NAGY, Janos; REM, Lajos; KOVESDI, Antal; CSERVENKA, Janos; BEREGI, Gabor; KOVARI, Laszlo; MAHNER, Sandor

Domestic news. Bany lap 95 no.10:697-699 O '62.

KOVARI, T.

Matematikai Lapok-Vol. 6, no. 1, 1955.

Tenth anniversary of our liberation. p. 1.
Bela Szokefalvi-Nagy's Valos fuggvenyek es fuggvenysorok (Real Functions and Series of Functions); a book review. p. 95.

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

4644:
Kővári, Tamás. - On a problem set by P. Turán. Mat. Lapok 7 (1956), 106–107. (Hungarian. Russian and English summaries)

The positive solution of the following problem of Turán is given: is there an integral function $f(z)$, for which the set of the roots of the functions $f(z), f'(z), \ldots, f^{(m)}(z), \ldots$ is everywhere dense on the whole complex plane?

Author's summary

KOVARI, T.

On the maximum modulus of entire functions. In English. p.305.
(Acta Mathematica, Vol. 7, no. 3/4, 1956, Budapest, Hungary)

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

KOVARI, T.

A note on entire functions. In English. p. 67.
(ACTA MATHEMATICA. Vol. 8, no. 1/2, 1957, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957. Uncl.

HAJOS, Gyrogy; CSASZAR, Akos; PAL, Laszlo; TURAN, Pal; CORRADI, Keresztely; KARTESZI, Ferenc; GALLAI, Tibor; GRATZER, Gyorgy; SCHMIDT, E. Tamas; RENYI, Alfred; HETYEI, Gabor; BARTFAI, Pal; DEAK, Ervin; KOVARI, Tamas

Mathematical problems. Mat lapok 13 no.1/2:174-183 '62.

1. "Matematikai Lapok" szerkeszto bizottsagi tagja (for Hajos).
2. "Matematikai Lapok" felelos szerkesztoje (for Turan).
3. "Matematikai Lapok" szerkeszto bizottsagi tagja (for Renyi).

KOVARIK, Antonin

New measuring, recording, signaling, and program controlling apparatus. Automatizace 8 no.1:22 Ja '65.

KOVARIK, B.; NEMEC, J.

Effect of cobalt II and nickel II salts on acetylene polymerization. p. 48

CHEMICKE PRUMYSI. (Ministeratvo chemickeho prumyslu) Praha, Czechoslovakia
Vol. 9, No. 1, Jan. 1959

Monthly List of East European Accessions, (EEAI) LC, Vol. 8, No. 7, July 1959
Uncl.

KOVARIK, B.

Effect of hydrothermal treatment upon the activity of Lebedev catalysts. / B. Kovařík (Výzk. ústav synth. kaučuku, Gottwaldov-Zlín, Czech.). *Collection Czechoslov. Chem. Commun.* 24, 1260-7(1959).—Hydrothermal treatment, i.e. heating with H_2O at 100–200° in an autoclave, increases the sorption activity, specific surface, and pore vol., and at the same time improves yields and conversion to *butadiene*, of the Lebedev catalyst composed of MgO and SiO_2 (e.g. 77:23%). The activity of fresh as well as used catalysts can be thus increased. M. Hudlický

4
2 Nov 59
1

III.
V,

DJ

Z/009/60/000/01/006/038
E112/E253

AUTHORS: Kovařík, B., Beníšek, J., and Zavřel, J

TITLE: Use of Silicates for the Preparation of Catalysts

PERIODICAL: Chemický průmysl, 1960, Nr 1, pp 21-22

ABSTRACT: This is an investigation on the effect of indigenous aluminium silicates (kaolin and clay) as additions to silica gel in the Lebedev process for the preparation of butadiene from alcohol. Details of the preparation of the catalyst which contained 69% MgO, 20% kaolin or clay, 10% SiO_2 and 1% promotor. In comparative tests the standard catalyst contained instead of kaolin the equivalent amounts of SiO_2. The activity of the catalyst was assessed in the synthesis of butadiene from ethanol and it was found that the addition of kaolin or clay gave certain technological advantages, such as halving of sedimentation time, improved ease of filtration. Kaolin showed slight advantages over clay in as much as the reaction temperature was about 10°C lower. Maximum yields were already obtained at 390°C. The conversion by the addition of kaolin was higher than with the standard catalyst or with clay. The yields

Card 1/2

Z/009/60/010/02/007/026
E142/E235

AUTHORS: Kovařík, B., Beníšek, J., and Zavřel, J

TITLE: The Preparation of Butadiene from Alcohol

PERIODICAL: Chemický Průmysl, 1960, Vol 10, Nr 2, pp 81-83

ABSTRACT: The authors studied the properties of catalysts for the preparation of butadiene from alcohol by the Lebedev method. This process has been described in various publications (Refs 1 to 6) but the quoted reaction temperatures vary between 270 to 450°C, the quoted yields vary between 45 and 72% and the quoted life of the catalyst varies between a few weeks and several months. Very little information is available on the composition and activity of the catalysts. Table 1 gives data on composition and activity of the most satisfactory catalysts described in literature. They all contain as basic components MgO and SiO_2 whereas the original Lebedev catalyst consisted of a mixture of zinc and aluminium oxides (Ref 1). The authors prepared some of the catalysts described in literatures and further types of catalysts which were tested on laboratory as well as on semi-pilot plant scale. The catalyst was activated for 24 hours in an air current

Card 1/4

Z/009/60/010/02/007/026
E142/E235

The Preparation of Butadiene from Alcohol

at 550°C. The experiments were carried out under atmospheric pressure; the tests lasted for 6 hours. On the semi-pilot plant scale 16 hours cycle reaction were interrupted by 3-hour regeneration cycles. The yield of butadiene was estimated by absorption from the contact gas. Ethyl alcohol was analysed in the condensates by esterification with formic acid in the presence of H_2SO_4. The preparation of the $MgO/SiO_2/Cr_2O_3$ catalyst is described. Several types of this catalyst with varying percentage composition of the 3 components were tested and best results were obtained when the catalyst consisted of 79% MgO, 19% SiO_2 and 2% Cr_2O_3. The preparation of a modified catalyst consisting of MgO/SiO_2/kaolin/Cr_2O_3 is described. Multi-component catalyst P7 contained SiO_2, MgO and catalyst promotors of oxides of group 2 and 8 of the periodic table. This type of catalyst increased the conversion and yield of the butadiene and reduced the optimum reaction temperatures; its preparation was described in an earlier publication (Ref 13). The properties of these three types of catalysts are compared in

Card 2/4

... ml of 85% ethyl alcohol,

Z/009/60/010/02/007/026
E142/E235

The Preparation of Butadiene from Alcohol

using 1 litre of catalyst per hour. The life of the P7 catalyst is about 800 hours when 16 hour reaction cycles are interrupted by 3-hour regeneration cycles. There are 2 figures, 2 tables and 14 references, 4 of which are English, 2 Soviet, 5 Czech, 1 German, 1 Polish and 1 Hungarian.

