

KASPAR, Emil

"Hartl's optical plate" by Antonin Spolna. Reviewed by Emil Kaspar.  
Pokroky mat fyz astr 9 no.4:252-253 '64.

L 31783-66 T IJP(c)

ACC NR: AP6021645

SOURCE CODE: CZ/0030/65/000/010/0310/0313

AUTHOR: Kaspar, E.; Cernicky, F.

40  
B

ORG: Department of Mathematics and Physics, Charles University, Prague (MFF KU)

TITLE: Dependence of wedge shape error and of ray deviation error on production errors of optical prism angles

SOURCE: Jemna mechanika a optika, no. 10, 1965, 310-313

TOPIC TAGS: optic prism, error function, light radiation

ABSTRACT: A previous paper of the authors presented a derivation of some general relations concerning the passage of a ray through an optical prism and characteristics of some current types of prisms or of their systems. The present paper gives a general form of the dependence of the prism wedge shape on production errors of prism angles and an analogous relation for the deviation of the ray. Orig. art. has: 5 figures and 30 formulas. [JPRS]

SUB CODE: 20 / SUM DATE: 14Apr65 / ORIG REF: 001

LS

Card 1/1

UDC: 535.315:681.4

KASPAR, F.

9

3857. Propagation of electromagnetic waves in an isotropic medium with complex electric and magnetic conductivities. F. Kasper. *Elektron. Obr.* 42, No. 7-8, 428-434, 1966, in Czech.

The paper is based mainly on the works of V. K. Arkad'ev, V. Vvedenskii and E. G. Breckman, P. H. Dowling and W. G. Stoeck. Local and average permeability,  $\mu = \mu' - j\mu''$ , and permittivity,  $\epsilon = \epsilon' - j\epsilon''$ , are defined, and the propagation constant, wave impedance and power relations for a plane monochromatic wave are derived in terms of  $\mu$  and  $\epsilon$ . The complex  $\mu$  and  $\epsilon$  are applied to the solution of the wave propagation in: (1) an infinite magnetodielectric cylinder and slab placed in an external magnetic or electric field; (2) a ferromagnetic cylinder and slab. The latter solution is illustrated by a number of graphs. The dependence of  $\mu$  and  $\epsilon$  on frequency is briefly discussed, some of the calculated and measured results being shown graphically. 29 references are given. R. S. SIDOROWICZ

6

RSPW  
RSPW

KASPAR, FRANTISEK

SCIENCE

KASPAR, FRANTISEK. Vseobecna fyziologia telesnych cviceni Bratislava,  
Slovenske pedagogicke nakl., 1957. 91 p. (Vysokoskolske ucebne texty)  
DNLM Not in DLC

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

KASPAR, F.

The Leipzig Fair 1957. [Supplement] p. 214.

(Elektrotechnický Obzor. Vol. 46, no. 4, Apr. 1957. Praha, Czechoslovakia)

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

KASPAR, F.

"Short-circuit resistance of thermal protective relays."

p. 517 (Elektrotechnický Obzor) Vol. 46, no. 10, Oct. 1957  
Prague, Czechoslovakia

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

KASPAR, F.  
KOPECKY, O.

Coordination of research work on the fattening, the fattening tests,  
and the commercial value of hogs and poultry. p. 251

Praha. Ceskoslovenska akademie zemedelskych ved. VESTNIK.  
Praha, Czechoslovakia. Vol. 6. no. 5, 1959

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

89304

Z/017/60/C 49/001/001/002

E197/E235

9,2140 (1001,1143,1325

AUTHOR: Kašpar, František, Doctor Engineer  
TITLE: Special Materials for Thermal Relays  
PERIODICAL: Elektrotechnický obzor, 1960, No. 1, pp. 14-19  
TEXT: The article deals with the calculation of stresses in bimetallic strips and of their deflection. The strips considered are made up of two different materials and are plated for the purpose of either better electrical conduction or protection against corrosion or as a bonding layer. The author states that bimetallic strips, improved by additional plating are used abroad. For better electrical conduction the bimetallic element has a film of copper. The author calculates the final stress as the sum of stresses due to elongation and of bending but assumes that there is no transfer of stress at the boundary of any of the layers. Under the quoted assumptions, the maximum combined stress in a bimetallic strip plated with copper on both sides will be, in the outside layer of the compressed component, as illustrated in Fig. 5 of the article. For a strip with a third layer in the middle, the maximum stress will be at the boundaries of the middle

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Special Materials for Thermal Relays

layer, as illustrated in Fig. 10 of the article. The approximate deflection per unit length of strip,  $k'$  will be in both cases:

$$k' = \frac{3(\alpha_2 - \alpha_1)h}{4 h_0}$$

in which  $h_0$ , the unplated thickness;  $h$ , the thickness including plate;  $\alpha_2$  and  $\alpha_1$ , the coefficients of thermal expansion of the main materials. There are 10 figures and 3 references: 1 Czech and 2 non-Czech. ✓

SUBMITTED: October 19, 1959

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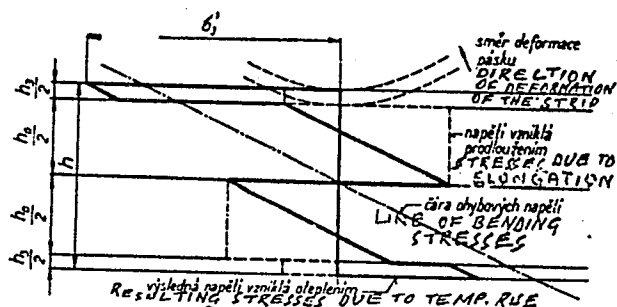
Z/017/60/049/001/001/002

E197/E235

Special Materials for Thermal Relays

Internal stresses in  
the strip caused by  
temperature rise

Fig. 5



Obr. 5. Vnitřní napětí v pásku vzniklá jeho oteplením pro

$$E_1 = E_2 = E_3 = E; h_1 = h_2 = \frac{h}{2}.$$

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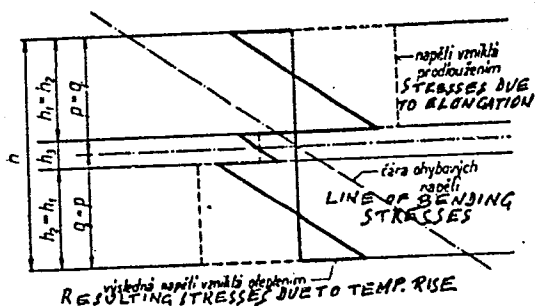
89304

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E197/E235

# Special Materials for Thermal Relays

Internal stresses in a strip with an intermediate connecting layer caused by a temperature rise

Fig. 10



Obr. 10. Vnitřní napětí v pásce se střední spojovací vrstvou vzniklá jeho oteplením pro  $E_1 = E_2 = E_3 = E$ ;  $h_1 = h_2$ ;  $p = q = \frac{h}{2}$ .

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80380

Z/009/60/010/05/039/040

E142/E135

15.7.000

AUTHORS: Otakar Kolář, Zdeněk Pelzbauer and František Kašpar

TITLE: Determination of the Particle Size, Distribution and Specific Surface of Pigments Used in Paints

PERIODICAL: Chemický Průmysl, 1960, Vol 10, Nr 5, pp 274-278

ABSTRACT: Lacquers contain an average of 20 to 50 volume % of pigments and fillers. The properties, especially the size and the distribution of particles, as well as the specific surface, are therefore most important. These parameters were determined by electron microscopy and results compared with data obtained by the sedimentation method devised by Andreasen (Ref 7). The specific surface of the pigments and fillers was estimated by the BET (Refs 8-10) gas adsorption method and values compared with results obtained according to the Carman method (Ref 14). The tested pigments and fillers are listed in Table 1. Photographs of the vacuum adsorption apparatus and the Carman apparatus are shown in Figs 2 and 3. Electron microphotographs of the various tested substances are given in Figs 4-8. The electron-microscope method was found to be most satisfactory for

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E142/E135

Determination of the Particle Size, Distribution and Specific Surface of Pigments used in Paints

estimating the size and distribution of particles. Results obtained were in good agreement with data obtained by other authors (Ref 17). This method also makes it possible to determine the formation of the pigment particle, and to define the specific surface of particles with a non-porous surface where the diameter does not exceed 1  $\mu$ . The Andreasen method cannot be used for particles with a size of less than 1  $\mu$  (Table 4) and even for particles between 1 to 20  $\mu$  results are not sufficiently accurate. The BET method was found to be most satisfactory for determining the specific surface of pigments and fillers. The Carman method is recommended when the pigments or fillers are dispersed in the lacquers. There are 8 figures, 4 tables and 18 references, of which 6 are Czech, 9 English and 3 German.

