

SOV-113-58-8-9/21

AUTHORS: Yatsenko, N.N., Candidate of Technical Sciences and Sozon-
tov, P.A.

TITLE: The Dynamometric Truck of the "DM-21" Type (Dinamometriches-
kaya mashina DM-21)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 8, pp 27-30 (USSR)

ABSTRACT: A new model of a dynamometric machine of the "DM-21" type
has been designed. It consists of a chassis of the "ZIL-
151" type car, on which an electric motor of the "DK-202 B"
type, manufactured by the "Dynamo" Plant is installed. A
trolley-bus traction motor is used as a brake generator. A
trolley-bus starter-rheostat of the "KF-2A-1" type is used
as a resistance. At the rear of the driver's cabin, a stand-
ard covered hood is installed. The front of it contains the
"YaAZ-204 V" type engine and a second "DK-202 B" type elec-
tric motor, both installed on a separate chassis. A hydraulic
dynamometer is installed in the rear part of the frame. The
total weight of the "DM-21" is about 10,000 kg and the maxi-
mum brake-torque is 36 kgm. Figure 7 shows the traction
characteristics of the "YaAZ-214" and "GAZ-63" type cars.
Figure 9 shows the traction characteristic of the "YaAZ-214"

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SOV-113-58-8-9/21

The Dynamometric Truck of the "DM-21" Type

type car when taken with the "DM-21". The "DM-21" type machine can also be utilized for figuring economical characteristics of cars and for the analysis of the car-roadability on soft ground and snow. There are 6 diagrams, 4 graphs, 1 photo and 3 Soviet references.

1. Automobile industry---USSR
2. Trucks--Design
3. Trucks--Test methods

Card 2/2

SEMENIDO, Ye., doktor tekhn. nauk; MILYUTIKOV, Yu., kand. tekhn. nauk;
SHCHEGOLEV, N., kand. khimicheskikh nauk; RUMENKOV, A., inzh.;
SHEREMET, M., inzh.; SOZONTOV, Yu., inzh.

All-year oil for diesel engines. Avt. transp. 43 no.4:19-22
Ap '65. (MIRA 18:5)

SOZOV, S.N.

Experience heat-treating distributing shafts with high-frequency current. Avt. i trakt. prom. no.3:32-35 Mr '56. (MLRA 9:7)

1.Gor'kovskiy avtozavod imeni Molotova.
(Automobiles--Electric equipment) (Metals--Heat treatment)

SOZOVSKIY, YA. I., Engr

PA 26/49T16

USSR/Electricity
Oscillographs
Switches

Aug 48

"Electromechanical Throw-Over Switch for Cathode
Oscillography," Ya. I. Sozovskiy, Engr, M. Kh.
Bilimovich, Engr, 3 pp

"Elek Stants" Vol XIX, No 8

Subject equipment was tested at the Lab of Elec
Measurements, TsNIEI. It permits simultaneous
control and recording of two individual mechanical
phenomena on the theory of mechanical vibrating
rectifiers. Includes circuit diagrams of first

26/49T16

USSR/Electricity (Contd)

Aug 48

assembled model. First performance results were
encouraging.

26/49T16

SOZYKIN, M.

Improve the supervision of public inspectors. Avt. transp. 35
no.8:10 Ag '57. (MIRA 10:9)

1. Nachal'nik Sarapul'skoy avtotransportnoy kontory.
(Transportation, Automotive)

ACCESSION NR: AT4004737

S/2922/63/007/000/0296/0306

AUTHOR: Sozy*kin, M. F.

TITLE: Method of observing the moisture transfer from an evaporating surface to the atmospheric boundary layer using a steam-impervious film

SOURCE: Vses. nauchn. meteorologich. soveshch. Trudy*, v. 7. Fizika prizemnogo sloya, Leningrad, 1963, 296-306

TOPIC TAGS: meteorology, hydrometeorology, micrometeorology, reservoir evaporation, antievaporation film, air water moisture transfer, heat transfer, water albedo, atmospheric boundary layer

ABSTRACT: The author discusses his "molecular method" to observe moisture transfer by retarding water molecules with a steam-impervious film. He discusses the underlying principles of his method and cites the advantages of the application of these principles. He explains in detail the mathematical formula for his method with its theoretical derivation and proof. As part of his proof, he subjects the theoretical mathematical computations to a comparison with practical computations obtained through experiments. The desirable specifications and designs for laboratory apparatus to be used are also described.

Card 1/2

SOZYKIN, N

F

Opyt polivnogo lesovodstva (Experiments in forestry irrigation) Moskva, Goslesbumzidat, 1953. 119 p. illus., diags., maps, tables. "Literatura": p. 119-(120)

N/5

729.4

.S7

SOZYKIN

USSR / Forestry. Forest Crops.

K-3

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24909.

Author : Sozykin, N. F.

Inst : ~~Not given.~~

Title : Experiment in Establishing Irrigation Afforestation.

Orig Pub: Sb. rabot po lesn. kh-vu. Vses. h.-i. in-t lesovod-
stva i mekhaniz. lesn. kh-va, 1956, vyp. 32, 19-36.

Abstract: An experimental section on irrigation afforestation was arranged in the Sarpinska lowlands. Data on the rooting and preservation of the plantings is given. Best results for almost all species were achieved on sandy soils. Post-planting irrigation on dark colored soils heightened the rooting of all species;

Card 1/2

SOZYKIN, N.F.

Work in forest drainage conducted by the All-Union Scientific Research Institute of Forest Management and the Use of Machinery in Forestry. Trudy Inst. lesa 49:89-93 '59.

(MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lesovodstva i mekhanizatsii lesnogo khozyaystva.
(Drainage) (Forests and forestry)

PROSTAKOV, P.Ye.; SOZYKIN, N.F.

Moisture conditions of the Chernozem soils under crop rotation
in the steppe piedmonts of the Caucasus. Pochvovedenie no.4:9-
17 Ap '64. (MIRA 17:10)

1. Volgogradskiy sel'skokhozyaystvennyy institut.

SOZYKIN, S. A. N. K.

USSR/ Scientists - Economics

Card 1/1 Pub. 45 - 16/16

Authors : Gerasimov, I. P.; Ivanova, E. N.; Larin, I. V.; Nikitin, S. A.; Sozykin, N. K.; and Fridland, V. M.

Title : Memories of I. I. Folimonov

Periodical : Izv. AN SSSR. Ser. geog. 6, 108 - 109, Nov - Dec 1954

Abstract : In announcing the death on 22nd June 1954 of Ivan Isodorovich Folimonov (1880 - 1954) the life history and work of this economist is recalled. Folimonov is said to have also been an outstanding naturalist well informed in agriculture. He distinguished himself as a research worker, teacher and writer.