ASSOCIATION: Výzkumný ústav syntetického kaučuku, Gottwaldov
(Research Institute for Synthetic Rubber, Gottwaldov)

SUBMITTED: June 30, 1959

Card 4/4

27227

Z/009/61/000/009/001/003
E112/435

5.1190

AUTHOR: Kovařík, Bohuslav

TITLE: Evaluation of catalysts for butadiene and styrene production

PERIODICAL: Chemický průmysl, No.9, 1961, pp.472-473

TEXT: The present report was compiled from several unpublished papers, deposited in the archives of the Research Institute of Synthetic Rubber. It summarizes efficiency studies of the following catalysts in semitechnical applications:
1) MgO/SiO_2 for butadiene from ethyl alcohol;
2) Ta_2O_5/SiO_2 for butadiene from ethyl alcohol and acetaldehyde;
3) Fe_2O_3 or ZnO for styrene from ethylbenzene;
4) Cr_2O_3/Al_2O_3 for butene from butane and
5) $Ca_8Ni(PO_4)_6$ for butadiene from butene.
Relevant data are assembled in the form of a table to which the following explanatory notes are added (the numbers are identical to the numbers of the first column of the table).
5. Reaction temperature: It is feasible, in theory, to prepare even more active catalysts, particularly for the butadiene processes from ethyl alcohol and ethylalcohol and acetaldehyde

Card 1/6

respectively. 6. Conversion: Never exceeds 40%; a higher rate of conversion necessitates higher temperatures, which is not desirable in view of low stability of the monomers. 7. Yields: The given values refer to a product of 100% purity in the rectificate; the yields decrease with the complexity of the process. Processes based on catalysts, capable of auto-regeneration are preferred. They are, however, applicable only where reaction temperatures are in the region of 500°C. For discontinuous processes, slower-acting catalysts were found to be advantageous. It is for this reason that the process of Ostromyslenkiy is given preference over Lebedev's method. 11. Service life of the catalyst: In Lebedev's process the catalyst is used only for 800 h and the yield during that period is 72%; using the catalyst for 1600 to 2000 h lowers the yield of butadiene to 66%. The physical deterioration of the catalyst has to be considered. Lebedev's catalyst suffers erosion and disintegration to dust particles which may block the pipes. 12. Performance of catalyst: This term defines the quantity of product produced during the life period of the catalyst. 14. Price of catalyst: This is only of secondary importance in

Z/009/61/000/009/001/003
E112/E435

Evaluation of catalysts ...

view of the varying life periods and varying efficiency.
15. Effect of catalyst price to the total costs of the product: Attention is drawn to the relatively high costs of the Lebedev catalyst. There are 1 table and 5 Soviet-bloc references.

ASSOCIATION: Výzkumný ústav syntetického kaučuku, Gottwaldov
(Research Institute of Synthetic Rubber, Gottwaldov)

Card 3/6

34688

11.2211
15.9201

Z/009/62/000/002/002/002
E112/E453

AUTHORS: Erben, F., Koudelka, J., Kovařík, B.

TITLE: Preparation of pure isoprene

PERIODICAL: Chemický průmysl, no.2, 1962, 66-69

TEXT: A two-stage process for isoprene is investigated involving: 1) reaction of paraformaldehyde with isobutylene to form 4,4-dimethyl-dioxane (1,3) (II); 2) pyrolysis of (II) over a suitable catalyst to produce isoprene (I). The process is known to produce isoprene contaminated with 1 to 4% of pentenes, which it is very difficult to separate and the aim of this paper is to find optimum conditions for the preparation of pure (I). Stage 1. Reaction of paraformaldehyde with isobutylene is carried out in presence of H_2SO_4 at 80°C. The effect of varying the concentration of H_2SO_4 was studied. Optimum quantities are 1 g H_2SO_4 per 1 mole CH_2O. Increased quantities produced tarry by-products. Heating for 10 min at 80°C produced 70% conversion. Prolonged heating increased the yield only insignificantly. Reaction is strongly exothermic and difficult to control. Difficulties in maintaining exact reaction conditions were first

Card 1/3

Preparation of pure isoprene

encountered in semitechnical experiments. They were due to varying moisture content of paraformaldehyde, which caused a variation in the concentration of H_2SO_4. Difficulties were then easily overcome by introducing necessary corrections for the H_2SO_4 concentration. Effects of H_2SO_4-concentration on rate of reaction and effects of temperature and reaction time on the conversion of isobutylene to (II) are summarized in the form of graphs. Stage 2. Pyrolysis of (II) into (I) was studied with three catalysts: K-1 - 75% Al_2O_3 + 25% SiO_2, activated for 8 hours at 550°C; K-2 - 38% H_3PO_4 on aluminosilicate, activated for 8 hours at 400°C; K-3 - mixture of calcium phosphates, activated for 8 hours at 400°C. Best results were obtained with K-2, effecting at 200°C a 79% conversion of (II) into (I) with a yield of 90 mole %. Disadvantages are that during reaction and regeneration of K-2, phosphoric acids are gradually washed out. Catalyst K-3 was, therefore, selected for bulk experiments. Effects of temperature on the efficiency of the catalysts are summarized in Table II, showing conversion of (II) into (I) in mole % and isoprene contents in distillation condensates. The

Z/009/62/000/002/002/002
Preparation of pure isoprene E112/E453

effects of temperature on conversion and on the ratio isoprene: pentenes were investigated. Since separation of isoprene from the pentenes by fractional distillation was found difficult, the authors set out to produce a raw isoprene with low pentene contents even at the cost of lower conversion figures. This was achieved with K-3 at 285 to 290°C. Results were as follows: conversion of (II) into (I), in mole %, 34 to 37%; yields of isoprene, 85 to 80%; ratio of isoprene:pentenes, 100:0.2 and 100:0.5 respectively. The material was now considered of sufficient purity to be used for polymerizations without further rectification. A chromatogram is shown (Fig.3) and its analysis after one and two rectifications is tabulated (Table V). It is concluded that the described method does not require complex plant equipment and produces isoprene of low pentene contents. Compared to other procedures, the refining of the crude materials proved simple. Semitechnical yields were 80 to 85% theory, based on 4,4-dimethyldioxane (1,3). There are 3 figures and 5 tables.

ASSOCIATION: Výzkumný ústav syntetického kaučuku, Gottwaldov
(Research Institute for Synthetic Rubber, Gottwaldov)

Card 3/5

ERBEN, F.; KOUDELKA, J.; KOVARIK, B.

Preparation of the pure isoprene. Chem prum 12 no.2:66-69 F '62.

1. Vyzkumny ustav syntetickeho kaucuku, Gottwaldov.

KOVARIK, J.

"Communication and People's Committees", P. 7, (TECHNICKE NOVINY, Vol. 2, No. 9, May 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

Kovarik, J.

How Soviet experiences help us. p. 229. PAPIR A CELULOSA. (Ministerstvo lesu a drevarskeho prumyslu) Praha. Vol. 9, no. 11, Nov. 1954. Through the increase of socialist competition toward fulfillment of tasks assigned by the Party and the Government. p. 230

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

KOVARIK, J.

SEDLACEK, V., Dr.; SILHAN, J., MUC.; KOVARIK, J., MUC.

Use of morphine during pathologically prolonged labor. Cesk. gyn. 22[36] no.4:304-309 May 57.