Card  
2/2

ASSOCIATION: Výzkumný ústav syntetických pryskyřic a laků, Pardubice  
(Research Institute for Synthetic Resins and Lacquers,  
Pardubice)

SUBMITTED: October 30, 1959

KASPAR, Frantisek

Tricycles with a body made by Ceske zavody motocyklove [Czech Motorcycle Factory] used by communication services. Cs spoje 7 no.3:27 Mr '62.

1. Reditel Mestske postovni spravy Praha

KASPAR, Frantisek; PELZBAUER, Zdenek

Interaction between adsorption of substances on pigments and pigment agglomeration. Chem prum 12 no.10:569-575 0 '62.

1. Vyzkumny ustav syntetickych pryskyric a laku, Pardubice (for Kaspar). 2. Ustav makromolekularni chemie, Ceskoslovenska akademie ved, Praha (for Pelzbauer).

KASPAR, Fr.

Establishment of a group of rheology specialists affiliated with the Czechoslovak Scientific and Technological Society. Chem prum 13 no.10:535 O '63.

1. Vyzkumny ustav syntetickych pryskyric a laku, Pardubice.

KASPAR, F., inz., dr.

"Motor protection; over-currents, overheating" by H. Franken.  
Reviewed by F. Kaspar. El tech obzor 52 no.5:272 My '63.

KASPAR, F.

Analytic representation of demagnetizing curves of permanent magnets. El tech obzor 52 no.6:313 Je '63.

KASPAR, F., inz. dr.

Use of superconductor activity in electrical engineering. El tech obzor  
53 no.11:611-613 N '64.

KASPAR, Frantisek; STANEK, Jiri

Rheological characteristics of concentrated alkyde solutions.  
Chem prum 15 no.3:165-170 Mr '65.

1. Research Institute of Synthetic Resins and Lacquers, Pardubice.

KASPAR, I.; KUTMAN, O.

"Electronic microcoulombmeter." P. 389.

SLABOPROUDY OBZOR. (Ministerstvo presneho strojirenstvi, Ministerstvo spoju a Vedecka technicka spolecnost pro elektrotechniku pri CSAV).  
Praha, Czechoslovakia, Vol. 20, No. 6, June 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,  
August 1959.  
Uncla.

SANDEROVA, Vera, promovany fyzik; KASPAR, Ivan, inz.

Device for measuring the dynamic response of selenium rectifier elements. Slaboproudý obzor 23 no.6:334-337 Je '62.

1. Katedra fyziky elektrotechnické fakulty, České vysoké učení technické, Praha.

KASPAR, J.

Industrial television in railroad operation. p. 165.

ZELEZNICNI DOPRAVA A TECHNIKA. (Ministerstvo dopravy)  
Praha, Czechoslovakia  
Vol. 7, no. 6, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11.  
Nov. 1959  
Uncl.

KASPAR, J.

Determination of constants in periodical movements of the plumb line by means of compensating computation.

P. 313, (Geofysikalni Sbornik) Ceased publication. No. 36/60, 1956 (Published 1957)  
Praha, Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

J. KASPAR.

The image of a curve in modeling an optional surface upon another one. In German. p. 131.

ACTA TECHNICA. (MAGYAR TUDOMANYOS AKADEMIA) Budapest, Hungary.  
Vol. 23, no. 1/3, 1959.

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

Uncl.

CZECHOSLOVAKIA/Electricity - General Problems.

G

Abs Jour : Ref Zhur Fizika, No 11, 1959, 25173

Author : Kutman, D., Kasper, J.

Inst : -

Title : Measurement of Electric Field

Orig Pub : Slaboproudý obzor, 1959, 20, No 2, 117-118

Abstract : Survey of methods used to measure electric field.

Card 1/1

CZECHOSLOVAKIA/Pharmacology and Toxicology - Agents Affecting Blood V  
Coagulation.

Abs Jour : Ref Zhur - Biol., No 2, 1959, 9241

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721030001-7

Author : Duchon, J., Kasper, J.

Inst : -

Title : Experience in the Treatment of Coronary Sclerosis with  
Heparin

Orig Pub : Lekar. obzor, 1958, 7, No 2, 112-115

Abstract : No abstract.

Card 1/1

KORINEK, Stanislav, inz.; KASPAR, Jaroslav, inz.

Modern technology and automation in mass production of  
drilling tools. Stroj vyr 10 no.8:384-388 '62.

1. Zavody Rijnove revoluce, n.p., Vsetin.

KASPAR, Josef, prof., inz.

Commemorating the 70th birthday of professor Jindrich Sarek. Hut  
listy 16 no.9:675-676 S '61.

KASPAR, J.

Professor Bedrich Salamon, cartographer and surveyor; a biography. p. 20.  
Ceskoslovenský spolecmost aemepisna. SEORNIK. Praha. Vol. 61, no.1, 1956.

SOURCE: East European Accessions List. (EEAL) Library of Congress.  
Vol. 5, No. 8, August 1956.

S/035/62/000/010/113/128  
A001/A101

AUTHOR: Kašpar, Jan

TITLE: On transformation of coordinates in geodesy

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 10, 1962, 36, abstract 10G189 ("Compte rendu 1-er sympos. internat. calculs géod. Cracovie, 1959", Cracow, 1961, 127 - 138, German and French)

TEXT: The author describes the method of coordinate transformation in triangulation networks, based on the principle of conform mapping. Conform mappings of one surface onto the other are considered under conditions of preservation of the length and direction of a curve (2 cases). Corresponding equations of the images of geodetic lines are derived. In the second case, a special example is considered: geodetic curvature of the image of a geodetic line is constant. As an example, the author presents transformation of a triangulation network from one surface of reference to the other under condition of minimizing the sum of squares of divergences between the similar points. (See also RZhAstr, 1958, no. 11, 7842; 1960, no. 4, 3691). L. D'yachenko  
[Abstracter's note: Complete translation]

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S/044/63/000/002/039/050  
A060/A126

AUTHOR: Kašpar, Jan

TITLE: Method for verifying experimentally established functions

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 40, abstract 2V182  
(Compte rendu 1-er sympos. internat. calculs géod. Cracovie, 1959.  
Kraków, 1961, 207 - 214; German)

TEXT: The paper sets forth certain characteristics of the method of least squares as applied to observations of a periodic function  $Y = f(t; x, y, z)$  of the argument  $t$  with unknown parameters  $x, y, z$ . The formulae are cited for the mathematical expectation of the first absolute and some other moments of the quantity  $Y - Y_1$ , where  $Y_1$  is the observed value of the function; the error of observation is assumed to be normally distributed.

A.Kh. Zaslavskiy

[Abstracter's note: Complete translation]

Card 1/1

KASPAR, Jan

Conformal representation of a surface on the other surface  
under optional conditions. Studia geophys 6 no.2:105-139  
'62.

1. Geophysikalisches Institut der Tschechoslowakischen  
Akademie der Wissenschaften, Bocni II, Praha 2 - Spcrllov.

KASPAR, Jan

Professor Augustin Seperad; obituary. Studia geophys 6 no.4:415-416  
'62.

KASPAR, Jan; PLESKOT, Vaclav

Commemorating the 80th birthday of professor Frantisek Fiala.  
Aplikace mat 8 no.1:79-80 '63.

KASPAR, Jan

Dr. Frantisek Fiala's eightieth birthday. Studia geophys 7  
no.2:207-208 '63.

ZOUBEK, Vladimir, akademik; KARNIK, V.; KASPAR, J.; MASKA, M.;  
VACHTL, J.; ZATOPEK, A.

Research on the deep earth layers and its place in the research  
on inorganic nature. Vestnik CSAV 72 no.3:327-332 '63.

KASPAR, Jan, dr.

One hundred years since the birth of Professor Vaclav Laska.  
Rudy 11 no.8:280 Ag '63.