Institution:

Submitted:

SOZYKIN, V.I.

Resonance grizzlies without frames. Gor. zhur. no.4:75 Ap '65.
(MIRA 18:5)

H/004/61/000/013/001/003
D018/D105

AUTHOR: Spácal, Lev

TITLE: Radiation and man

PERIODICAL: Tudomány és Technika, no. 13, 1961, 436-438

TEXT: The article which represents an interview granted to the author by Professor Ferdinand Herčík, doctor of medicine, doctor of natural sciences, corresponding member of the Czechoslovak Academy of Sciences and director of the Biophysical Institute of the Czechoslovak Academy of Sciences, deals with effects of radioactive radiation on the body in general and with research in this field carried out by various Czechoslovak scientific institutions. According to Professor Herčík, the first Czechoslovak Biophysical Congress held in Tatranská Lomnica at the beginning of May 1961, discussed the training of scientists and various biophysical problems, such as effects of radiation on the organism, protection against such radiation, molecular biology, influence of low temperature on living organism, biophysical measuring methods, biophysical instruments, etc. ✓

Card 1/2

H/004/61/000/013/001/003 ✓
D018/D105

Radiation and man

The Biophysical Institute of the Czechoslovak Academy of Sciences in Brno, in operation since 1960, has been studying the effects of radioactive radiation on health. At the Medical Department of the University in Košice a radiobiological center has been established. At Prague research is being conducted on the diagnostics of diseases caused by radioactive radiation while the Biophysical Institute at Hradec Králové studies the effects of radioactive materials absorbed by the body. Research is also being conducted on the treatment of diseases caused by radiation. A new diagnostical method of determining radiation damages is expected to be developed in the near future. Czechoslovak scientists are participating in the preparation for the first International Biophysical Congress to be held in Stockholm in the summer of 1961. The Biophysical Institute of the Czechoslovak Academy of Sciences keeps constantly in touch with biophysicists in Leningrad, Moscow and in Hungary. There are 5 figures.

Card 2/2

H/004/61/000/026/001/005
D286/D304

AUTHOR: Dubský, Vilda and Spáčil, Lev

TITLE: Fantasy becomes reality

PERIODICAL: Tudomány és technika, no. 26, 1961, 904-905

TEXT: The article describes an interview given to the authors by Engineer Jaroslav Šlechta, chief designer of the HC-3 helicopter, Engineer Jaromír Schindler, well-known technical writer and Engineer Jiří Matějčík, designer of the "Standart 16" and "Standart 17" gliders. All three engineers are associates of the Czechoslovak Aircraft Engineering Research and Development Institute. The Czechoslovak aircraft industry specializes in sports planes and small airliners. In the field of large aircraft engineering high technical levels have been reached in the USSR with the "TU"-models and the "Il-18". The passenger-carrying capacity of these aircraft will probably be increased, requiring, however, also an increase of the power plant capacity. Experiments with VTOL aircraft are under-

Card 1/2

Fantasy becomes reality

H/004/G1/000/025/001/005
D286/D304

way and a helicopter rotor is being developed by which even 500 km/hr can be achieved. The Soviet "Mi-6" jet-powered helicopter has an enormous lifting capacity, yet its speed does not exceed 300-320 km/hr. In the development of STOL aircraft, automation will play an important role, e.g. in case of a convertiplane no pilot would be able to fly without automatic control. The shape of aircraft to be flown at the end of the 20th century will differ from the present types. These aircraft will have practically no wings, since the size of the wings is relative to speed. VTOL aircraft having an auxiliary power plant for take-off would need a flat wing-shaped fuselage for horizontal flight. There are 5 figures.

Card 2/2



2/048/62/000/026/001/004
D287/D307

AUTHORS: Dubsky, V. and Spačal, L. (Reviewers)

TITLE: When towards the moon?

PERIODICAL: Věda a technika mládeži, no. 26, 1962, 904-905

TEXT: Summary is given of replies by 4 different experts on astronautics to the following questions: 1) Which were the most important events or discoveries in recent months? 2) Is the USSR or the USA leading in the conquest of the universe? 3) When will man finally land on another planet and who will land there? Dr. B. Valniček. Astronomický ústav Československé akademie věd, Ondřejov (Astronomical Institute of the Czechoslovak AS, Ondřejov): 1) The flight of Nikolayev and Popovich which proved the possibility of coordinated action in space and the flight of the 2 cosmic probes Mariner II and Mars I. 2) The advantages of the USSR in the conquest of space are as follows: heavier rockets and more economic methods of return to the earth. 3) Rockets could be sent to the moon, carrying a crew, but for unsolved medical problems. He anticipates that man will land

Card 1/3

When towards the moon?

E/048/62/000/026/001/004
D287/0307

on the moon in 1965 or 1966, probably both Russian, as American space cabins are not satisfactory. M. Pick Engineer; director of the Geofyzikální ústav Československé akademie věd (Geophysical Institute, Czechoslovak AS): 1) Determination of the shape of the earth by using satellites; further, the phenomenon of the van Allen radiation bands (which have adverse effects on living organisms) and transmission of television pictures through interplanetary space (2) The Soviet lead in astronautics can be explained by the fact that only one research authority coordinates all investigations not several competing authorities and firms as in the USA); 3) The first Soviet cosmonaut will probably land within the next ten years. J. Dvořák, Doctor of Medical Sciences, Ústav leteckého zdravotnictví v Praze (Institute of Medicine of the Air Force, Prague): 1) The problem of visits of cosmonauts from other planets to the earth has been given serious consideration as well as the problem of the presence of microorganisms in meteorites; 2) Dr. Dvořák considers that the space research program is more realistic in the USSR and that 3) man will land on the moon as soon as the problem of the rocket's return to earth has been solved. J. Sadil, chairman of the Lunar and Planetary Section of the
Card 2/3

When towards the moon?

2/048/62/000/026/001/004
D287/0307

Československá astronautická komise (Czechoslovak Astronautical Committee): 1) The launching of Mariner II and Mars I. 2) The advantages in the Soviet program lie in systematic research, perfect preparations (e.g. plotting of the trajectory and maintenance of course). The Americans hold the record for communications across very large distances; 3) The flight around the moon in a man-manned rocket should be realized within 3-4 years. Automatic probes should land on various planets within the next 10 years and the same applies for the landing of man on the nearest planets. Soviet cosmonauts will probably be the first to fly around the moon. There is 1 figure. ✓

Card 3/3

SPACEK, Antonin

DECEASED

1963/4

(1961)

SPACEK, B.