1. I. por. a gyn. klinika MU v Brne, prednosta prof. Dr. Ludvik Havlasek.

(MORPHINE, anesth. & analgesia
in prolonged labor (Cz))
(LABOR, anesth. & analgesia
morphine in prolonged labor (Cz))

KOVARIK, Jan, promovany geolog

Technical problems of rock surveying for building purposes. Geolog pruzkum 5 no.2:52-53 F '63.

1. Geologicky pruzkum, n.p., Praha.

KOVARIK, Jan, promovany geolog

Deposits of nonore raw materials in the German Democratic Republic.
Geol pruzkum 6 no.5:132-134 My '64.

1. Geologicky pruzkum National Enterprise, Prague.

LICHY, J.; KOVARIK, J.; LICHA, H.; STOVICEK, J.

Contribution to the use of punch cards for the documentation of diagnosis in neurology. Cesk. neurol. 29 no.1:55-58 Ja '66.

1. Neurologicka klinika lekarske fakulty Karlovy University v Hradci Kralove (prednosta prof. dr. M. Sercl, DrSc.).

SERCL, Miroslav; JECHOVA, Dagmar; KOMRSKA, Milan; KOVARIK, Jaromir; KYRAL, Vlastimil; LICHA, Helena; LICHY, Josef; NETTL, Sasa; SIMKOVA, Dagmar; STOVICEK, Jaroslav; VRCHA, Lubomir; ZDRAHAL, Leopold

Comparison of neurologic findings and organic phosphate serum cholinesterases in delayed effects of insecticides on the human body. Sborn. ved. prac. lek. fak. Karlov. univ.: Suppl. 8 no.4: 415-433 '65.

1. Neurologicka klinika (prednosta prof. MUDr. M. Sercl, DrSc.).

KOVARIK, J.

KOVARIK, J., SERCL, M.

Early diagnosis of extensive intracranial tumors. Lek. listy 5:15-16, 1 Aug. 50. p. 439-44

1. Of the Neurological Clinic Palackeho University in Olomouc (Head--Prof. Mir. Sercl, M. D.).

CLML 19, 5, Nov., 1950

SERCL, M.; JAROS, O.; SVACINA, J.; KOVARIK, J.; NETTL, S.; ZDRAHAL, L.; STOVICEK, J.; LICHY, J.; JECHOVA, D.; SIMKOVA, D.; KYRAL, Vl.

Problem of the effect of one-centimeter electromagnetic waves on the nervous system in exposed workers (radar). Pracovni lek. 11 no.8:395-400 Oct 59.

1. Neurologicka klinika v Hradci Kralove, prednosta prof. Dr. Sc. MUDr. Mir Sercl.
(RADAR) (NERVOUS SYSTEM, radiation eff.)

SERCL, Miroslav; KOVARIK, Jaromir

Contribution to the familial occurrence of amyotrophic lateral sclerosis. Studies on amyotrophic lateral sclerosis VI. Cesk. neur.23 no.6:406-411 0'60.

1. Neurologicka klinika lekarske fakulty KU v Hradci Kralove, prednosta prof. Dr.Sc. MUDr. M.Sercl.
(AMYOTROPHIC LATERAL SCLEROSIS genetics)

SHERTSL', M.; KOVARZHIK, Ya.

Lateral amyotrophic sclerosis; a clinical study of 50 patients from the point of view of external factors. Zhur.nevr.i psikh. 60 no.9:1101-1105 '60. (MIRA 14:1)

1. Nevrologicheskaya klinika meditsinskogo fakul'teta v Gradtse Kravlove (rukovoditel' - prof. M. Shertsl'), Chekhoslovakiya.
(SPINAL CORD--DISEASES)

SERCL, M.; KOVARIK, J.

Geomedical factors in amyotrophic lateral sclerosis in Czechoslovakia with special reference to the Hradec Kralove region. Cesk. neurol. 25 no.3:183-186 My '62.

1. Neurologicka klinika lekarske fakulty KU v Hradci Kralove, prednosta prof. MUDr. M. Sercl, DrSc.

(AMYOTROPHIC LATERAL SCLEROSIS statistics)

SERCL, M.; KOVARIK, J.; JICHA, J.

A contribution to the problem of the level of lipids in the blood serum in disseminated sclerosis. Cas.lek.cesk 101 no.2:48-54 12 Ja '62.

1. Neurologicka klinika lekarske fakulty KU v Hradci Kralove, prednosta prof. Dr. Sc. MUDr. M. Sercl Ustredni biochemicka laborator KUNZ v Hradci Kralove, prednosta MUDr. J. Jicha.

(MULTIPLE SCLEROSIS blood) (LIPIDS blood)

SERCL, Miroslav; KOVARIK, Jaromir; JAROS, Otakar

Clinical experiences with Psilocybin Sandoz (CY 39 Sandoz).
Sborn. ved.prac. lek. fak. Karlov. univ. (Hrad Kral) 4 no.4:421-426
'61.

1. Neurologicka klinika; prednosta prof. DrSc. MUDr. M. Sercl.
(HALLUCINOGENS ther) (INDOLES ther)
(MENTAL DISORDERS ther)

SERCL, Miroslav; JECHOVA, Dagmar; KOMRSKA, Milan; KOVARIK, Jaromir; KRYAL, Vlastimil; LICHA, Helena; LICHY, Josef; NETTL, Sasa; SIMKOVA, Dagmar; STOVICEK, Jaroslav; VRCHA, Lubomir; ZDRAHAL, Leopold; TUSL, Miloslav; SVORCOVA, Stopanka; KAUT, Vlastislav

On the effect of 1-centimeter electromagnetic waves on the nervous system in man (radar). Sborn. ved. prac. lek. fak. Karlov. univ. (Hrad Kral) 4 no.4:427-440 '61.

1. Neurologicka klinika; prednosta prof. DrSc. MUDr. M. Sercl Katedra obecne hygieny; prednosta prof. MUDr. V. Dvorak.
(RADAR) (NERVOUS SYSTEM physiol)

SERCL; Miroslav; KOVARIK, Jaromir; JAROS, Otakar; VRCHA, Lubomir; SIMKOVA, Dagmar.

Clinical trials with N-(3,4,5-trimethoxybenzoyl)-tetrahydro-1,4-oxazine (trioxazine, V-7) Budapest. Sborn.ved.prac.lek. fak.Karlov.Univ.(Hrad.Kral.) 6 no.3:345-350 '63.

1. Neurologicka klinika, Universita Karlova (prednosta:DrSc, prof., MUDr. M.Sercl).

*

SERCL, Miroslav; KOVARIK, Jaromir

On the effect of centrophenoxine (ANP 235, Lucidril) in Charcot's disease. Study on amyotrophic lateral sclerosis. XIII. Sborn.ved.prac.lek.fak.Karlov. Univ. (Hrad.Kral.) 6 no.5:579-585 '63.

1. Neurologicka klinika; prednosta prof.MUDr.M.Sercl. DrSc., LFUK v Hradci Kralove.

KOVARIK, Jaromir

Study of Charcot's disease with special reference to the clinical picture and analysis of elements of the external environment. Sborn. ved.prac.lek.fak. Karlov. Univ. (Hrad.Kral.) 6 no.4:Supplement:491-497 '63.