L 3730-66

ACCESSION NR: AP5027647

CZ/0023/65/009/002/0178/0185

AUTHOR: Kaspar, Jan (Doctor, Engineer)

TITLE: Obtaining a suitable system of coordinates on the surface from the point of view of determination of an approximate geoid [This paper was presented at the Symposium on the Determination of the Figure of the Earth, October 6 - 10, 1964, Prague]

SOURCE: *Studia geophysica et geodaetica*, v. 9, no. 2, 1965, 178-185

TOPIC TAGS: geodesy, surface geometry, coordinate system, parameter

Abstract [Author's Russian summary, modified]: An equation has been derived for the surface, in separate vectors of its accompanying trihedron, with parameters representing the arcs of the principal parametric curves. Here, curvilinear lines of the surface are the parametric curves. In addition, equations have been derived for transformation of analogous parameters for the case of a general orthogonal system with a common origin into the above cited system. A system of rectangular curvilinear coordinates, corresponding to the directions of the extreme distortions in the case of reflection of the original surface on the other, was

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ACCESSION NR: AP5027647

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used to determine transformation formulas for the arcs of the curvilinear lines. An equation was derived for the surface of reflection with parameters representing arcs of the curvilinear lines on the original plane. This method was also used in the case of single vectors of the accompanying trihedron in reflection. As a result, identical parameters were obtained for the two surfaces, by which it proves possible, for example, to compare the normals of the surface of reflection, considered an approximation of the geoid, with the system of normals obtained on the basis of suitable reduced astronomical latitude and longitude, or to compare the normals and coordinates of the two surfaces. The original surface is considered the surface of relativity. Since the resulting equations contain, besides constants determining the reflection regardless of the form of the surface, invariant expressions as well which have geometric value, they can be used to determine the form of the surface of reflection. Orig. art. has 3 figures and 8 formulas.

ASSOCIATION: Geophysikalisches Institut der Tschechosl. Akad. d. Wiss., Prague  
(Geophysics Institute, Czechoslovak Academy of Sciences)

CA

PROCESSES AND PROPERTIES INDEX

A brief sketch of the mineralogy and geochemistry of the carbon from Kladno. Jan Vaclav Kaspner. *Vestník Státního Geol. Ústavu Čkosloveské Rep.* 9, 297-303 (1933); *Chem. Zvest.* 1934, 11, 2668. Among the carbonates of the carbonate formation of Kladno the Mg series predominates, the deposit of these minerals precedes that of the sulfides; barite in general follows the sulfides. Among the sulfides are those of Pb, Fe, Co, Ni, Cu and Zn. M. G. Moore

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ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ca

Crystallography of millerite from Kladsno, Bohemia.  
I. V. Kalpar. *Vestnik Kral. Ces. Spol. Nauk, Praha*  
*Mat.-Fiz. No. 12, 21 pp.(1933); Mineralog. Abstracts*  
5, 470. I. F. Schairer

8

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECOND AND THIRD CATEGORIES

MINERALOGY

ALLOYING

AND OTHERS

*BC*

*a-2*

*Origin of guano minerals in the Dominican  
Große, Steudemann, G. V., Kitzner (Vestn. Stde. Geol.  
Est. Oostokiev. Repub. 1936, 10, 104-111; Chem.  
Zentr., 1937, 1, 2537).—Analytical data are given.  
H. J. E.*

ABX-566 METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBOLS

RECORD MAP ONLY ONE

ANALYSTS

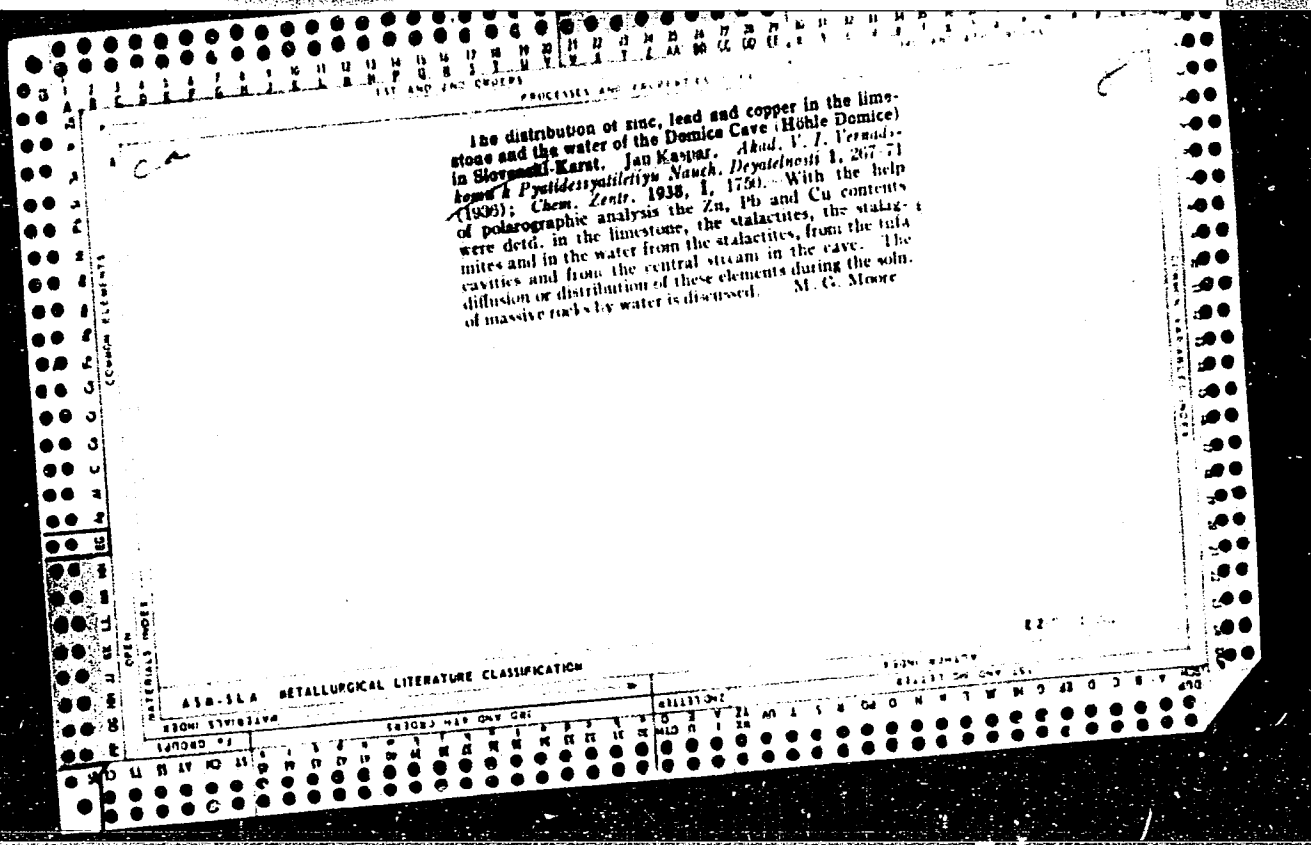
RECORD ONLY ONE

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CP

THE GENESIS OF GUANO MINERALS IN THE CAVES AT DOMICE.  
 J. V. Kadpar. *Vestnik St. geol. inst. CSR 10, 101-11*  
 (1955); *Chem. Obozr 13, Abstracts 131*.--The water soak-  
 ing through layers of bat guano exts. primarily the sulfate  
 and phosphate, which react with the  $\text{CaCO}_3$  of the stalag-  
 mites and form new minerals; among these K. identified  
 gypsum, brushite ( $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$ ), colophanite and cal-  
 cite. The mechanism by which brushite becomes dehy-  
 drated is described. Frank Mareš

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION



| COMMON ELEMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   | RARE EARTH ELEMENTS |   | METALS |   | NON-METALS |   | GASES |    | OTHER |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------|---|--------|---|------------|---|-------|----|-------|----|
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| Ca                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |                     |   |        |   |            |   |       |    |       |    |
| <p><b>Mineralogy and geochemistry of the granite massif at Ricany.</b> V. Kaspar. <i>Věstn. Pírodni 17</i>, 1-4 (1930); <i>Novos. Věstn. Mineral. Geol.</i>, Ref. 1, 1938, 304. The granite massif at Ricany is the youngest intrusion into the mid-Bohemian pluton. Differentiation has clearly resulted in a marginal facies and pegmatite veins. In the granite the order of crystals has been apatite and titanite, biotite, plagioclase and oligoclase, quartz. In the pegmatites orthoclase and tourmaline were noted usually associated with apatite, beryl, biotite, quartz and muscovite. In one pegmatite in contact-metamorphism hornblende, cassiterite and arsenopyrite were observed. Traces of a hydrothermal phase resulting in introduction of barite, quartz and fluorite were found in some fissures. Migration of magmatic material into the surrounding sediments is shown by the presence of tourmaline, epidote and fluorite with bessonite, vesuvian, chlorite, pyrite and calcite. C. A. Silbert</p> |   |                     |   |        |   |            |   |       |    |       |    |
| <p>ASB-354 METALLURGICAL LITERATURE CLASSIFICATION</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |   |                     |   |        |   |            |   |       |    |       |    |
| <p>140000 14</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |   |                     |   |        |   |            |   |       |    |       |    |