Costotome of a new construction. Roshl.chir. 29 no.9:376-379 1950.
(CML 20:7)

1. Of the Second Surgical Clinic in Prague (Head--Prof. J. Divis, M.D.).

Špaček, Bohumil

✓ Selective bronchography with a new contrast medium.
Vilém F. Hess, Jaroslav Sochor, and Bohumil Špaček (Bio-
chemické oddělení nemocnice Vinohrady, Prague). *Časopis
Lékařů Českych* 89, 1011-18(1950).—A new contrast me-
dium consisting of 3,5-diodo-1-methylcelidamik acid
(Ultraren) and polyvinylpyrrolidinone is described. Both
components form a colloidal complex which enables the
prepn. of a contrast medium of very high I content and
suitable viscosity. It is nonirritant and its excretion is very
rapid. Anthony Zenske

(2)

SPACEK, Bohumel, Doc MUDr.

Case of bronchial adenoma. Cas.lek.cesk. 91 no.37:1065-1067 12
Sept 52.

1. Reditel Ustavu pro experimentalni chirurgii v Praze.
(BRONCHI, neoplasms,
adenoma, case report)

SPACEK, B., Doc. Dr

Science and life. Cas. lek. cesk. 93 no. 43:1185-1188 22 Oct 54.
(SCIENCE, (MEDICINE,
in Czech.) in Czech.)

SPACEK, Bohumil, Doc. Dr.; WEBER, Klement, Prof. Dr.; BENISOVA,
Dagmar, Doc. Dr.

Experimental study on revascularisation of ischemic myocardium.
Ces. lek. cesk. 93 no.51-52:1393-1397 24 Dec 54.
(MYOCARDIUM, diseases
ischemia, revascularisation)

SPACEK, Bohumil, Dr., Doc.

Medical science in democratic Czechoslovakia. Cas.lek.cesk. 94
no.20:525-527, 13 May 55.

1. Místopředseda vědecké rady ministerstva zdravotnictví CSR.
(MEDICINE,
in Czech.)

SPACEK, Bohumil, Doc., Dr.

Surgery of cardiac aneurysm after myocardial infarct. Cas. lek.
cesk. 44 no.33:893-896 19 Aug 55.

1. Ustav klinické a experimentální chirurgie Praha-Krc.
(HEART, aneurysm
after. myocardial infarct, surg., new technic)
(MYOCARDIAL INFARCT, complications
heart aneurysm, surg., new technic)

SPACEK, Bohumil; BERGMANN, Karel

Surgical therapy of cardiac aneurysm following myocardial infarct.
Rozhl. chir. 35 no.5:320-328 May 56.

1. Ustav klinike a experimentalni chirurgie, Praha-Krc. Ustav
chorob obehu krevniho, Praha-Krc.

(CORONARY VESSELS, aneurysm
caused by myocardial infarct. surg. (Cz))

(MYOCARDIAL INFARCT. compl.
cardiac aneurysm, surg. (Cz))

SPACEK, B.

EXCERPTA MEDICA Sec.18 Vol.1/8 Cardiovascular Aug 57

2394a. SPACEK B. Inst. für Klin. und Exp. Chir., Prag. Ein neues Operationsverfahren beim Herzwandaneurysma *A new method of operation in aneurysm of the cardiac wall* Zbl. Chir. 1956, 81/13 (497—502) Illus. 3

Description of a new operation for chronic cardiac aneurysm. The method can be described as aneurysmorrhaphy by means of cardiomyopexy. In it, 3 important surgical advantages are combined: it abolishes the aneurysm, which is the cause of cardiac weakness or rupture, leads to adequate scar formation and even improves the nutrition of the ischaemic myocardium. In this way, 3 patients with aneurysm of the apical region of the heart and one patient with a large aneurysm of the anterolateral portion of the cardiac ventricle were successfully operated on. All the patients tolerated the operation very well and all of them were considerably improved by it. The operation is therefore recommended in cases of chronic aneurysm with symptoms of cardiac weakness or a severe form of angina pectoris. (IX, 18)

9205

SPACEK, B.; KESZLER, H.; RACENBERG, E.

Effect of ganglion-blocking drugs on shock. Rozhl. chir. 36 no.4:197-208 Apr 57.

1. Ustav klinické a experimentální chirurgie, Praha-Kro.
(SHOCK, ther.
autonomic drugs (Cz))
(AUTONOMIC DRUGS, ther. use
shock (Cz))

SPACEK, Bohumil (Praha-Krc, Budejovicka 800)

Experiences with aneurysmorrhaphy & cardiomyopexy for postinfarction changes in the myocardium. Cas. lek. cesk. 96 no.50:1537-1543 13 Dec 57.

1. Ustav klinicke a experimentalni chirurgie, Praha-Krc, prednosta doc. Dr. B. Spacek.

(MYOCARDIAL INFARCT, surg.

aneurysmorrhaphy & cardiomyopexy for postinfarction changes in myocardium (Cz))

(HEART, surg.

same)

Country : CZECHOSLOVAKIA

Category: Pharmacology. Toxicology. Tranquilizers.

Abs Jour: RZhBiol., No 6, 1959, No 27730

Author : Spacek, B.; Keszler, H.; Racenberg, E.

Inst : -

Title : On the Influence of Neuroplegic Agents on the Condition
of Shock.

Orig Pub: Rozhl. chirurg., 1957, 36, No 4, 197-208

Abstract: No abstract.

Card : 1/1

SPACEK, B.

In Memoriam Academician Arnold JIRASEK. Cas.lek.cesk.99 no.35:
1090-1091 26 Ag'60.

(OBITUARIES)

SPACEK, B.

Pioneer of a modern surgical technic. Reshl. chir. 40 no.9:585-586
S '61.

(BIOGRAPHIES)

SPACEK, Bohumil, Prof. MUDr., člen korespondent GSAV

Gnosiological principles in medical diagnosis. Cas.lek.cesk 100
no.1:9-15 6 Ja '61.

(DIAGNOSIS)

SPACEK, B.; VOSMIK, J.; KLAIN, M.; PAVLIK, F.

Some aspects of cardiac surgery with extracorporeal circulation.
Rozhl. chir. 41 no.5:297-305 '62.

1. Ustav klinické a experimentální chirurgie v Praze, reditel prof.
dr. B. Spacek, DrSc.
(HEART SURGERY) (HEART MECHANICAL)

SPACEK, Bohumil

Experimental surgery and its importance for the practice of surgery.
Cas. lek. cesk. 101 no.26:820-822 29 Je '62

1. Ustav klinicke a experimentalni chirurgie v Praze, reditel prof.
dr B. Spacek.

(SURGERY OPERATIVE experimental)

SPACEK, Bohumil, prof. dr., DrSc.