1. Nerulogicka klinika; prednosta: prof. DrSc. Mudr. M.Sercl, Karlov. Univ. v Hradci Kralove.

SOREL,M., prof. dr., DrSc.; JECHOVA,D.; KOMISKA,M.; KOVARIK,J.; KYRAL,V.; LUCHA,H.; LUCKY,J.; NETTL,S.; SEMKOVA,D.; STOVICEK,J.; VRCHA,L.; ZOUHAL, I.

The problem of late effects of poisoning with organic phosphate insecticides. Cesk. neurol. 28 no.3:220-223 Ap '65.

1. Neurologicka klinika lekarske fakulty Karlovy University v Hradci Kralove (predneta: prof. dr. M. Sorel, DrSc.).

SERCL, Miroslav, prof. MUDr., DrSc.; KOVARIK, Jaromir; JICHA, Josef, MUDr.; LICHY, Josef

The problem of serum transaminases in amyotrophic lateral sclerosis. Sborn. ved. prac. lek. fak. Karlov. Univ. 7 no.4: 609-615 '64.

1. Neurologicka klinika (prednosta: prof. MUDr. M. Sercl, DrSc.), a Ustredni biochemicka laborator (predstavitel: MUDr. J. Jicha).

SERCL, Miroslav; JECHOVA, Dagmar; KOMRSKA, Milan; KOVARIK, Jaromir; KYRAL, Vlastimil; LICHA, Helena; LICHY, Josef; METTL, Sasa; STIKOVA, Dagmar; STOVICEK, Jaroslav; VRCHA, Lubomir; ZDRAHAL, Leopold.

On the possible development of demyelination diseases of the human central nervous system resulting from injury by organic phosphate insecticides. Sborn. ved. prac. lek. fak. Karlov. Univ. 9 no.1:175-182 '64.

1. Neurologicka klinika (prednosta: prof. MUDr. M. Sercl, DrSc) Karlovy University v Hradci Kralove.

CZECHOSLOVAKIA

MICHL, J., BAUDYSOVA, M., KOVARIK, J; Physiological Institute, Czechoslovak Academy of Sciences (Fysiologicky Ustav CSAV), Prague.

"Changes in Respiration of Cultivated Cells Adapted to Cold."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 105-107

Abstract: Cells adapted to cold use more oxygen than controls. they are also more inhibited in their growth by the presence of cyanide. It appears that cells adapted to cold have a more active oxidative ability to decompose glucose. 1 Figure, 1 Czech reference. Submitted at "16 Days of Physiology" at Kosice, 29 Sep 65.

1/1

L 33001-66

ACC NR: AP6024090 SOURCE CODE: CZ/0082/66/000/001/0055/0058

AUTHOR: Lichy, J.; Kovarik, J.; Licha, H.; Stovicek, J. 34 B

ORG: Neurological Clinic, Medical Faculty, KU/headed by Professor, Doctor M. Sercl, Doctor of sciences/, Hradec Kralove (Neurologicka klinika lekarske fakulty KU)

TITLE: Contribution to the use of punch cards with holes on the edge for filing to diagnoses in neurology

SOURCE: Ceskoslovenska neurologie, no. 1, 1966, 55-58

TOPIC TAGS: punched card, computer application, hospital equipment, data storage

ABSTRACT: A punch card with holes at its edges for filing of neurological diagnoses is described. The registering of the data on the cards is described. A decimal system describing the diagnosis and the clinical syndromes is discussed. The advantages of the suggested filing system are described. Possible use of such cards in computer diagnoses of diseases is discussed. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 05, 06 / SUBM DATE: 06Apr64 / ORIG REF: 002 / OTH REF: 009

Card 1/1

0915 1656

KOVARIK, J.

"Geometric Correctness of Projected Maps." p. 135,
(KARTOGRAFICKY PREHLED, Vol. 8, No. 4, Dec. 1954, Praha, Czechoslovakia)

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

KOVARIK, J.

Czechoslovakia

Unsere Hilfe der tschechoslowakischen Kartographic (tschech.)S. 31-32

SO: Vermessungs Technik, Nov 1955, Uncl.

KOVARIK, J.

KOVARIK, J. For a perfect production of maps. p. 203.

Vol. 2, No. 11, Nov. 1956
GEOLETICKY A MAP OGRAFICKY OBZOR
SCIENCE
Czechoslovakia

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

KOVARIK, J.

Problems connected with the selection of the contest of a map. p. 124

Vol. 9, no. 3, Sept. 1955
KARTOGRAFICKY PREHLED
Praha, Czechoslovakia

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

KOVARIK, J.; SMIDRKAL, J.

"Use of a copying device for aerial photographs in cartography."

p. 97 (Kartograficky Prehled) Vol. 10, no. 3, Sept. 1956
Prague, Czechoslovakia

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

KOVARIK, J.

Cartometric determination of curve lengths on a topographic surface.

P. 97 (Kartograficky prehled. Vol. 11 No. 3, 1957, Praha. Czcholovakia)

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

L 12843-66 EWT(1)/EWA(j)/EWA(b)-2 RO

ACC NR: AP6005712 SOURCE CODE: CZ/0082/65/000/003/0220/0223

AUTHOR: Sercl, M.; Jechova, D.; Komrska, M.; Kovarik, J.; Kyral, V.; Licha, H.; Lichy, J.; Nettl, S.; Simkova, D.; Stovicek, J.; Vrcha, L.; Zdrahal, L.

ORG: Neurological Clinic, Medical Faculty, Charles University, Hradec Kralove (Neurologicka klinika lekarske fakulty KU)

TITLE: Problem of late sequellae of poisoning with organophosphate insecticides

SOURCE: Ceskoslovenska neurologie, no. 3, 1965, 220-223

TOPIC TAGS: insecticide, toxicology, biochemistry, organic phosphorus compound, neurology, biologic metabolism, nervous system

ABSTRACT:

Insecticides containing compounds of organic phosphorus damage the periphery of the nervous system in humans because they act on neuromuscular plates, vegetative ganglia, CNS, and the brain. Study of 398 people who worked with these insecticides showed the possibility of the occurrence of late sequellae. Pseudoneurasthenic syndromes were found. The organic P compounds affect the cholinosterase complex, and possibly hydrolysing ferments, and glycolysis and phosphorylation of serines. Myeline metabolism may be damaged permanently. Orig. art. has: 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 009

Card 1/1 HW

L 13239-66

ACC NR: AP6006051 SOURCE CODE: CZ/0053/65/014/004/0298/0298

AUTHOR: Kovarik, J.; Svec, F.