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Analcline from Morcinov near Lomnice on the Popelka  
 Jan Kalpar. Věstník Státního Geol. Ústavu Českoslov.  
 Repub. 15, 193-5(1939); Chem. Zvest. 1941, 11, 175.  
 Analysis of crystals occurring in vesicular melaphyre rock  
 gave  $\text{SiO}_2$  68.72,  $\text{Al}_2\text{O}_3$  21.25,  $\text{Fe}_2\text{O}_3$  0.11,  $\text{CaO}$  0.12,  
 $\text{Na}_2\text{O}$  11.42,  $\text{K}_2\text{O}$  0.10,  $\text{H}_2\text{O}$  8.38, sum 100.10%. They  
 had d. 2.338,  $n$  1.4765. Michael Fleischer

AS - SLA METALLURGICAL LITERATURE CLASSIFICATION

| CLASS | SUBCLASS | NUMBER | DATE | AUTHOR | TITLE | ABSTRACT | NOTES | REMARKS |
|-------|----------|--------|------|--------|-------|----------|-------|---------|
| 1     | 1        | 1      | 1    | 1      | 1     | 1        | 1     | 1       |
| 2     | 2        | 2      | 2    | 2      | 2     | 2        | 2     | 2       |
| 3     | 3        | 3      | 3    | 3      | 3     | 3        | 3     | 3       |
| 4     | 4        | 4      | 4    | 4      | 4     | 4        | 4     | 4       |
| 5     | 5        | 5      | 5    | 5      | 5     | 5        | 5     | 5       |
| 6     | 6        | 6      | 6    | 6      | 6     | 6        | 6     | 6       |
| 7     | 7        | 7      | 7    | 7      | 7     | 7        | 7     | 7       |
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| 16    | 16       | 16     | 16   | 16     | 16    | 16       | 16    | 16      |
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| 24    | 24       | 24     | 24   | 24     | 24    | 24       | 24    | 24      |
| 25    | 25       | 25     | 25   | 25     | 25    | 25       | 25    | 25      |
| 26    | 26       | 26     | 26   | 26     | 26    | 26       | 26    | 26      |
| 27    | 27       | 27     | 27   | 27     | 27    | 27       | 27    | 27      |
| 28    | 28       | 28     | 28   | 28     | 28    | 28       | 28    | 28      |
| 29    | 29       | 29     | 29   | 29     | 29    | 29       | 29    | 29      |
| 30    | 30       | 30     | 30   | 30     | 30    | 30       | 30    | 30      |
| 31    | 31       | 31     | 31   | 31     | 31    | 31       | 31    | 31      |
| 32    | 32       | 32     | 32   | 32     | 32    | 32       | 32    | 32      |
| 33    | 33       | 33     | 33   | 33     | 33    | 33       | 33    | 33      |
| 34    | 34       | 34     | 34   | 34     | 34    | 34       | 34    | 34      |
| 35    | 35       | 35     | 35   | 35     | 35    | 35       | 35    | 35      |
| 36    | 36       | 36     | 36   | 36     | 36    | 36       | 36    | 36      |
| 37    | 37       | 37     | 37   | 37     | 37    | 37       | 37    | 37      |
| 38    | 38       | 38     | 38   | 38     | 38    | 38       | 38    | 38      |
| 39    | 39       | 39     | 39   | 39     | 39    | 39       | 39    | 39      |
| 40    | 40       | 40     | 40   | 40     | 40    | 40       | 40    | 40      |
| 41    | 41       | 41     | 41   | 41     | 41    | 41       | 41    | 41      |
| 42    | 42       | 42     | 42   | 42     | 42    | 42       | 42    | 42      |
| 43    | 43       | 43     | 43   | 43     | 43    | 43       | 43    | 43      |
| 44    | 44       | 44     | 44   | 44     | 44    | 44       | 44    | 44      |
| 45    | 45       | 45     | 45   | 45     | 45    | 45       | 45    | 45      |
| 46    | 46       | 46     | 46   | 46     | 46    | 46       | 46    | 46      |
| 47    | 47       | 47     | 47   | 47     | 47    | 47       | 47    | 47      |
| 48    | 48       | 48     | 48   | 48     | 48    | 48       | 48    | 48      |
| 49    | 49       | 49     | 49   | 49     | 49    | 49       | 49    | 49      |
| 50    | 50       | 50     | 50   | 50     | 50    | 50       | 50    | 50      |
| 51    | 51       | 51     | 51   | 51     | 51    | 51       | 51    | 51      |
| 52    | 52       | 52     | 52   | 52     | 52    | 52       | 52    | 52      |
| 53    | 53       | 53     | 53   | 53     | 53    | 53       | 53    | 53      |
| 54    | 54       | 54     | 54   | 54     | 54    | 54       | 54    | 54      |
| 55    | 55       | 55     | 55   | 55     | 55    | 55       | 55    | 55      |
| 56    | 56       | 56     | 56   | 56     | 56    | 56       | 56    | 56      |
| 57    | 57       | 57     | 57   | 57     | 57    | 57       | 57    | 57      |
| 58    | 58       | 58     | 58   | 58     | 58    | 58       | 58    | 58      |
| 59    | 59       | 59     | 59   | 59     | 59    | 59       | 59    | 59      |
| 60    | 60       | 60     | 60   | 60     | 60    | 60       | 60    | 60      |
| 61    | 61       | 61     | 61   | 61     | 61    | 61       | 61    | 61      |
| 62    | 62       | 62     | 62   | 62     | 62    | 62       | 62    | 62      |
| 63    | 63       | 63     | 63   | 63     | 63    | 63       | 63    | 63      |
| 64    | 64       | 64     | 64   | 64     | 64    | 64       | 64    | 64      |
| 65    | 65       | 65     | 65   | 65     | 65    | 65       | 65    | 65      |
| 66    | 66       | 66     | 66   | 66     | 66    | 66       | 66    | 66      |
| 67    | 67       | 67     | 67   | 67     | 67    | 67       | 67    | 67      |
| 68    | 68       | 68     | 68   | 68     | 68    | 68       | 68    | 68      |
| 69    | 69       | 69     | 69   | 69     | 69    | 69       | 69    | 69      |
| 70    | 70       | 70     | 70   | 70     | 70    | 70       | 70    | 70      |
| 71    | 71       | 71     | 71   | 71     | 71    | 71       | 71    | 71      |
| 72    | 72       | 72     | 72   | 72     | 72    | 72       | 72    | 72      |
| 73    | 73       | 73     | 73   | 73     | 73    | 73       | 73    | 73      |
| 74    | 74       | 74     | 74   | 74     | 74    | 74       | 74    | 74      |
| 75    | 75       | 75     | 75   | 75     | 75    | 75       | 75    | 75      |
| 76    | 76       | 76     | 76   | 76     | 76    | 76       | 76    | 76      |
| 77    | 77       | 77     | 77   | 77     | 77    | 77       | 77    | 77      |
| 78    | 78       | 78     | 78   | 78     | 78    | 78       | 78    | 78      |
| 79    | 79       | 79     | 79   | 79     | 79    | 79       | 79    | 79      |
| 80    | 80       | 80     | 80   | 80     | 80    | 80       | 80    | 80      |
| 81    | 81       | 81     | 81   | 81     | 81    | 81       | 81    | 81      |
| 82    | 82       | 82     | 82   | 82     | 82    | 82       | 82    | 82      |
| 83    | 83       | 83     | 83   | 83     | 83    | 83       | 83    | 83      |
| 84    | 84       | 84     | 84   | 84     | 84    | 84       | 84    | 84      |
| 85    | 85       | 85     | 85   | 85     | 85    | 85       | 85    | 85      |
| 86    | 86       | 86     | 86   | 86     | 86    | 86       | 86    | 86      |
| 87    | 87       | 87     | 87   | 87     | 87    | 87       | 87    | 87      |
| 88    | 88       | 88     | 88   | 88     | 88    | 88       | 88    | 88      |
| 89    | 89       | 89     | 89   | 89     | 89    | 89       | 89    | 89      |
| 90    | 90       | 90     | 90   | 90     | 90    | 90       | 90    | 90      |
| 91    | 91       | 91     | 91   | 91     | 91    | 91       | 91    | 91      |
| 92    | 92       | 92     | 92   | 92     | 92    | 92       | 92    | 92      |
| 93    | 93       | 93     | 93   | 93     | 93    | 93       | 93    | 93      |
| 94    | 94       | 94     | 94   | 94     | 94    | 94       | 94    | 94      |
| 95    | 95       | 95     | 95   | 95     | 95    | 95       | 95    | 95      |
| 96    | 96       | 96     | 96   | 96     | 96    | 96       | 96    | 96      |
| 97    | 97       | 97     | 97   | 97     | 97    | 97       | 97    | 97      |
| 98    | 98       | 98     | 98   | 98     | 98    | 98       | 98    | 98      |
| 99    | 99       | 99     | 99   | 99     | 99    | 99       | 99    | 99      |
| 100   | 100      | 100    | 100  | 100    | 100   | 100      | 100   | 100     |