Current status and importance of modern clinical medicine. Cas. lek.
cesk. 101 no.46:1369-1372 '62.

(MEDICINE)

SPACEK, B.

3

CZECHOSLOVAKIA

Z. ONDRACEK, C. SVEHLA, M. MLEJKOVA and H. SPANKOVA, Clinical and Experimental Surgery Research Institute (Vyzkumny ustav klinicke a experimentalni chirurgie) Chief (reditel) ~~Prof. Dr. B. SPACEK~~, DrSc; and Experimental Therapy Research Institute (Vyzkumny ustav experimentalni terapie) Chief Docent Dr O. SNAHEL, DrSc; Prague.

"Effect of Coagulation Processes by Chlortetracycline."

Prague, Casopis Lekarů Ceskych, Vol 102, No 19, 10 May 62; pp 532-533.

Abstract : Studies in dogs and in vitro reveal significant and complex effect of chlortetracycline on coagulation beyond the self-explanatory decrease in vitamin K (from intestinal bacteriostasis). Tentative explanation is that altered pancreatic enzymes influence K absorption, and formation of chlortetracycline-factor V complex takes place in the plasma. Graph.

1/1

SPACEK, B.; PELESKA, B.; KLAIN, M.

Implantation of a battery cardiostimulator ELEMA in a patient with complete AV block and Adams-Stokes syndrome. Rozhl. chir. 43 no.2:118-126 F'64.

1. Ustav klinické a experimentální chirurgie v Praze; reditel: prof.dr.B.Spacek, DrSc.

*

PELESKA, B.; SPACEK, B.; KLAIN, M.; PISA, Z.; HAMMER, J.

Our experiences with implantation of cardiostimulators in AV block and Adams Stokes syndrome. Rozhl. chir. 44 no.1:16-23 Ja '65.

1. Vyzkumny ustav pro elektroniku a modelovani v lekarstvi, Praha; Ustav klinicke a experimentalni chirurgie, Praha a Ustav pro choroby obehu krevniho, Praha.

SPACEK, B.; PELESKA, B.; ZASTAVA, V.; HAMMER, J.; PISA, Z. Technicka
spoluprace: RABL, M.; BLAZEK, Z.; ZMRHALOVA, A.; CERNA, H.; MAJEROVA, H.

Reversibility of cardiac contraction after temporary obstruction
of the coronary arteries. Cas. lek. cesk. 104 no.1:1-11 8 Ja '65

1. Ustav klinicke a experimentalni chirurgie v Praze (reditel -
prof. dr. B. Spacek, DrSc.) a Ustav pro choroby obehu krevniho
v Praze (reditel - prof. dr. J. Brod, DrSc.).

SPACEK, B.

Accidents from the viewpoint of protection and saving of life.
Cas. lek. cesk. 104 no.32/33:853-857 6 Ag '65.

1. Ustav klinicke a experimentalni chirurgie v Praze (prednosta
prof. dr. B. Spacek, DrSc.).

CZECHOSLOVAKIA

UDC 617.541-001-085.816

SPACEK, B.; ZITKO, K.; Institute of Clinical and Experimental Surgery (Ustav Klinicke a Experimentalni Chirurgie), Prague, Director (Reditel) Prof Dr B. SPACEK.

"Importance of Prolonged Artificial Respiration in the Treatment of Closed Chest Injuries."

Prague, Casopis Lekarů Ceských, Vol 105, No 20, 20 May 66, pp 544 - 547

Abstract [Authors' English summary modified]: Two cases of block fractures of the skeleton of the chest with paradoxical respiration and severe respiratory insufficiency are described. Both patients recovered completely after prolonged artificial respiration by means of an Engstrom apparatus. This method is recommended in treatment of block fractures of the chest wall. 6 Western, 1 Czech reference. (Manuscript received Apr 66).

1/1

FECAK, B.; MAJOR, K.; SPACEK, F.

Effect of the binding substance on the quality of amidopyrine tablets.
Cesk. farm. 11 no.7:342-345 S '62.

1. Katedra galenickej farmacie Farmaceutickej fakulty Univerzity
Komenskeho, Bratislava Leciva n.p., provozovna Zizkov, Praha.
(AMINOPYRINE) (TABLETS) (GELATIN) (STARCH)

Country : CZECHOSLOVAKIA
 Category= : Chemical Technology. Chemical Products (Part 3).
 Food Industry
 Abs. Jour. : Ref Zhur-Khim, 1959, No 7, 25154

Author : Spacek, J.
 Institut. : -
 Title : Evaluation of the Quality of Food Products

Orig. Pub. : Prumysl potraviny, 1957, 8, No 10, 534-537

Abstract : The aims of the determination of the quality of products with indication of the range, problems involved and organization of control, are discussed. The question of the objectiveness of the control, of the selection of the persons who make the quality evaluation, the technique of the selection of samples, the order of the evaluation of their quality, and the processing of the results of the testing, are treated in greater detail.-- V. Grzhivo

Card: 1/1

H-176

CZECHOSLOVAKIA

NEMECEK, S.; PETR, R.; SPACEK, J.; MADVORNIK, P.; Neurosurgical Clinic (Neurochirurgicka Klinika) Head (Prednosta) Prof Dr R. PETR, Chair of Histology and Embryology (Katedra Histologie s Embryologii) Head (Vedouci) Prof Dr V. VRTIS, Medical Faculty, Charles University (Lek. Fakulty KU), Hradec Kralove.

"Microscopic Findings in the Acoustic Nerve and in Acoustic Neurinoma."

Prague, Ceskoslovenska Neurologie, Vol 29, No 5, Sep 66, pp 289-292

Abstract [Authors' English summary]: It is important to operate on acoustic neurinoma as early as possible and to determine the origin and microstructure of these tumors. A survey of the histological, histochemical, and electronoptic findings made by the authors is presented. 4 Figures, 9 Western, 4 Czech, 1 East German reference.