ORG: Department of Pharmacodynamics and Toxicology, Faculty of Pharmacy, Comenius University, Bratislava (Katedra farmakodynamiky a toxikologie FaFUK)

TITLE: Cytostatic effect of some antimetabolities in tissue cultures in vitro [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 26 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 298

TOPIC TAGS: biologic metabolism, drug effect, pharmacology, tissue physiology

ABSTRACT: Study of the effect of 5 compounds on HeLa cells in tissue culture: most effective cytostatic was unidentified compound TS 160 which was slightly (4%) inhibitory even at lowest (10^{-7} M, i.e. hundreds of mg /ml); next was 6-azauridine at 10^{-3} inhibiting growth at 83.3% but at 10^{-6} stimulated it 6.9%; 6-azacytodine similarly as well as 5-azaorotic acid potassium salt; 6-mercaptopurine was less effective. [JPRS]

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

Card 1/1

VALENTA, Vaclav; VLACHOVSKY, Karel; VYSKOCIL, Vaclav; ZBYTOVSKY, Adolf; KOTT, Josef; KOVARIK, Karel; MAZUR, Arne; COUFAL, Jaromir

Some remarks on the problem of nuclear reactor shielding. Jaderna energie 9 no.7:233 Jl '63.

1. Zavody V.I. Lenina, Plzen.

KOVARIK, L

The effect of the angular displacement of engine cylinder rows upon balance.

P. 395. (AUTOMOBIL) (Praha, Czechoslavakia) Vol. 1, no. 12, Dec. 1957

SO: Monthly Index of East European Accession (EEAI) LC Vol 7 No. 5, May 1958

KOVARIK, M. ; UNCRAD, Z.

"We have been in Hungary." p. 519.

SVET MOTORU. (SVAZ PRO SPOLUPRACI S ARMADOU). Praha, Czechoslovakia, Vol. 9, no. 17, Aug. 1955.

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

Kovarik, M.

"Training of the League for Cooperation with the Army helped me." p. 781

SVET MOTORU. Praha, Czechoslovakia, Vol. 9, No. 25/26, Dec., 1955

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

KOVARIK, M.

Spearheads' responsibility. p.359.
(Svet Motoru, Vol. 11, No. 12, June 1957, Praha, Czechoslovakia)

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

22(3)

CZECH/3-59-9-26/39

AUTHOR: Kovařík, M.

TITLE: Praise to the Praha Parachutists (Pochvala patří Pražským parašutistům)

PERIODICAL: Křídla Vlasti, 1959, Nr 9, p 19, col 1 (CSR)

ABSTRACT: Author congratulates Praha-City parachutists for organizing so-called "Defence Marches". The members of USSR, Poland and Bulgarian embassies took part in the "Defence March" organized in March 1959.

Card 1/1

KOVARIK, M.

Five wasted years.

p. 6 (Vynalezy a Normalisace, Ochranne Znamky, Chranene Vzory. Vol. 1, no. 2, Sept. 1957. Praha, Czechoslovakia)

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

KOVARIK, M.

Professor Cermak's new high-speed combustion reactor. p. 13.
(VYNALEZY A NORMALISACE, OCHRANNE ZNAMKY, CHRANENE VZORY. Vol. 1, no. 1, July 1957, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions (EEAL) LC. VOL. 6, no. 12, Dec. 1957. Uncl.

KOVARIK, M.

Working methods used by improvers in the TOS machine-tool factory in Celakovice. p. 17.
(VYNALEZY A NORMALISACE, OCHRANNE ZNAMKY, CHRANENE VZORY, Vol. 1, no. 1, July 1957, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957. Uncl.

KOVARIK, M.; JIRKOVSKY, R.

Rapid factory analysis for control of high-pressure material without damaging models. p. 476. CHEMICKE ZVESTI. Bratislava. Vol. 9, no. 8, Oct. 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

KOVARIK, Miloslav, inz., arch.

Conclusions from the evaluation of designs of mass construction of dwellings. Poz stavby 11 no.4:179-185 '63.

1. Vyzkumny ustav vystavby a architektury, Praha.

Kovarik, M.

1535. Determination of traces of copper in water. M. Kovařík and V. Vinš (Inst. for Anal. Chem., School of Mining, Ostrava, Czechoslovakia). *Z. anal. Chem.*, 1955, 147 (6), 401–403.—A method is given for the photometric estimation of traces of Cu in water, including mineral water. When the sample is shaken with a soln. of Pb diethyldithio-carbamate in $CHCl_3$, Cu is extracted together with Ag and Hg, which do not interfere. *Procedure.*—To a 500-ml sample of the water are added 10 ml of a 10 per cent. soln. of K Na tartrate and 10 ml of 2 *N* NH_4Cl soln., and then the soln. is made weakly alkaline with aq. NH_3. The soln. is shaken with 10 ml of a $CHCl_3$ soln. of Pb diethyldithio-carbamate and the yellow to brown layer of Cu diethyldithiocarbamate is separated. The extinction of the copper compound is measured at 500 mμ in a 1-cm cell, an S50 filter being used. The method enables amounts of Cu from 0·02 μg per ml to be determined with a relative error of $\pm 1{\cdot}5$ per cent. The Pb diethyldithiocarbamate reagent is prepared as follows. Lead acetate (0·1 g) is dissolved in water and 5 ml of a 10 per cent. K Na tartrate soln. are added. The soln. is made alkaline with 2 *N* KOH soln., and 5 ml of *N* KCN soln. are introduced to complex traces of Cu and Fe. Sodium diethyldithiocarbamate (0·12 g) in water is added, and the pptd. lead salt is extracted in 250 ml of $CHCl_3$. The organic layer is removed, shaken with water, re-separated, filtered and made up to 1 litre.

J. H. Watson

(1)

KOVARIK, M.

2955. Use of pyrogallolcarboxylic acid as complexometric indicator. M. Kovařík and M. Moučka (Montan-Hochschule, Ostrau, Czechoslovakia). *Z. anal. Chem.*, 1950, 150 (6), 416-420.—Pyrogallolcarboxylic acid (I) is used as indicator in the determination of Ca by titration at pH 12 with EDTA. The method is suitable for the determination of Ca in drinking water, after removal of heavy metals with Na_2S. No interference is caused by Mg. For other cations (Ba, Sr, Pb, Cd, Al and Zn), direct titration is inadvisable (indistinct colour change) and these ions are determined by addition of excess of EDTA and back-titration with $BaCl_2$. The method is highly accurate and of general applicability to metals forming colourless and stable EDTA complexes at pH 12. *Procedure*.—For the determination of Ca, adjust the soln. of Ca salt to pH 12 (or higher), add a satd. aq. soln. of I (one-tenth of total vol.), and titrate with 0·1 *M* EDTA. At the end-point the violet colour disappears. For the determination of other metals, add to the soln. of the metal salt a measured excess of 0·1 *M* EDTA, adjust to pH 12, add the satd. aq. soln. of I, and titrate with 0·1 *M* $BaCl_2$. At the end-point the colour changes from yellow to violet.