Ca

The chemical composition of brushite from the south Carpathian karst. *Ian. Knapar. Vistnik SSSR'skoi Geol. Pribor. Chislisov. Repub. 16, 66-63(1940); Chem. Zentr. 1941, II, 176.*—Analysis gave CaO 32.45, MgO 8.25, FeO 0.03, P<sub>2</sub>O<sub>5</sub> 40.62, N<sub>2</sub>O<sub>2</sub> 0.20, SO<sub>3</sub> none, H<sub>2</sub>O 20.15, sum 99.70%. No isomorphous admixt. of gypsum was present. Dehydration study showed a loss of approx. 20% up to 190°; dehydration was complete at 600°.

Michael Fleischer

ASAP-55-A METALLURGICAL LITERATURE CLASSIFICATION

| 1ST AND 2ND ORDERS                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  | 3RD AND 4TH ORDERS |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|
| PROCESS AND PROPERTIES INDEX                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |
| <p><i>Ca</i></p> <p>Fluorite crystals from Kosof. Jan Václav Kašpár.<br/> <i>Věda Pěstová, Praha</i> 20, 823(1946); <i>Mineralog. Ab-</i><br/> <i>strakt</i> 9, 264(1946). Violet cubes occur with smoky<br/> quartz in limestone. Michael Fritsch</p> |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |
| <p>ASME-ELA METALLURGICAL LITERATURE CLASSIFICATION</p>                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |

C de

Copper in the melaphyre from Lomnice on Popelka.  
 Jan Vachek Nalpor. *Veda Průmyslu, Praha* 20, 237 0  
 (1940). *Mineralog. Abstracts* 9, 201 (1940). Melaphyre  
 from Lomnice contains veins of jasper and other forms of  
 silica, together with calcite and barite. Native Cu, as  
 dendritic forms and wire rimmed by cuprite, occurs in a  
 jasper breccia consisting of fragments of green jasper  
 cemented by gray jasper. It also occurs in the melaphyre  
 as specks consisting of a mixt. of Cu and cuprite, or as  
 pseudomorphs after plagioclase. Michael Fleischer

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

*Ca*

8

Pectolite from Zelechov-Tal near Liebstadt. Jan V.  
Kaiser. *Zentralblatt für Mineralogie*, 17, 12-50  
in German, 50 (1911) (Publ. 1912). Pectolite occurs in a  
tholeiite, the occurrence resembling that in the New Jersey  
trap rock. Two analyses, one showing a slight excess of  
*Ca*, and a dehydration curve are given. The water is  
essential. Michael Fleischer.

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

| GROUP | SUBGROUP | SECTION | DETAILS |
|-------|----------|---------|---------|
| 1     | 2        | 3       | 4       |
| 5     | 6        | 7       | 8       |
| 9     | 10       | 11      | 12      |
| 13    | 14       | 15      | 16      |
| 17    | 18       | 19      | 20      |
| 21    | 22       | 23      | 24      |
| 25    | 26       | 27      | 28      |
| 29    | 30       | 31      | 32      |
| 33    | 34       | 35      | 36      |
| 37    | 38       | 39      | 40      |
| 41    | 42       | 43      | 44      |
| 45    | 46       | 47      | 48      |
| 49    | 50       | 51      | 52      |
| 53    | 54       | 55      | 56      |
| 57    | 58       | 59      | 60      |
| 61    | 62       | 63      | 64      |
| 65    | 66       | 67      | 68      |
| 69    | 70       | 71      | 72      |
| 73    | 74       | 75      | 76      |
| 77    | 78       | 79      | 80      |
| 81    | 82       | 83      | 84      |
| 85    | 86       | 87      | 88      |
| 89    | 90       | 91      | 92      |
| 93    | 94       | 95      | 96      |
| 97    | 98       | 99      | 100     |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

8

CA

A new natural ferric silicate. Jan V. Kabanov. *Russ. Geol. Zh.* 1961, No. 14, 8 pp. (1961). *Mining* heavy Crude. 1961, No. 14, 8 pp. (1961). *Mining* Abstracts 0, 186(1961). Limonite-like incrustations on pyrrhotite from Chibabala, Rumania, contained  $\text{SiO}_2$  28.70,  $\text{Fe}_2\text{O}_3$  40.20,  $\text{FeO}$  1.00,  $\text{S}$  0.83,  $\text{H}_2\text{O}$  (below  $240^\circ$ ) 22.90,  $\text{H}_2\text{O}$  (above  $240^\circ$ ) 0.07, sum 100.74%. This corresponds to  $\text{H}_2\text{Fe}_2\text{Si}_2\text{O}_7 \cdot 6\text{H}_2\text{O}$ . The mineral, named *abmesite*, has sp. gr. 2.075, hardness 2½, and is isotropic. Michael Fleischer with n 1.008.

ASIA 15.4 METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

| 1ST AND 2ND ORDERS                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| PROCESSES AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p><i>Ca</i></p> <p>Cuprite from Bilowes near Nachod. Jan. Kaspar.<br/> <i>Zpravy Geol. Ústavně Čechy Morava</i> 18, 21-22 (1911).<br/>           271 (1912) (Pub. 1913). Cuprite, formed by oxidation of<br/>           native Cu, occurs in veins in granite porphyry. Assocd.<br/>           minerals include hematite, domeykite, and wad.<br/>           Michael F. Hoyer</p> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>23000 SYMBOLISM</p> <p>23000 SYMBOLISM</p> <p>23000 SYMBOLISM</p>                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Ca

8

Axinite veins of Záběhlice near Zbraslav, Bohemia.  
 Jan Vachek, ~~Katany~~ *Katany* Czech. Akad. 52, No. 13,  
 1990 (1992). *Mineralog. Abstracts* 9, 205 (1990). Pale  
 violet crystals of axinite, occurring assoc. with quartz  
 and calcite in veins, gave on analysis: SiO<sub>2</sub> 40.12, B<sub>2</sub>O<sub>3</sub>  
 5.87, Al<sub>2</sub>O<sub>3</sub> 17.90, Fe<sub>2</sub>O<sub>3</sub> 4.88, FeO 4.75, MnO 0.81, MgO  
 1.49, CaO 20.14, Na<sub>2</sub>O 2.12, H<sub>2</sub>O<sup>+</sup> 0.16, H<sub>2</sub>O<sup>-</sup> 2.45,  
 Sr trace, sum 100.75%. It had sp. gr. 3.214-3.254.  
 Michael Fleischer