Z/031/61/009/002/008/008
A205/A126

AUTHORS: Kadlec, L., Engineer and Špaček, J., Docent, Engineer

TITLE: New technology for hot-bending of tubes

PERIODICAL: Strojírenská výroba, v. 9, no. 2, 1961, 98 - 99

TEXT: The article lists laboratory and sem-production-scale tests on vibration filling and compacting of sand into tubes being prepared for hot bending. The tests were performed with the purpose of replacing the tiresome and insufficient manual compacting with pneumatic hammers. Since the vibration equipment mainly used in foundries is not very efficient, tests were based on the principle used for compacting the earth with rammers or for driving piles into the ground with vibration and vibration-shock pile drivers. Very good results were achieved in laboratory tests, and the percentage of compacting, compared with loosely filled sand, reached 18 - 25%. Best results were achieved when vibration was applied during filling and when tubes were not rigidly connected with the vibrator. The principle of the vibration equipment is shown in Fig. 2. Semiproduction tests were performed at the tube plant of the "Královopolské strojírny", National Enterprise in Brno. The vibration equipment was used for filling and compacting of

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New technology for hot-bending of tubes

Z/031/61/009/002/008/008
A205/A126

sand into tubes 44 - 270 mm in diameter and 4 - 6 m long. The successfully produced bends measured $r = 2.5$ to $3 D$. The compacting percentage reached 18 - 23%, additional compacting with pneumatic hammers was not necessary since it increased the compacting percentage only by 0.2 - 1.5%. Conventional "EVU 500" and "EVU 1000" were used and the time for sand filling and compacting was 5 - 7 times shorter than that required by the old technology. The tests showed, that the centrifugal force of the vibrator should be 30% higher than the total weight of the vibrated mass, and that the shaking amplitude of the vibrator table should be 1 - 1.6 mm. The size of the vibrator must be adjusted to the vibrated load. To use one vibrator size for tubes of all diameters, smaller tubes are either vibrated in bundles, or vibrators are provided with the possibility to alter their kinetic moments. The described sand filling and compacting method is also used at the construction of the "Slovnaft" National Enterprise. There are 6 figures.

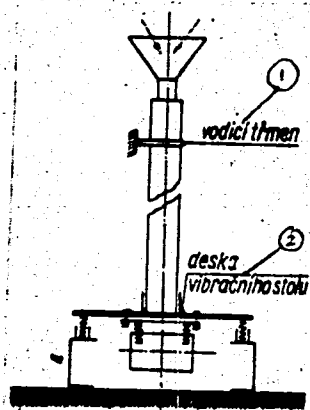
ASSOCIATION: Vojenská akademie A. Zápotockého (A. Zapotocky Military Academy)

Card 2/3

New technology for hot-bending of tubes

Z/031/61/009/002/008/008
A205/A126

Fig. 2: Schematic diagram of vibration equipment. (1) guide clip, (2) vibrator-table



Card 3/3

CAPOVA, H.; DUBANSKA, H.; HAHN, P.; HUTAK, D.; JILEK, J.; KOLDOVSKY, O.;
NECAS, O.; NOVAK, P.; SEJNOHA, L.; SPACEK, J.

The amount of total body fat determined by skin fold thickness in
males from 16 to 35 years. Cesk. gastroent. vyz. 15 no.7:540-555
N '61.

1. Fyziologicky ustav CSAV - Praha, Ustav letectvneho zdravotnictvi -
Praha, Vojensky ustav hygieny, epidemiologie a mikrobiologie - Praha.
(ADIPOSE TISSUES)

JELINEK, Vladimir; PIHAR, Otomar; SPACEK, Jan

Apparatus for measurement of small changes of direct-current voltage. Chem listy 58 no. 7:808-812 JI '64.

1. Research Institute on Child Development, Prague.

SPACEK, Jaroslav

Provisional protection against the rail breakage. Zel dop tech
10 no. 3:87. '62.

SPACH, Jar., 1971.

Remarks on the defects of image formation circuits.
Sialk tech 12 no. 6-232 Ja '64.

SPARK, L.

P 2

10(0); 26(1)

PHASE I BOOK EXPLOITATION

CZECH/2369

✓
Československá Akademie Věd. Sekce technická

✓
Proudění v lopatkových strojích (Flow Through Turbomachinery) Praha, Nakladatelství Československé Akademie Věd, 1958. 413 p. (Series: Its: Sborník ústavu pro výzkum strojů) Errata slip inserted. 1,250 copies printed.

Scientific Ed.: Jan Jerie, Engineer, Doctor, Corresponding Member of the Czechoslovak Academy of Sciences; Resp. Ed.: Ladislav Hrdina; Tech. Ed.: František Končický.

PURPOSE: This collection of papers is intended for engineers and scientific workers in the field of turbomachinery.

COVERAGE: The collection covers turbomachinery theory, investigations of the flow of working substance in basic elements of turbomachines, phenomena accompanying flow and variable with time, and investigations of various problems

Card 1/7

Flow Through Turbomachinery

CZECH/2369

Discussion: Hošek, J., Engineer, Doctor, VZLU

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OF TURBOMACHINERY

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Discussion: Kousal, Milan, Engineer, PBZKG (The First Brno
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Design of a Reaction
Turbine Blade Profile

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- Discussion: Kučera, A., ÚMS (Institute of Mathematical Machines, Czech Academy of Sciences). Basic Functional Elements of the Anapos Analog Computer 223
- Peprný, Josef, Engineer, VUS (Machinery Research Institute) ZVIL, Plzeň. Wind Tunnel for Airfoil-Cascade Research 225

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Card 6/7

SRACEK, L.

Z/6284

PHASE I BOOK EXPLOITATION

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

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

Sponsoring Agency: Československá akademie věd.

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

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

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

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

Basic Problems in the Construction (Cont.)

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P. Gröbner (Modřany Machine Plant, Modřany). Corrosion by Combustion Products in Gas Turbines

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M. Hořejší (State Research Institute for Heat Engineering, Prague). Aerodynamics of Turbine Cascades in the Subsonic Region

309

J. Bukovský (Technical University for Machine Building and Electrical Engineering, Plzeň). Some Properties of Compressor Cascades at High Flow Velocities

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SPACEK, L.

Spacek, L. Problem of very pure iron. p. 612. CZECHOSLOVAKIAN JOURNAL OF
PHYSICS. Praha. Vol. 4, no. 5, Oct. 1954.


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

SPACEK, L.
Spacek, L.

Contribution to the problem of diffusion of carbon in iron. p. 118.

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

SPACE, L.

~~C. F. C. H.~~ Determination of Gases in Iron by Vacuum Melting. *J. Space Res.* (Humboldt Univ., 1964, 9, (12), 706-711). (In German.)
Methods of gas determination in metals are critically surveyed. Equipment designed by the author, in which the samples are induction heated to temperatures up to 2000° C. *in vacuo*, is described, and a statistical analysis of the probable errors in this method is made. — r. 

SPACEK, L.

