute of Public Health (Ustav Narodniho Zdravi), Melnik, Director (Reditel) Dr Z. PELIKAN.

"The Problem of Neurological Preventive Care in Chemical Plants."

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001447610002-6"  
Prague, Ceskoslovenska Neurologie, Vol 29, No 6, Nov. 66, pp 407 - 409

Abstract: The tasks of the preventive care in chemical plants can be classified into 4 categories: examination before the start of employment; preventive periodic examinations, preventive care for important personnel, and protection of personnel working in developmental processes. The examinations should always be made by a qualified neurologist. The importance of proper evaluation of the medical examinations is illustrated in several cases from author's practice. Periodic examinations of workmen dealing with Hg, CS<sub>2</sub>, phenol, CO, and benzene is mandatory. The examining medical personnel should, as far as possible, always examine the same people. No references.  
1/1



SVEDA, Vladimir; SCHUTZ, Jaromir

Experience with the introduction of timework wages with bonuses.  
Prace mzda 10 no.1:12-14 Ja '62.

1. Pracovnici n.p. Automobilove zavody Letnany, zavod Jiriho  
Dimitrova.

SCHUTZ, Mihaly

Results in investigating the material properties and durability of fly ash concretes. Epitoanyag 12 no.10:373-380 0 '60.

HAMORI, Gyorgy; SCHUTZ, Mihaly

Time factor analysis concerning the duration of slag and fly  
ash concretes. Epitoanyag 14 no.11:414-421 H '62.

L 35615-65 EWT(1)

ACCESSION NR: AF5007013

P/0045/65/027/001/0041/0048

AUTHOR: Goetz, K.; Schutz, W.; Unangst, D.

TITLE: Diffraction experiments with a laser for the optical Fourier transformation

SOURCE: Acta physica polonica, v. 27, no. 1, 1965, 41-48

TOPIC TAGS: x ray diffraction, laser, gas laser, fine structure, organic compound structure, optical Fourier transformation

ABSTRACT: The intensity of illumination can be increased  $10^3$  to  $10^5$  times, and excellent coherence and monochromaticity ensured, by employing a laser as the light source in x-ray diffraction studies. By means of this technique, the scope and precision of fine-structure analyses with x-rays can be significantly extended. The schematic diagram of the laser setup (and that of a conventional mercury-vapor lamp setup) is shown in Figure 1 of the Enclosure. The two setups differ only in the cross section of the diffraction mask, which is a few millimeters wider for the laser. Figure 2 of the Enclosure illustrates the improvements realizable with a laser light source using the carbon backbone of the naph-

Card 1/4

L 35615-65

ACCESSION NR: AP5007013

thalene molecule as an example. Diffraction pattern c in Figure 2 of the Enclosure was obtained with a helium-neon laser ( $\lambda = 6328 \text{ \AA}$ ; confocal mirror) at 1/50 second illumination time, using ORWO NP-27 negative film. The intensity of the laser illumination was sufficient to enable the diffraction pattern to be televised using an industrial Endikon F 2.5M1-UR unit. The use of laser illumination was found to provide similar advantages in a great number of other diffractometric operations. Further experimental details will be published at a later date. "We thank R. Neubert and G. Wiederhold, Diplomate Physicists, for supplying the gas laser and for advice concerning its operation". Orig. art. has: 6 formulas and 6 figures. [08]

ASSOCIATION: Physikalisches Institut der Friedrich-Schiller-Universität, Jena  
 (Physics Institute, Friedrich Schiller University)

SUBMITTED: 02Jun64

ENCL: 02

SUB CODE: EC, OP

NO REF SOV: 000

OTHER: 010

ATD PRESS: 3220

Card 2/4

L 35615-65

ACCESSION NR: AP5007013

ENCLOSURE: 01

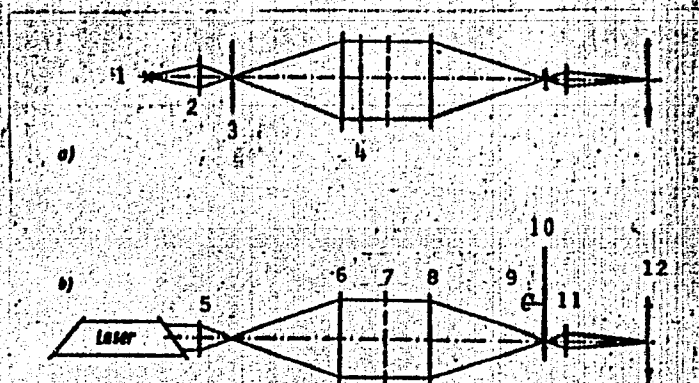


Fig. 1. Schematic drawing of the Fraunhoferian diffraction setup using (a) a high-pressure mercury-vapor lamp and (b) a laser