ASB-51.2 METALLURGICAL LITERATURE CLASSIFICATION

8

CA

The origin of agates and jaspers. Jan Václav Kaizer.  
Věda Pěstovní, Praha 23, 67-104(1944). *Mineralog.*  
Abstracts 10, 63(1947).--The Fe oxides forming the pig-  
ments of agates examd. by reflected light show pseudo-  
morphs of chalcedony after hematite, parallel growths of  
minute rhombohedra of hematite, perimorphs of hematite  
on barite, and replacements of barite and chlorite by iron  
oxides. Hematite and goethite were deposited contem-  
poraneously or subsequently. The paragenetic features  
do not agree with Liesegang's explanation of rhythmic

ptns. or with Linck's theory of tropical climatic condi-  
tions. Michael Fleischer

| TEST AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |  |                           |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| TEST AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |  | TEST AND PROPERTIES INDEX |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>Ca</p> <p>Calcite crusts on small lakes in the caves of Zdravov. Jan Václav Kármán. <i>Věda Písecká, Praha 22</i>, 130-6 (1943); <i>Mineralog. Abstracts</i> 9, 205(1940). — Thin crusts of calcite, contg. traces of Ba and Sr, cover the surface of small lakes in the caves. Fe oxide forms later than the calcite.</p> <p>Michael Fletcher</p> |  |  |  |  |  |  |  |  |  |  |  |  |                           |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |  |  |  |                           |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>STANDARD CODE</p>                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  | <p>STANDARD CODE</p>      |  |  |  |  |  |  |  |  |  |  |  |  |
| <p>STANDARD CODE</p>                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |  |  |  | <p>STANDARD CODE</p>      |  |  |  |  |  |  |  |  |  |  |  |  |

8

ONDFEJITE, a new mineral. Preliminary note. Jan Václav Kalpar. *Věda Přírodní, Praha* 23, 132-7 (1944); *Mineralog. Abstracts* 9, 261 (1946).—Crusts and irregular concretions on aragonite crystals in the Zbrašov caves near Hranice, eastern Moravia, consist of white pulverulent material which was proved by x-ray photographs to be homogeneous. Sp. gr. 2.217. Analysis gave  $\text{CO}_2$  43.60,  $\text{SiO}_2$  6.57,  $\text{FeO}$  0.40,  $\text{MgO}$  18.34,  $\text{CaO}$  12.65,  $\text{Na}_2\text{O}$  5.31,  $\text{H}_2\text{O}$  (60°) 2.17,  $\text{H}_2\text{O}$  (650°) 2.07, sum 94.07%. If the deficit represents water expelled at a still higher temp., the mineral would belong to the thaumasite group.

Michael Fleischer

ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION

BRISTOL

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CH

Calcite from the melaphyres in the northeast of Hoho  
mte. Jan. 1910. Lith. Nat. Ges. Praha Rep.  
Ceskoslov. 21, 101-202 (in English, 201-21010).  
Crystallographic study. Michael Fleischer

ASME-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM DIVISION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA

19

The manufacture of synthetic corundum and its practical use. Jan Kalpar. Chem. Zvesti 4, 84-97(1950).  
Ivan Mikh

KASPAR, J.

KASPAR, J.; POSPISIL, R:

"Meteoric Iron From Opava." p. 54. (Casopis. Series A. Historia  
Naturalis. Vol. 2, No. 1/2, 1952, Opava.)

Vol. 3, No. 3.

SO: Monthly List of East European Accessions, Library of Congress, March 1954, Uncl.

KASPAR T

3

✓ Kaspar, J., and Distoupil, V. *Negativní analýza*  
Prague: Státní Nakl. Tech. Lit. 1954. 100 pp. 1.00 Kč  
Reviewed in Chem. Listy 49 (1955)

✓ Kaspar, J., and Distoupil, V. *Mineral Raw Materials*. Prague: National  
Technical Literature Publishing House. 1954. 550pp. Reviewed in Chem. Listy  
49(1955).

PM

Kaspar, J.

Production of Thomas slag in Talbot furnaces. p. 236. HUTNIK,  
(Ministerstvo hutního průmyslu a rudných dolů) Praha. Vol. 4,  
no. 8, Aug. 1954.

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

**"APPROVED FOR RELEASE: 06/13/2000**

**CIA-RDP86-00513R000721030001-7**

**APPROVED FOR RELEASE: 06/13/2000**

**CIA-RDP86-00513R000721030001-7"**

VICTOR, J.

New Information on the Use of Plastic in Construction

KASPAR, Jan

Monokrystaly. (Single Crystals. 1st ed. English and Russian summaries, illus., bibl, indexes, notes) Authors: Jan Kaspar, Josef Smid, Juraj Lekstein. Prague, SNTL, 1957. 213 p.

Principles of the chemistry of crystals and their application for manufacturing single crystals. First part of the book is devoted to the theory of single crystals, their inner structure and properties, and their growth as well as solution. The second part deals with the synthesis of single crystals. It analyses the most important methods used in the crystallization of metals and the preparation of single crystals of various inorganic and organic matters.

Bibliograficky katalog, CBR, Ceske knihy, No. 32, 17 Sept. 57, p. 676

S/564/57/000/000/001/029  
D258/D307

AUTHOR: Kašpar, Jan (Czechoslovakia)  
TITLE: Studies in the field of preparation and  
investigation of technical monocrystals in  
Czechoslovakia  
SOURCE: Rost kristallov; doklady na Pervom soveshchanii  
po rostu kristallov, 1956 g. Moscow, Izd-vo  
AN SSSR, 1957, 32-38

TEXT: A brief historical review of the state of this field  
is first given, beginning from the gem-cutting in Czechoslovakia  
in the 14th century. A description is then given of: (1) The  
synthesis of monocrystals by Verneille's method (corundum and  
sialon), comprising the studies of G. R. Shotton (1944) and of  
G. W. Barta (1956), summarizing a procedure for automation of the  
process, and mentioning application of the method to laboratory  
scale production of other minerals, e.g., rutile, scheelite, and

Card 1/3

S/564/57/000/000/001/029  
D258/D307

Studies in the field...

BaWO<sub>4</sub>. Czechoslovakia may be regarded as the leading country in some directions in this field. (2) Synthesis of piezoelectric monocrystals, beginning from the work on ammonium dihydrogen phosphate in 1950, and summarizing the procedure which is based on Walker's work. Numerous, particularly theoretical, problems remain unsolved although crystals are now in production. The procedure may be extended to potassium dihydrogen phosphate and potassium tartrate. Walker and Kohman's method was also used for growing crystals of ethylenediamine tartrate; quartz crystals were produced in 1953 on laboratory scale. (3) Synthesis of optical crystals, chiefly alkali metal halides, beginning in 1951. The work on KBr is summarized, which has now led to production of crystals on a semi-industrial scale. (4) The utilization and work on diamonds, including rapid and reliable crystallographic assessment of the crystals. Theoretical and practical studies began in 1950. Considerable progress and increased application of monocrystals is foreseen by the second 5-year plan in Czechoslovakia. [Abstracter's note: Parts

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Studies in the field...

S/564/57/000/000/001/029  
D258/D307

(2) and (3) include author's past work. 7 There are 1 figure  
and 11 references: 6 Soviet-bloc and 5 non-Soviet-bloc.

Card 3/3

PHASE I BOOK EXPLOITATION

CZECH/4900

Kašpar, Jan, Professor, Doctor of Natural Sciences

Nerosty radioaktivních prvků, jejich vznik a vývoj (The Minerals of the Radioactive Elements, their Origin and Development) Prague, SNTL, 1959. 155 p. 2,700 copies printed.

Reviewer: Mikuláš Gregor, Professor, Doctor, Engineer, Corresponding Member of the Czechoslovak Academy of Sciences; Tech. Ed.: Vladislav Lacina; Chief Ed.: Adolf Balada, Doctor; Resp. Ed.: Marie Mervartová, Engineer.

PURPOSE: This book is intended for researchers in the field of radioactive minerals, personnel engaged in refining radioactive minerals, students in special [technical] schools and institutions of higher learning, and for geologists, mineralogists, geochemists and chemists.

COVERAGE: The author gives a detailed description of radioactive minerals, appraises radioactive ores to determine their suitability for refining, and considers various refining methods.

Card 1/4

Prerace

Card 2/4

7



KASPAR, Jan

The history of mineralogy at the Technical High School in Prague.  
Sbor chem tech no.3, part2:5-35 '59.

1. Katedra mineralogie, Vysoka skola chemicko-technologicka, Praha.

KASPAR, Jan

Adularia from Obri Dul below Snezka Mountain. Sbor chem tech  
no.3, part 2:157-162 '59.

1. Katedra mineralogie, Vysoka skola chemicko-technologicka, Praha.

KASPAR, Jan

Genetic relation between uranyl carbonates, liebigite, uranothallite and voglite; synthesis of carbonate III. Sbor chem tech no.3, part 2: 197-210 '59.