Contribution to the problem of diffusion of carbon in iron. p. 113,
CESKOSLOVENSKY CASOPIS PRO FYSIKU Vol. 5, No. 1, Jan. 1955

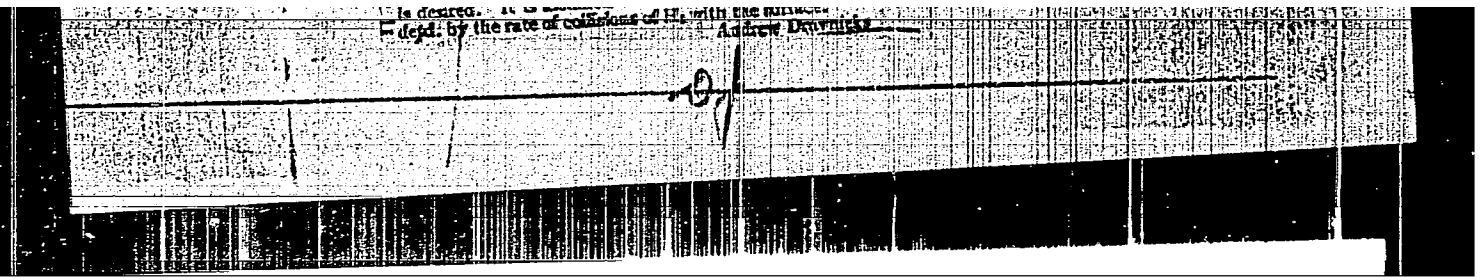
SO: Monthly East European Accession (EEAL), LC. Vol. 4, No. 9, Sept. 1955 Uncl.

Spaček, L.

18 18 18
Diffusion of carbon in iron. (Karlov Univ., Prague). Czechoslov. J. Phys. 5: 286-9 (1955) in Russian. — Theoretical discussion of the relative rates of C diffusion and of removal of C from the surface by reaction with H₂ led to the conclusion that decarburization of Fe with H₂ led to the cleaning of Fe.

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SPACEK, L.

More work on pure iron; also, remarks by J. Bednar and others. p. 479

Vol. 5, no. 4, July 1955
CESKOSLOVENSKY CASOPIS PRO FYSIKU
Praha, Czechoslovakia

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

SPACEK, L.

Domain structure of polycrystalline materials. p. 395

Vol. 5, no. 4, July 1955
CESKOSLOVENSKY CASOPIS PRO FYSIKU
Praha, Czechoslovakia

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

SPACEK, L.

CZECHOSLOVAKIA/Magnetism - Ferromagnetism.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13204

Author : Spacek, Ladislav

Inst :

Title : Domain Structure of Polycrystalline Materials.

Orig Pub : Ceskosl. casop. fys., 1955, No 5, 578-579

Abstract : See Referat Zhur Fizika, 1956, No 5, 13645.

Card 1/1

SPACEK, L.

Decarburization of Iron with Hydrogen. L. Spatek. (Hil-
nicka Listy, 1955, 10. (9), 549-550). (In ~~Chemical~~ ^{Mathematical} ~~discussion~~ ^{discussion} of the dependence of the rate of decarburiza-
tion on the partial pressure of hydrogen and the temperature.)

Of 2000

2000

TLUSTY, Jiri [Flustyy, Irzhi, inzhener, laureat Gosudarstvennoy premii, Chekhoslovatskaya Akademiya nauk]; SPACHEK, Ladislav [SHPACHEK, Ladislav, doktor, laureat gosudarstvennoy premii]; SHVARTS, V.V., [translator]; KUDINOV, V.A., kandidat tekhnicheskoy nauk, redaktor; UVAROVA, A.F., tekhnicheskoy redaktor

[Self-induced vibrations in machine tools] Avtokolebaniia v metallo-rezhushchikh stankakh. [Supplement: Ladislav Spachek. The theory of coordinate relations for systems with several degrees of freedom. Translated from the Czech] Prilozhenie: Ladislav Shpachek. Teoriia koordinatnoi svyazi dlia sistemy so mnogimi stepeniami svobody. Perevod s cheskskogo V.V.Shvartsa. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 394 p. (MIRA 10:1)

(Machine tools--Vibrations)
(Differential equations)

Spacek, L.

Remarks on pure iron; also, reply by J. Bednar and others. P. 228
CESKOSLOVENSKY CASOPIS PRO FYSIKU. (Ceskoslovenska akademie ved.
Ustav technicke fysiky) Praha
Vol. 6, no. 2, Mar. 1956

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

LADISLAV SPACEK, LADISLAV

The domain configuration on polycrystalline material.
II. Domains on slightly inclined (110) planes. Ladislav
Spacek (Tech. Univ. Railway Eng., Prague), Czechoslov.
J. Phys. 6, 284-89, Russian summary, 267-3 (1954) (in
English).—An expansion of C.T. 50, 8380a. The orienta-
tion of the 110 planes on a polished polycryst. Fe surface was
detd. by etching with 25% aq. HNO₃ and reading the angles
with an optical goniometer. For an inclination greater than
6° between the (001) axis and the sample surface the domain
configuration is not that of classical geometry but rather one
in which the domain width is practically the same as the
width of the block wall. H. K. Livingston

KLK
eye

~~LADISLAV~~ SPACEK, Ladislav

F-4

CZECHOSLOVAKIA/ Magnetism. Ferromagnetism.

Abs Jour : Ref Zhur - Fizika, No 3, 1957, 6847

Author : Spacek Ladislav

Inst : Higher Railroad School, Prague, Czechoslovakia

Title : Structure of Domains in Polycrystalline Materials. Part II. Domains on Planes Making a Small Angle With (110).

Orig Pub : Ceskosl. casop. fys., 1956, 6, No 3, 313-323

Abstract : A study is made of the magnetic structure of polycrystalline iron with particular attention to the (110) surface, which is rotated somewhat relative to the [110] axis and the grinding plane. The domain structure is observed in individual crystals as a function of the angle of inclination. The author describes the preparation of the specimens, the effect of mechanical and electrolytic polishing on the domain structure, and the action of anisotropic etching. The connection between the domain structure and the crystallographic orientation is determined. In a region of

Card : 1/2

CZECHOSLOVAKIA / Magnetism. Ferromagnetism.

F-4

Abs Jour : Ref Zhur - Fizika, No 3, 1957, 6847

Abstract : of angles of 6° between the $[001]$ axis and the grinding plane, when the (110) plane is inclined to the $[110]$ axis, there occurs a very rapid change in the character of the domain structure, in which classical scheme changes into forms in which the width of the domain is practically equal to the width of the boundary layer. An attempt is made to explain this result on the basis of the energy balance, and good agreement is obtained thereby with the experimental results.

For Part I, see Referat Zhur - Fizika, 1956, 13645.