J. P. STERN

B-2

COUNTRY : Poland
CATEGORY :

ABS. JOUR. : RZXhim., No. 22 1959, No. 78302

AUTHOR : Kovarik, M. and Moucka, M.
INST. : Not given
TITLE : The Detection and Determination of Thallium with Methyl Violet

ORIG. PUB. : Chem Analit, 3, No 3-4, 615-618 (1958)

ABSTRACT : It has been established that Tl(3+) in HCl solution gives a colored compound with Methyl Violet (I); the product can be readily extracted with benzine with the formation of a blue solution showing maximum light absorption at 610 mμ; the Beer law holds for Tl concentrations of 0-180 per 100 ml extract: the intensity of the color of the extract attains a maximum value after 10 min and remains constant over a period of 2 hrs. On the basis of the above data, the authors have

CARD: 1/3

blue color (pb base) = 0%. For the determination

CARD: 2/3

COUNTRY : Poland
CATEGORY : E-2

ABS. JOUR. : RZKhim., No. 22 1959, No. 78302

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : of Tl, the sample of unknown solution treated as described above is further treated with an equal volume of (1 : 1) HCl, 2 volumes of 30% sodium citrate solution, and 1 ml of 0.2% I solution, the resulting solution is shaken with 3 10-20 ml portions of benzene, diluted with benzene to 100 ml, and analyzed photometrically with a S-61 filter. Interference by Hg, Au, and Sb is eliminated by reduction with metallic copper. The presence of MoO_4^{2-}, WO_4^{2-}, and VO_3^- does not interfere with the determination.

V. Luk'yanov

CARD: 3/3

KOVARIK, M.; JANCIK, J.; JANOSTKOVA, V.

Spectrum analysis supplementing nondestructive testing. I. p. 371

Ostrava, Czechoslovakia Republic (City) Vysola skola banska. SBORNIK VEDECKYCH PRACI. Ostrava, Czechoslovakia, Vol. 4, no. 4, 1958

Monthly List of East European Accessions (EEAI), LV, Vol. 8, no. 7, July 1959
Uncl.

KOVAŘÍK, M.; JANOSIKOVÁ, V.; JANOSIK, J.

Spectrum analysis as the completion of the N. A. Tanajev method. In German. p. 399.

CHEMIA ANALITYCZNA. (Komisja Analityczna Polskie Akademii Nauk i Naczelna Organizacja Techniczna) Warszawa. Poland. Vol. 4, No. 1/2, 1959.

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

KOVARIK, M.

COUNTRY : CZECHOSLOVAKIA H
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Food Industry
ABS. JOUR. : RZKhim., No. 23 1959, No.83942

AUTHOR : Janicek, J.; Boublik, M.; Kovarik, M.
INST. : -
TITLE : Drying of Meat by Sublimation (Lyophilization)

ORIG. PUB. : Prumysl potravin, 1959, 10, No 2, 72-76

ABSTRACT : Studied were the basic conditions of meat drying by sublimation. Water content in the dehydrated beef is 5.5-8.3%, in pork 4.6-8.1%; pH respectively 5.1-5.6 and 5.2-5.8. Freshness of the dehydrated beef was determined by the NH_3 content; after the restoration of moisture NH_3 content in beef comprized 15.7 mg%, in pork 16.9 mg%. Storage of the dehydrated meat at temperatures of -20, 4, 20 and 37° for 70 days did not affect the NH_3 build up in meats (16.5 mg% at -20°, and 18.20 mg% at 37°).

-- D. Yakesh.

CARD: 1/1

H - 192

KOVARIK, Milos

A bouquet will not solve the problem. Siln doprava 13 no.3:1 F '65.

MITURA, Karel, inz.; KOVARIK, Milos, RNDr.

Effect of the phosphorus trihydride content in acetylene on the phosphoration of welds, and its fast chemical determination. Zvaranie 14 no.1:3-5 Ja '65.

1. Vitkovicke zelezarny Klementa Gottwalda, Ostrava-Vitkovice.

CZECHOSLOVAKIA

KOVARIK M.

FERLING, M; KOVARIK, M; VOSMACKOVA, Z

Institute of Organic Chemistry, Technical College of Chemistry (Institut fur organische Chemie, Technische Hochschule fur Chemie), Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 5, March 1966, pp 1348-1354

"Investigation of the pyridine series. Part II: Reduction of quaternary salts of some pyridine homologues with sodium borhydride."

L 23144-66 EWP(j)/T/EWP(t)/ETC(m)-6 IJP(c) JD/WW/RM

ACC NR: AP6010708 SOURCE CODE: CZ/0034/65/000/004/0288/0289

AUTHOR: Styblo, Karel (Engineer); Ermis, Frantisek; Pivoda, Petr (Graduate chemist); Kovarik, Milos

ORG: VZU NHKG VZKG, Ostrava

TITLE: Determination of gases, and oxygen particularly, by means of the instrument exhalograph EA-1

SOURCE: Hutnicke listy, no. 4, 1965, 288-289

TOPIC TAGS: steel, aluminum, metal chemical analysis, laboratory instrument

ABSTRACT: The instrument is supplied by Balzers of Liechtenstein. Description of the instrument is given. Operation of the apparatus is described. The results are reproducible, and obtained in 3 minutes. In samples of steel stilled with Al (up to 0.05% Al) the time required is 5-6 minutes; when 0.5 Al is present the time needed is 10-12 minutes. At higher Al contents, up to 20 minutes is needed for the analysis. Orig. art. has: 2 figures and 1 table. [JPRS]

SUB CODE: 11, 07 / SUBM DATE: none / OTH REF: 006

Card 1/1 UDC

KOVARIK, Rudolf, inz.

Present experience with the Soviet machines for permanent way renewal. Zel dop tech 11 no.2:38-39 '63.

KOVARIK, S.

Removal of cell debris, thrombocytes and dead cells from a spleen cell suspension. Folia biol. (Praha) 9 no.5:388-392 '63.

1. Institute of Microbiology, Czechoslovak Academy of Sciences, Prague.

(CYTOLOGY) (SPLEEN) (BLOOD PLATELETS)
(CHROMATOGRAPHY) (TRYPAN BLUE)

KOVARIK, V.

Contribution to the nonlinear theory of layered plates. Bul Ac Pol Tech 12 no.9:641-649 '64.

1. Institute of Theoretical and Applied Mechanics of the Czechoslovak Academy of Sciences, Prague. Submitted June 17, 1964.

ACC NR: AP7003778 SOURCE CODE: CZ/0090/66/000/006/0708/0758

AUTHOR: Kovarik, Vaclav (Engineer; Candidate of sciences); Slapak, Pavel (Engineer; Candidate of sciences; Docent)

ORG: Building Institute CVUT, Prague

TITLE: The stability of sandwich plates Part 2

SOURCE: Ceskoslovenska akademie ved. Acta technica, no. 6, 1966, 708-758

TOPIC TAGS: sandwich structure, sandwich plate, sandwich plate stability, incompressibility, transverse incompressibility, shear stress, material deformation, material stress

ABSTRACT: Stability theories of sandwich plates with both light and rigid cores are given. In formulating the theories, linear geometrical and physical equations were employed. In chapter I the assumptions of transversal incompressibility, a certain distribution of transversal shear stresses, etc., lead to a certain form of the expressions for the components of displacement. Components of deformation and of stress were also derived. Similarly to the classical theory of homogeneous plates, the concepts of normal and shearing forces, of bending and twist-

Card 1/2

ACC NR: AP7003778

ing moments, are introduced. The formulation of the problem for a plate of general shape is given; the rectangular plate is considered, and results of a series of numerical examples are presented. A simple criterion for a plate of optimum structure is established. Chapter II is subdivided into two parts. In the first a more precise theory for rectangular plates with light cores and comparatively thick outer layers is given. The second part contains a rather simple theory which holds true for the only plates with very thin facings. The results of numerical examples are arranged in tabular form. Orig. art. has: 14 figures, 5 tables, and 167 forumlas. [Based on authors' abstract] [WA-52] [KS]