1. Katedra mineralogie, Vusoka skola chemicko-technologicka, Praha.

APPROVED FOR RELEASE: 06/13/2000  
CZECHOSLOVAKIA/ Electronics

H-  
CIA-RDP86-00513R000721030001-

Abs Jour : Ref Zhur Fizika, No 3, 1960, 6434

Author : Koseh, F., Horak, J., Kaspar, J.

Inst : Technical or Chemical College, Pardubice, Czechoslovakia

Title : Conductivity of Copper Tungstate

Orig Pub : Collect. Czechsl. Chem. Communs, 1959, 24, No 6, 2034-2037

Abstract : Sintered specimens of  $\text{CuWO}_4$  were used to investigate the dependence of the conductivity on the temperature. From this dependence, the energy of activation was calculated; on the basis of the analysis of the lines and the Debye patterns of certain conducting specimens of  $\text{CuWO}_4$ , the strength of the Cu -- O -- W bond is evaluated.

06605

CZECH/8-53-1-1/20

AUTHOR: Kaspar, Jan

TITLE: Raw Material Base of Fluorine Chemistry

PERIODICAL: Chemické listy, 1959, Vol 53, Nr 1, pp 1 - 5

ABSTRACT: Lecture presented to a conference on fluorine chemistry in Prague. It deals with the current world supplies of fluorine containing minerals. It is stated that the problem of flotation containing less than 30% fluorine has been solved in Czechoslovakia. The author draws attention to the necessity of recovery of fluorine from the wastes of apatite processing and from the manufacture of super-phosphate. The locations of fluorine deposits in Czechoslovakia, East Germany, Bulgaria, the Soviet Union, China, Western Europe and the USA are briefly enumerated. Plants for the beneficiation of fluorine ores exist in Czechoslovakia and Eastern Germany. The Czech deposits consist mainly of ores with fluorine contents between 20 and 30%. The quantities of the deposits vary between 10 000 and 100 000 tons for most locations, with the exception of the deposits at Harrachov which are larger.

Card1/2

06605

CZECH/8-53-1-1/20

Raw Material Base of Fluorine Chemistry

Particularly large fluorine deposits exist in China and this is of practical interest from the point of view of the Czech industry. In Western Europe France has particularly rich deposits of fluorine ores.

ASSOCIATION: Katedra mineralogie, Vysoká škola chemicko-technologická, Praha (Chair of Mineralogy, Faculty of Chemical Technology, Technical University, Prague)

Card 2/2

KASPAR, Jan; TALANDOVA, Marie

Arsenic, material for mineralogy of Bohemia. Sbor chem tech 4 no.1:  
217-222 '60. (EEAI 10:9)

1. Katedra mineralogie, Vysoka skola chemicko-technologica, Praha.  
(Arsenic) (Mineralogy)

KASPAR, Jan

Second report on Iceland spar. Sbor chem tech 4 no.1:229-255 '60.  
(EEAI 10:9)

1. Katedra mineralogie, Vysoka skola chemicko-technologicka, Praha.  
(Iceland spar)

23070

Z/037/61/000/002/002/003  
E133/E435

24,7700 (1055, 1137, 1144)

AUTHORS: Kosek, F., Horák, J. and Kašpar, J.

TITLE: The Semiconducting Properties of Copper Tungstate

PERIODICAL: Československý časopis pro fysiku, 1961, No.2,  
pp.133-140

TEXT: The semiconducting properties of tungstates have been inadequately studied. So far, the reactions during the formation of copper tungstate from metallic oxides have been studied and the diffusion processes at the contact between copper oxide and tungsten oxide (Ref.4: Tamman, G., Westerhold, F., Z.anorg.allg. Chem.35 (1925),149). Recently, the equilibrium between copper tungstate and hydrogen as well as the thermodynamic properties of copper tungstate have been studied (Ref.5). The electrical properties of sintered samples of copper tungstate were studied by the authors. The samples were prepared from sodium tungstate (Merck) and copper nitrate. From these, tungsten oxide and copper oxide were prepared. These were mixed and heat-treated at 800°C for 48 hours in oxygen. Samples 1 and 2 were prepared by this method while another two samples (3 and 4) were prepared by mixing the oxides into molten sodium chloride. The melt was held at

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Z/037/61/000/002/002/003  
E133/E435

The Semiconducting Properties ...

820°C for 48 hours. After cooling, the powdered preparation was extracted in hot distilled water and washed in water several times. The samples were pressed at 15000 kg/cm<sup>2</sup> into cylindrical shape and heated in a quartz tube to 580°C for 4 hours in oxygen. After slow cooling, gold contacts were evaporated onto the samples. These electrodes proved ohmic between 0 and 1 Volt. The measurements on all samples gave identical and reproducible results. The conductivity  $\sigma$  of the samples was measured at a constant oxygen pressure of 750 mm Hg in the temperature range from 273 to 873°K. Fig.1 shows the results for the samples 1 to 4. The samples sintered at lower partial pressures (about 50 mm Hg) of oxygen showed higher conductivity than those sintered at atmospheric pressure of oxygen. An investigation of the dependence of the conductivity upon the partial pressure of oxygen was undertaken next. The measurements were taken only after equilibrium had been set up, i.e. after approximately 15 hours.  $\sigma$  was found to be a linear function of the partial pressure of oxygen. It can be expressed by the equation

$$\sigma = \text{const} \times P_{O_2}^{-\frac{1}{x}}$$

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E133/E435

The Semiconducting Properties ...

where  $p_{O_2}$  is the partial pressure of oxygen. The values of  $x$  vary between 3.48 at 703°K and 4.96 at 856°K. We might speculate that the conductivity is due to either oxygen vacancies or to copper (or tungsten) ions or atoms in interstitial positions. In the monoclinic lattice, the second possibility seems rather unlikely. Assuming that the conductivity is due to the electrons from oxygen anions, we can calculate the conductivity as a function of partial pressure of oxygen and find that the probable mechanism is given by equation 1:

- (1) oxygen molecule  $\rightleftharpoons$  oxygen atom + (oxygen vacancy)<sup>+</sup> + e<sup>-</sup>
- (2) oxygen molecule  $\rightleftharpoons$  oxygen atom + (oxygen vacancy)<sup>++</sup> + 2e<sup>-</sup>

At higher temperatures, a second mechanism (equation 2) might come into action. This assumption is supported by the fact that the dependence of  $\log \sigma$  upon  $1/T$  changes at about 693 to 753°K (Fig.1). Measurements of the thermoelectric e.m.f. as a function of temperature supported the assumption that copper tungstate is an n-type semiconductor. The view that oxygen vacancies determine the conductivity of copper tungstate is in agreement with

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The Semiconducting Properties ... Z/037/61/000/002/002/003  
E133/E435

Landsberg et al (Ref.11) and Pschera and Hauffe (Ref.12).  
The luminescent properties of cadmium tungstate also point to  
oxygen vacancies as the most likely defects in this substance,  
which is isomorphous with  $\text{CuWO}_4$ . There are 5 figures and  
13 references: 4 Soviet-bloc and 9 non-Soviet bloc).

ASSOCIATION: Vysoká škola chemickotechnologická, Pardubice  
(School of Chemical Technology, Pardubice)

SUBMITTED: April 28, 1960

Card 4/5

SORM, Frantisek, akademik; MASTOVSKY, Otakar; KASPAR, Jan; SIRACKY, Andrej;  
VANA, Josef; ZACHOVAL, Ladislav; RASKA, Karel; BLASKOVIC, Dionyz,  
akademik; WICHTERLE, Otto, akademik; PRANTL, Ferdinand; CUTA, Frantisek;  
JERIE, Jan; HENNER, Kamil, akademik; CAPEK, Ladislav; LINK, Frantisek;  
STRNAD, Julius

Report on the activities of the Czechoslovak Academy of Sciences made  
at its 12th General Assembly, and the discussion. Věstník CSAV 70 no.1:  
26-34 '61.

1. Namestek presidenta Ceskoslovenska akademie ved (for Sorm).
2. Clen korespondent Ceskoslovenske akademie ved (for Mastovsky,  
Kaspar, Siracky, Vana, Zachoval, Raska, Prantl, Cuta, Jerie,  
Capek, Link and Strnad).
3. Predseda Slovenskej akademie vied  
(for Siracky).

KASPAR, Jan

The 4th Conference on Monocrystals. Vestnik CSAV 70 no.5:  
650-655 '61.