Card : 2/2

CZECHOSLOVAKIA/Magnetism - Ferromagnetism.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13206

Author : Spacek, Ladislav

Inst : -

Title : Structure of Closing Surface Domains on the (100) Surface of Iron.

Orig Pub : Ceskosl. casop. fys., 1957, 7, No 6, 666-672

Abstract : See Referat Zhur Fizika, 1959, No 1, 1081.

Card 1/1

SPACEK L.

F

CZECHOSLOVAKIA/Magnetism - Ferrromagnetism.

Abs Jour : Ref Zhur Fizika, No 12, 1959, 27566

Author : Spacek, Ladislav

Inst : Technical University of Railway Engineering, Prague, Czechoslovakia

Title : The Energy of Periodic Surface Structures in Ferrromagnetism.

Orig Pub : Chekhosl. fiz. zh., 1959, 9, No 2, 186-199

Abstract : An experimental and theoretical investigation was made of the domain structures for unfavorably oriented surface layers of ferromagnetic substances. The connection between the surface structure and the crystallographic orientation of the crystals was confirmed. All the components of the total energy of the surface layer were determined. A general solution

Card 1/2

F

CZECHOSLOVAKIA/Magnetism - Ferrromagnetism.

Abs Jour : Ref Zhur Fizika, No 12, 1959, 27566

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is given for the problem of the arbitrary distribution of charges.

Card 2/2

SPACEK, Ladislav (Prahá)

Commemorating the 65th birthday of Miloslav Hampl. Cas pro pes mat
87 no.4:499-500 0 '62.

SPACEK, L

PHASE I BOOK EXPLOITATION

JUN 25 1968 42

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

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

Sponsoring Agency: Československá akademie věd.

Ed. of Publishing House: Marie Moravová; Tech. Ed.: František Konečný.

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

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

Card 1/8

Basic Problems in the Construction (Cont.)

Z/6284

- L. Svršek (Research Institute for Crude Oil and Hydrocarbon Bases, Bratislava). Heavy Fuel Oils for Gas Turbines 251
- P. Gröbner (Modřany Machine Plant, Modřany). Corrosion by Combustion Products in Gas Turbines 279
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- J. Bukovský (Technical University for Machine Building and Electrical Engineering, Plzeň). Some Properties of Compressor Cascades at High Flow Velocities 335

Card 5/8

SPACEK, M.

Contribution to the polarimetric determination of optically
active substances. Cesk. farm. 13 no.3:143-146 Mr.64.

1. Leciva Praha, n.p., Dolni Mecholupy.

*

SPACEK, Miroslav, inz.

Purification of fructose sirup and solution of glucose hydrate
by ion-exchangers. Prum potravín 15 no.3:145-148 Mr 164.

1. Leciva Praha, National Enterprise, Dolni Měcholupy.

1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX 1ST AND 2ND ORDERS

CA

112

The importance of the shifting of the maxima of the absorption spectra of solutions in their analytical interpretation. M. Spach. *Shvniia i khoroby Karmel.* 68, 195-204 (1946); *Biol. Abstracts* 21, 828(1947).—The reasons for the shifting of the max. of absorption spectra of solns. are discussed. Spectra of mixts. of tyrosine and sulfotyrosine, and oxy- and methemoglobin, resp., are discussed with special regard to concns. M. P. R.

COMMON ELEMENTS
COMMON ABSTRACTS INDEX
MATERIALS INDEX
ASB. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION
NUMBER INDEX
1ST AND 2ND ORDERS

11 F

ea

Distillate of urine made alkaline with sodium hydroxide. Miroslav Spacek (Inst. radiotherapeutique, Prague-Bukovka). *Compt. rend. Acad. Sci. 141, 1074-5 (1947)*. -- When 10% of solid NaOH is added to human urine and the mist. is distd. the distillate contains small amts. of a substance with the phys. and chem. characteristics of o-aminacetophenone. Its ultraviolet absorption curve shows peaks at approx. 350 and 230 mμ with a dip at 300 mμ. The substance gives a polarographic half-wave potential of -1100 mv. at pH 2 and becoming 85 mv. more neg. for each pH unit up to pH 8.5. There is considerable variation from day to day in the urine of any one subject, but the amt. is generally greater in cancer patients, especially after x-ray treatment. L. E. Gilson

ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION

SPACEK M.

C Z E C H

~~Production of pure glucose. R. Vaněček and M. Šnatek. Průmysl Potravin 6, 140-4 (1965). The dependence of color of glucose solns. on the Fe content was studied, and colorimetric methods of estn. are evaluated. L. J. Urdánek.~~

SPACEK M.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application - Carbohydrates and refinement J-12

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 6147

Author : Spacek Miroslav

Inst : Not given

Title : Some Problems Concerning Quality Determination and Refinement of Fructose Sirup

Orig Pub : Prumysl potraviny, 1957, 8, No 6, 320-325

Abstract : Methods are considered of determining the quality of fructose sirup (determination of solids and their composition, degree of acidity, ash content). It is shown that pycnometric and refractometric methods of determination of solids yield inaccurate results, which depends primarily on proportions of fructose and glucose. The polarimetric

Card 1/2

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application - Carbohydrates and refinement J-12

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Abstract : method is also unreliable, since it determines only these two sugars. It is shown that the conductometric method is suitable in this case. A description is given of experimental work on purification of fructose sirup with ion-exchangers and activated carbon; this method of purification ensures the production of colorless, ash-free sirups.

Card 2/2

SPACEK, Milan, inz.

Automation of rotary furnaces. Automatizace 6 no.4:92-95 Ap '63.

1. Rudny projekt, Brno.

WAGNER, M., 1964.

Operational defects of the legal rotary lineklins. Stavivo 43
no. 73247-347 31'64

1. Radny projekt. End.

DOPIA, Miloslav, inz.; SPACEK, Otakar, inz.

Requirements of the safety bores for sinking shafts in the Ostrava area. Geol pruzkum 6 no.8:228-230 Ag '64

1. Sdruzeni ostravsko-karvinskych dolu, Ostrava; Vystavba ostravsko-karvinskych dolu, Ostrava.

CZECHOSLOVAKIA

HUBIN, M; SPACEK, P.

Institute of Macromolecular Chemistry of the Czechoslovak
Academy of Sciences, Prague (for both)

Prague, Collection of Czechoslovak Chemical Communications,
No 10, 1965, pp 3294-3301

"Structure and Properties of Hydrophilic Polymers and Their
Gels. V. Diffusion in Gels."

SPACEK, V.;MUSIL, J.