- 1 - Mercury-vapor lamp; 2 - condenser; 3 - collimator diaphragm; 4 - filter;
- 5 - objective for expansion; 6 - collimator - objective; 7 - diffraction mask (x, y plane); 8 - objective; 9 - rotating matte disk; 10 - diffractogram (u, v plane); 11 - objective of the microscope; 12 - photographic plate.

Card 3/4

L 35615-65

ACCESSION NR: AP5007013

ENCLOSURE: 02

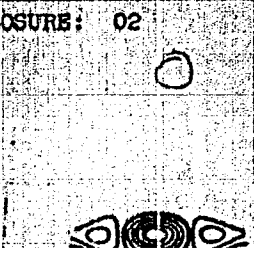
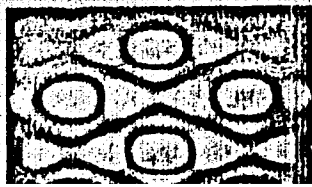
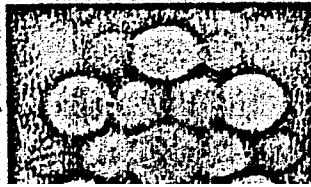
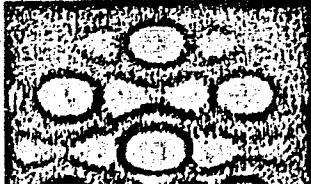




Fig. 2. Fourier transform of a naphthalene molecule obtained (a) light-optically with the aid of a high-pressure mercury-vapor lamp of good coherence (diffraction mask visible at the bottom of the picture), (b) as under (a) but with poor coherence, (c) light-optically with the aid of a laser, and (d) by calculation

Card 4/4



SCHUTZNEROVA-HAVELKOVA, V.

"A find of Miocene sediments in the basin of the Punkva River east of Blansko."

p. 318 (Casopia Pro Mineralogii A Geologh, Vol. 2, no. 3. 1957, Czchoslovakia)

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

~~SCHUTZNEROVA-HAVELKOVA, V.~~

GEOGRAPHY & GEOLOGY

PERIODICAL: VESTNIK. Vol. 33, no. 3, 1958

SCHUTZNEROVA-HAVELKOVA, V. Occurrence of Miocene sediments near Lazanky in the Moravian Karst. p. 208.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2, Feb 59, Unclass.

ACC NR: AP0007291

SOURCE CODE: UR/0133/00/000/0712/0712-

AUTHOR: Lmachin, V. N. (Candidate of technical sciences); Schvartsbart, Ya. S. (Engineer); Sinel'nikov, Yu. I. (Candidate of technical sciences); Wikitin, G. S. (Candidate of technical sciences)

ORG: "Elektrostal" Plant (Zavod "Elektrostal"); MVTU im. Bauman

TITLE: Work and deformation resistance in hot rolling high nickel alloys

SOURCE: Stal', no. 8, 1966, 722-724

TOPIC TAGS: metal deformation, hot rolling, nickel alloy, differentiation

ABSTRACT: The authors study five alloys: 1. 97% nickel, 2. 79MM precision soft-magnetic alloy, 3. 80XMM precision soft-magnetic alloy, 4. Kh20M60 refractory alloy, 5. Kh20M80TZ (E143T) refractory alloy. The chemical composition of these alloys is given. Experimentally determined specific energy values of hot rolling for the five alloys are used to set up curves of their dependence on the degree of deformation. Specific energy values in the region of deformation were determined during rolling on a production sheet rolling mill 650/450/650-800 at speeds of 1.36 m/sec and at various relative degrees of reduction at 1000 and 1150°C. A method of differentiating compression deformation energy curves with respect to hot rolling is used to establish relationships between actual deformation resistance and the degree of deformation for

Card 1/2

UDC: 621.770

ACC NR: AP6027291

the five alloys. These relationships show strengthening in the deformation zone de-  
termined by temperature and degree of deformation for each alloy. Orig. art. has:  
4 figures, 2 tables, 8 formulas.

SUB CODE: 11/13/ SUBM DATE: None/ ORIG REF: 002

Card 2/2 5b