SUB CODE: 13/SUBM DATE: 27Jul66/ORIG REF: 001/SOV REF: 001/ OTH REF: 005/

Card 2/2

L 26199-66 EWP(w)/EWP(k) IJP(c) EM

ACC NR: AP6014780 SOURCE CODE: CZ/0090/66/000/002/0242/0284 33 B

AUTHOR: Kovarik, V. (Engineer, Candidate of sciences); Slapak, P. (Docent, Engineer, Candidate of sciences)

ORG: Building Research Institute, Technical University, Prague

TITLE: Cylindrical bending of sandwich plates (small-deflection theory)

SOURCE: Ceskoslovenska akademie ved. Acta technica, no. 2, 1966, 242-284

TOPIC TAGS: mechanics, stress analysis, sandwich structure, cylindrical bending, small deflection theory

ABSTRACT: A linear solution of the cylindrical flexure of a sandwich plate is presented. The formulation of the problem is based on a previous work by the authors (Acta technica CSAV no. 1, 1966) dealing with the nonlinear problem of cylindrical flexure of sandwich plates. Two basic theories are derived for plates with rigid and light-weight cores. Chapter 1 discusses the bending of an orthotropic asymmetric sandwich plate of infinite length with a rigid core. Expressions are derived for the components of displacement strains and stresses as well as for the elementary longitudinal and shear forces and moments per unit length. These expressions contain three unknown displacement functions which are determined from the equilibrium conditions of elementary forces described by a system of three differential equations. This system is reduced to a simple fourth-order equation with constant

Card 1/2

L 26199-66

ACC NR: AP6014780

coefficients which is solved by quadratures by introducing a displacement function ω. The maximum extreme values of stress components and the boundary conditions are also expressed in terms of ω. Examples of solutions are given for a uniformly loaded plate of infinite length with the following types of edge support: 1) fixed hinge along one edge and movable hinge along the other; 2) fixed hinges along both edges; and 3) built-in edges. A uniformly loaded symmetrical plate with hinged edges is also discussed, and the effect of geometric parameters on the flexural and normal stresses is examined and illustrated by diagrams, as well as the difference between statically and kinematically allowable values of the shear stresses. The effect of shearing strains on deflection and normal stresses is pointed out. Chapter 2 is devoted to plates with physically and geometrically asymmetrical faces and a light compressible core. Two differential equations are derived which describe the flexure of this plate; they are reduced to a single differential equation with appropriate boundary conditions (for simply supported and built-in edges). An example is given to illustrate the theory. The case of a plate with symmetrical outer layers and a light core is also discussed and a sample solution is given. A number of examples are given to compare the results and to show the limitations of validity of approximation theory and the results are tabulated for a simply supported, uniformly loaded plate. The third chapter contains some remarks on possible applications of the approximate theory and lines for its further theoretical research. [VK]

SUB CODE: 20/ SUBM DATE: 25Nov65/ ORIG REF: 004/ OTH REF: 002/ ATD PRESS: 4252

Card 2/2

L 45412-66 EWP(k)/EWP(w) IJP(c) EM

ACC NR: AP6019818 (A) SOURCE CODE: CZ/0090/66/000/001/0012/0059

AUTHOR: Kovarik, Vaclav (Engineer; Candidate of Sciences); Slapak, Pavel, (Engineer; Candidate of Sciences)

ORG: Building Research Institute, Technical University, Prague

22 B

TITLE: Cylindrical bending of sandwich plates (Finite-deflection theory)

SOURCE: Ceskoslovenska akademie ved. Acta technica, no. 1, 1966, 12-59

TOPIC TAGS: sandwich plate, sandwich plate bending, rigid core plate, light core plate, cylindrical bending

ABSTRACT: The paper considers the bending of an infinite strip supported along two opposite edges, with x_1 = const, and carrying a load which does not depend on the variable x_2. Under these conditions the problem becomes one-dimensional. The influence of the variation of some parameters of the plate on the quality of the results is shown. The first chapter of the paper deals with a plate with a rigid core in which both the shearing and normal stresses are taken into account. The

Card 1/2

L 44615-66 EWP(w)/EWP(k) IJP(c) EM

ACC NR: AT6033130 SOURCE CODE: HU/2504/66/053/03-/0343/0357

AUTHOR: Dundrova, V. (Prague); Kovarik, V. (Prague); Slapak, P.--Shlapak, P. (Prague)

ORG: none

TITLE: Non-linear bending theory for sandwich plates. Part 1: The sandwich plate with very thin external layers

SOURCE: Academia scientiarum hungaricae. Acta technica, v. 53, no. 3-4, 1966, 343-357

TOPIC TAGS: thin plate, approximation method

ABSTRACT: The theory for bending of rectangular sandwich plates with isotropic core and very thin transversely isotropic external layers was developed from Lameian equations solved by a stepwise approximation method. Non-linear conditions existed only in some boundary conditions and the principal equations were all linear. The application of the theory was illustrated with a numerical example. The intermediate and final terms were interpreted in terms of actual physical factors. Thirty-two equations were presented to characterize the relations involved. Orig. art. has: 3 figures, 32 formulas and 1 table. [Orig. art. in German] [JPRS: 36,645]

SUB CODE: 13, 12 / SUBM DATE: 01Jul64

Card 1/1 blg

ACC NR: AP6036348 SOURCE CODE: CZ/0090/66/000/005/0589/0630

AUTHOR: Slapak, Pavel (Docent; Engineer; Candidate of sciences); Kovarik, Vaclav (Engineer; Candidate of sciences)

ORG: Czechoslovak College of Technology, Prague-Dejvice (Tschechische Technische Hochschule)

TITLE: On the stability of sandwich plates. Part. I. Cylindrical buckling of sandwich plates

SOURCE: CSAV. Acta technica, no. 5, 1966, 589-630

TOPIC TAGS: sandwich structure, structure stability, buckling, eigenvalue, potential energy, stability loss, wrinkling

ABSTRACT: The present paper consists of three chapters concerning basic types of one-dimensional stability problems of sandwich plates: buckling (total loss of stability) and wrinkling (loss of stability of the outer layers only). Chapter I deals with the buckling of sandwich plates with rigid cores. In the core, which is assumed to be transversally incompressible, both the shearing and the normal stresses are

Card 1/2

ACC NR: AP6036348

taken into account. Expressions are obtained for eigenvalues of simply supported plates and built-in plates. In addition, expressions for eigenvalues of simply supported plates derived from the potential energy are given. Because of the non-linear dependence of the normal stresses on the variable x_3 the two expressions do not coincide. However, the difference seems to be of no practical importance. Chapter II concerns the buckling of a sandwich plate with a light core. The outer layers are assumed to be thin enough to correspond to the Kirchhoff-Love hypothesis. The formulation of the problem is made partly from the minimum condition of the potential energy and partly from the conditions of equilibrium of an element of the plate. The first formulations laed to a fundamental equation of higher order than the second one. Boundary conditions are defined for simply supported and clamped plates. The solution gives practically identical results for both formulations. Chapter III deals with the wrinkling of outer layers. The linear geometrical and physical equations of the theory of elasticity are employed in formulating the problem. The conditions of equilibrium are written for a deformed element of an outer layer. Boundary conditions are defined for simply supported plates. Orig. art. has: 3 figures, 2 tables, and 5 formulas. [Based on authors' abstract]

[KS]

SUB CODE: 13/SUBM DATE: 10Apr66/ ORIG REF: 006/SOV REF: 005/ OTH REF: 024/

Card 2/2

S/124/63/000/003/038/065
D234/D308

AUTHOR: Kovařík, Václav

TITLE: Design of oblique-angled orthotropic plates by the variational method of successive approximations

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1963, 15, abstract 3V100 (Stavebn. časop. 1962, v. 10, no. 3, 167-179 (Czech.; summaries in Rus. and Eng.))