1. Clen korespondent Ceskoslovenske akademie ved.

KOZESNIK, Jaroslav, akademik; BLASKOVIC, Dionyz, akademik; KOJMAN, Arnost, akademik; MACURA, Jiri, dr.; VANA, Josef; GOSIOROVSKY, Milos; BOHM, Jaroslav, akademik; PROCHAZKA, Jaroslav, prof., dr.; HAMPEJS, Zdenek, dr.; BRABEC, Frantisek, prof, inz., dr.; SORM, Frantisek, akademik; NOVAK, Josef, akademik; NEUMANN, Jaromir, doc., dr.; BAZANT, Vladimir, inz., dr.; KOUNOVSKY, Bohumil, dr.; SZANTO, Jan, dr.; ROZSIVAL, Miroslav, dr.; KASPAR, Jan, dr.; HANKA, Ladislav, prof., inz.; STRNAD, Julius; WICHTERLE, Otto, akademik; ZATOPEK, Alois; JAVORNICKY, Jan, inz.; VAVRA, Jaroslav, dr.; BLATNY, Ctibor, akademik; ONDRIS, Karol, dr.; KUKAL, Vaclav, inz.

The 22d Congress of the Communist Party of the Soviet Union and the tasks of Czechoslovak science; discussion. Vestnik CSAV 71 no.1:3-59 '62.

1. Hlavní vedecký sekretar Československé akademie věd (for Kozesnik).
2. Člen korespondent Československé akademie věd (for Vana, Gosiorovsky, Kaspar, Strnad, Zatopek).
3. Rektor Karlovy university (for Prochazka).
4. Rektor Ceskeho vysokeho uceni technickeho (for Brabec).
5. Namestek presidenta Československé akademie věd (for Sorm)

KASPAR, Jan

Symposium on the use of radioisotopes in soil research in Bombay.  
Vestnik CSAV 71 no.4:459-462 '62.

1. Clen korespondent Ceskoslovenske akademie ved.

KASPAR, Josef

Principles of designing die castings. Slevarenstvi 12  
no.4:133-137 Ap '64.

1. Ceske zavody motocyklove, Strakonice.

KASPAR, Jaromir, inz.

Uniform qualification requirements for employees in technical and economic services. Prace mzda 11 no.4:161-164 Ap '63.

1. Jachymovske doly, n.p., Zadni Chodov.

KALMAN, Jaroslav, inc.

Problems of the Danube-Oder-Elbe canal and the third main  
railroad line construction. Doprava no. 57377-281 '64.

KASPAR, Jaroslav, inz.

Development of a standardized European automatic coupler  
and its effectiveness. Zel dop tech 12 no. 3: 72-74  
'64.

KASPAR, Jaroslav, inz.

Problems of automatic couplers in Czechoslovakia. Zel dop  
tech 12 no.11:290-292 '64.

KASPAR, Jaroslav, inz.

The VZLU experimental air turbine. Zpravodaj VZLU 3:37-39 '64.

KOROPECKY, Igor; KOROPECKA, Helena; GEMZA, Emil; KASPAR, Jiri

Continuous measurement of the viscosity of liquids. Pt. 3.  
Sbor VSChT Pardubice 1/2 145-151 '62 [publ. '63].

1. Katedra automatizace chemickych vyrob, Vysoka skola  
chemicko-technologicka, Pardubice.

KASPAR, Jiri, dr.; VRSECKY, Arnost, inz.

Methods of establishing and using the technical and economic indexes of capital investment in the food industry. Prum potravin 13 no.6:286-289 Je '62.

1. Ministerstvo potravinarskeho prumyslu, Praha.

KASPAR, Josef, prof., inz.

Introduction. Sbor VSB Ostrava 9 no.1:5-6 '63.

1. Vedouci katedry ocelarstvi, Vysoka skola banska, Ostrava.

Kaspar, K.

Construction of electric installations in residential buildings.  
p. 232. ELEKTROTECHNIK. (Ministerstvo strojirenstvi) Praha.  
Vol. 11, no. 7, July 1956.

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

5.3831

AUTHORS:

TITLE:

PERIODICAL: Chemický průmysl, 1961, No.8, pp. 444-445  
 Juračka, František, and Kašpar, Karel  
 Adsorption of trimethylamine on chloromethyl-  
 divinylbenzene-styrene copolymers

TEXT:  
 D. Jones (Ref.2: Ind. Eng. Chem. 44, 2686 (1952)). The present  
 paper reports the adsorption of trimethylamine by CDSC from  
 aqueous solutions under dynamic conditions in an absorption column.  
 The effects of trimethylamine concentration, rate of flow and  
 reaction temperature on yields are studied. A diagrammatic cross-  
 section of the apparatus (Fig.1) and experimental details are  
 presented. CDSC was allowed to swell in toluene, the excess of  
 which was removed by suction. 90 ml. of CDSC were placed in  
 column k<sub>2</sub> (27 mm diameter, 270 mm long). A solution of  
 trimethylamine was then introduced into the column from container  
 z<sub>1</sub> through float-valve P, dripper k<sub>1</sub> and heat exchanger V, in  
 which the solution of trimethylamine was preheated. It enters  
 Card 1/5

ROVED FOR

CIA-RDP86-00513R000721030001-7

26272

Z/009/61/000/008/005/005  
 E112/E153

Adsorption of trimethylamine on ....

column k through the three-way tap TK<sub>1</sub>, and is finally led  
 through three-way tap TK<sub>2</sub> into the calibrated cylinder OV. Heat  
 exchanger and jacket of column k<sub>2</sub> are heated by means of water from  
 thermostat Th. The system was closed hydraulically by means of  
 wash-bottles p, containing dilute sulphuric acid. The reacted  
 solution of trimethylamine was withdrawn from the system at regular  
 time intervals through TK<sub>2</sub> and the concentration of trimethylamine  
 determined acidometrically. Its concentration was plotted against  
 volume, and comparative curves were plotted for the absorption of  
 trimethylamine on a non-chloromethylated divinylbenzene-styrene  
 copolymer. On conclusion of each experiment samples of the resin  
 were withdrawn from different parts of the column and their anion-  
 exchange capacity tested. Results of tests showed that high  
 concentrations of trimethylamine (20% solutions) gave unsatisfactory  
 products. The reaction was strongly exothermic, leading to boiling  
 and escape of free trimethylamine. Flow of aqueous trimethylamine  
 was finally completely stopped. Dilute solutions improved yields  
 and sorption of trimethylamine was found to increase inversely with  
 the charge. Lower concentrations of trimethylamine permit the  
 study of temperature effects on the rate of conversion, the latter  
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Adsorption of trimethylamine on ... Z/009/61/000/008/005/005  
E112/E153

ASSOCIATION: Výzkumný ústav syntetických pryskyřic a laků,  
Pardubice (Research Institute for Synthetic Resins  
and Paints, Pardubice)

SUBMITTED: April 1, 1961

Caption to Fig.1 Diagram of apparatus.

Z<sub>1</sub> - container of starting solution; Z<sub>2</sub> - container of reacted  
solution; P - float valve; k<sub>1</sub> - dripper (to gauge rate of flow);  
k - column with jacket; K<sub>1</sub>, K<sub>2</sub> - taps; TK<sub>1</sub>, TK<sub>2</sub> - three-way  
taps; OV - calibrated cylinder; V - preheating of amine-solution;  
Th - thermostat; p - wash bottles.

Card 4/5

DOKOUPIL, Stanislav; KARPINSKY, Jurij; KASPAR, Milan

The attenuation of electromagnetic waves in rocks. Studia  
geophys 6 no.2:176-192 '62.

1. Institute of Radio Engineering and Electronics,  
Czechoslovak Academy of Sciences, Lumumbova 1, Praha 8 -  
Kobylisy (for Dokoupil, Karpinsky). 2. Ore Research  
Institute, Modranska 23, Praha 4 - Hodkovicky (for  
Kaspar).

KASPAR, Milos, inz.

Replacement of steel rollers of rubber belt conveyers.  
Energetika Cz 14 no.1:35 Ja'64.

1. Elektrarna Hodonin, n.p.

KASPAR, M.

"Possible prospects of geophysics in mining." p. 115

RUDY. Praha, Czechoslovakia, Vol. 7, No. 4, April, 1959

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

KASPAR, Milan, inz., CSc.

The 4th National Conference of Geophysicists in Gottwaldov on  
November 3, 1961. Rudy 10 no.1:32 Ja'62.

1. Ustav pro vyzkum rud.