TEXT: The author investigates the bending of plates as above, subject to a transverse load. The essence of the method consists in reducing the problem of minimum of a double integral to that of minimum of a single integral. The convergence of the method is shown in a numerical example of an isotropic plate having the shape of a parallelogram rigidly clamped along the whole boundary. [Abstracter's note: Complete translation.]

Card 1/1

DUNDROVA, Vera, inz., CSc.; KOVARIK, Vaclav, inz., CSc.; SLAPAK, Pavel, inz., CSc.

Some problems of the theory of sandwich plates. Stav cas 11 no.5:313-331 '63.

1. Ustav teoreticke a aplikovane mechaniky, Ceskoslovenska akademie ved, Praha.

L 21298-66 EWP(w)/EWP(k) EM

ACC NR: AP5024313 SOURCE CODE: PO/0033/65/017/004/0563/0576

AUTHOR: Kovarik, V. (Prague)

35

B

ORG: none

TITLE: Finite deflection theory of sandwich plates

24 26

SOURCE: Archiwum mechaniki stosowanej, v. 17, no. 4, 1965, 563-576

TOPIC TAGS: sandwich structure, bending strength, stress analysis, nonlinear theory

ABSTRACT: The present paper is a contribution to the nonlinear bending theory of three layered simply supported plates (sandwich plates). Using nonlinear relations between the components of displacement and strain, a theory is derived at which seems more valid than that by Reissner (Finite deflections of sandwich plates, J. of the Aeron. Sci., 7, 15, 1948). The formulation of the theory is given by a system of two nonlinear differential equations for the stress and displacement functions, respectively, and by an appropriate system of boundary conditions; then, the utilization of the Galerkin method for the solution of this problem is shown. Numerical data for a particular case of loading are given. Orig. art. has: 2 figures, 5 formulas and 1 table. [Author's abstract.]

SUB CODE: 13 SUBM DATE: 15Jun64/ ORIG REF: 003/ OTH REF: 002/

SOV REF: 002/

Card 1/1 FV

2

KOVARIK, Vaclav, inz. CSc.

Finite deflections of sandwich plates. Stav cas 13 no.2:65-88 '65.

1. Institute of Theoretic and Applied Mechanics of the Czechoslovak Academy of Sciences, Prague. Submitted December 18, 1963.

DUNDROVA, Vera, inz. CSc.; KOVARIK, Vaclav, inz. CSc.; SLAPAK, Pavel, doc. inz. CSc.

Theory of sandwich plate bending. Pt.3. Stav cas 12 no.9:580 '64.

DUNDROVA, Vera, inz. CSc.; KOVARIK, Vaclav, inz. CSc.; SLAPAK, Pavel, inz. CSc.

Application of new theories of sandwich plate bending. Stav cas 12 no.10:622-640 '64.

1. Institute of Building of the Czech Higher School of Technology, Prague. Submitted February 1, 1964.

KOVARIK, R.

Investigating certain causes of the derailment of railroad cars.

P. 135 (Zeleznicni Technika) Vol. 5, No. 5, May, 1957, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. - VOL. 7, NO. 1, JAN. 1958

KOVAŘÍK St.

3090. KOVAŘÍK St. Histol.-embryol. Inst. Plzeň. *Artefakty při provádění Feulgenovy reakce na gangliových buňkách. Artefacts in staining ganglion cells by Feulgen's method ČESKOSLOVENSKÁ MORFOLOGIE 1953, 31/3 (202-207) Illus. 3

Muhlmann's assertion that the tigroid substance of nerve cells is Feulgen-positive is based on an error; it is not the tigroid but the pigment granules that give a positive Feulgen reaction.

Frankenberger - Prague (I, 5)

SO: Excerpta Medica, Section V, Vol. 7 No. 9

KOVARIK, S.

Origination of cellular nodels from autolytic cells.

p. 215 (Ceskoslovenska Biologie) Vol 6, no. 3, June 1957. Praha, Czechoslovakia.

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 1, Jan 1958

KOVARIK, S.

Adhesion of reticulocytes to glass and paraffin oil. Folia Biol. 8 no.2:115-118 '62.

1. Institute of Histology and Embryology, Medical Faculty, Charles University, Plzen.
(ERYTHROCYTES)

KOVARIK, V., C. Sc.

Some notes on the solution of skew orthotropic plates. Acta techn Hung 35/36:585-609 '61

1. Czechoslovak Academy of Sciences, Prague.

KOVARIKOVA, A.

SMAHEL, O., Dr.Doc.; KOHOUT, J., Dr.; KORBOVA, L., Dr.; KOVARIKOVA, A., Dr.

Neurohumoral effects on gastric secretion. Cas. lek. cesk. 44 no.12: 293-294 18 Mar 55.

1. Z I. interni kliniky K.U., prednosta prof. Dr.Netousek
(STOMACH, physiology
gastric secretion, neurohumoral eff. on)
(GASTRIC JUICE
secretion, neurohumoral eff. on)

KOVARIKOVA, A.; CAPEK, R.

Effect of bacterial toxins on adenosintriphosphatase activity. Cesk. fysiol. 7 no.3:275-276 May 58.

1. Farmakologicka laborator CSAV, Praha.
(BACTERIA,
toxins, eff. on ATPase metab. (Cz))
(ADENYLPYROPHOSPHATASE,
metab., eff. of bact. toxins (Cz))

KOVARIKOVA, A.

Determination of cardiotonic and cardiotoxic effects of lanatoside D.
Cesk. fysiol. 7 no.5:493-494 Sept 58.

1. Vyzkumny ustav lecivych rostlin, Praha.
(DIGITALIS, effects,
lanatoside D, tonic & tox. eff. (Cz))

KOVARIKOVA, Al.

Comparison of lanatoside A, B, C, D on the heart-lung preparation in cats. Cesk.fysiol. 9 no.3:293-294 My '60.

1. Vyskumny ustav lecivych rostlin, Praha.
(DIGITALIS pharmacol)

KOVARIKOVA Alena L.; STORK, Alois

Pharmacology and clinical use of lanatoside D. Cas.lek.cesk 100 no.21: 653-657 26 My '61.

1. Vyzkumny ustav prioridnich leciv, I interni klinika lekarske fakulty KU, Praha.

(DIGITALIS)