Reconstruction of industrial gas appliances. Prace Ust
paliv no. 5:94-126 '62.

Z/008/61/000/001/002/005
E112/E253

AUTHOR: Špaček, Václav

TITLE: Zirconium

PERIODICAL: Chemické listy, 1961, No. 1, pp. 16-25

TEXT: The present paper is a literature review on zirconium up to and including 1959. It deals with (1) Occurrence in nature (distribution of some elements, including zirconium is shown in a table). (2) Physical and chemical properties. (The following data are tabulated: (a) Atomic constants; (b) natural isotopes and their relative distribution; (c) radioactive isotopes; (d) physical constants of metallic zirconium; (e) zirconium contents and accompanying materials in zirconium concentrates. (3) Preparation of zirconium (a flow sheet, showing its preparation from zirconium concentrates by the method of Kroll, Z.anorg. Chemie. 234,42,1937 is included). (4) Alloys of zirconium. (5) Applications. No contribution to the chemistry of zirconium either by the author or other Czechoslovak workers is quoted. There are 41 references: 2 Soviet and 39 non-Czech.

ASSOCIATION: Ústav pro výzkum rud, Praha
Card 1/1 (Institute for Ore Research, Prague)

SPACEK, Vaclav, inz., Sc.C.

Hydrometallurgical treatment of collective concentrates.
Rudy 10 no.5:Suppl.: Prace vyzk ust no.4:23-28 My '62.

1. Ustav pro vyzkum rud, Praha.

SPACEK, Vladimir

Conference on the use of cladding materials in chemical industries.
Chem prum 12 no.11:618 N '62.

1. Spolana, n.p., Neratovice.

SPACIL, Frantisek

A model railway line section. Zelez dop tech 9 no.11:326,329 '61.

SPACIL, J.

Coupling of aryloxy-O-acetic acids with diazonium salts. V. Eitel, J. Weichert, and J. SPACIL (*Coll. Trav. chim. Tchécosl.*, 1959, 16, 204-216).—In AcOH the coupling of PhO·CH₂·CO₂H, *m*-C₆H₄(O·CH₂·CO₂H or Me), and 2-C₁₀H₇·O·CH₂·CO₂H with diazotised amines occurs in the same manner as with the corresponding phenolic ethers. Addition of a trace of H₂SO₄ to the medium causes the replacement of O·CH₂·CO₂H by OH (almost quant. in the case of 2-C₁₀H₇·O·CH₂·CO₂H).

m-C₆H₄(OH)₂ (1 mol.) and NaOH (2 mol.) in H₂O are mixed with a solution of CH₂Cl·CO₂H (1 mol. + 10%) and NaOH (2 mol. + 10%) and boiled for 2 hr., giving, after acidification, *m*-phenylenedioxydiacetic acid (I), m.p. 191–192°, converted by boiling H₂SO₄·MeOH into the Me ester, C₁₂H₁₀O₄ (II) (86%). Diazotising *m*-NH₂·C₆H₄·O·CH₂·CO₂H with NaNO₂ in dil. H₂SO₄ (1 : 3) at >3° and heating the solution slowly to 80° gives *m*-OH·C₆H₄·O·CO₂H (~80%), m.p. 145–150°, transformed by boiling H₂SO₄·MeOH into *Me m*-hydroxyphenoxyacetate, C₉H₈O₄ (III), m.p. 76–78°, b.p. 168–169°/1–2 mm. 2 : 4 : 1-(NO₂)₂C₆H₃·NH₂ dissolved in AcOH·conc. H₂SO₄ is diazotised by *iso*-C₁₀H₇(O·NO) and the diazonium salt (IV) is pptd. as an oil by addition of Et₂O. It is purified by dissolution in AcOH, pptn. by Et₂O and is used in AcOH. II and IV in AcOH for 20 hr. at 0° give 2 : 4-dinitrobenzenazo-*m*-di(carboxymethoxy)benzene, C₁₄H₁₀O₄N₂ (V), m.p. 162–163°. I and 3-hydroxy-5-2' : 4'-dichlorobenzenazophenoxyacetic acid, C₁₄H₁₀O₄N₂ (VI), m.p. 234–235° (decomp.). I and IV in anhyd. AcOH overnight at 0° furnish V

542+1
and 2' : 4'-dinitrobenzenazo-*m*-di(carboxymethoxy)benzene, C₁₄H₁₀O₄N₂·3H₂O, m.p. 203–204°. Short boiling of this compound or of V in AcOH containing a trace of conc. H₂SO₄ and keeping the solution at room temp. for 24 hr. gives VI. Diazotising 2 : 5 : 1-C₆H₃Cl₂·NH₂ in conc. H₂SO₄ and proceeding as in the case of 2 : 4 : 1-(NO₂)₂C₆H₃·NH₂, coupling the solid diazonium salt with II in AcOH furnishes 4-2' : 5'-dichlorobenzenazo-*m*-di(carboxymethoxy)benzene, C₁₄H₁₀O₄N₂Cl₂, m.p. 209–210°. III and IV furnish VI. Coupling IV with 2-C₁₀H₇·O·CH₂·CO₂H in AcOH gives 1-2' : 4'-dinitrobenzenazo-2-naphthal, C₁₈H₁₄O₄N₂, m.p. 298–300° (decomp.), identical with the product obtained from IV and 2-C₁₀H₇·OH. Diazotising (NaNO₂) *p*-NH₂·C₆H₄·O·CH₂·CO₂H in dil. HCl at 0° and gradually adding PhOH in aq. Na₂CO₃ gives Na *p*-*p'*-hydroxybenzenazophenoxyacetate, C₁₄H₁₀O₄N₂Na, converted by Cl₂·Cl·CO₂Na into azo-*p*-carboxymethoxybenzene, C₁₄H₁₀O₄N₂, m.p. >250°, also obtained from (1-C₆H₄(OH))₂·NaOH and Cl₂·Cl·CO₂H. Coupling (diazotised 2 : 5 : 1-C₆H₃Cl₂·NH₂ with *m*-OH·C₆H₄·O·CH₂·CO₂H) gives 3-hydroxy-6-2' : 5'-dichlorobenzenazophenoxyacetic acid, C₁₄H₁₀O₄N₂Cl₂, m.p. 236–237° (decomp.). III and diazotised *p*-NO₂·C₆H₄·NH₂ furnish 3-hydroxy-6-*p'*-nitrobenzenazophenoxyacetic acid, C₁₄H₁₀O₄N₂·H₂O, m.p. 232–233° (decomp.). Similarly diazotised *p*-NH₂·C₆H₄·SO₃H and III give a product isolated as the Ba salt. H. WERN.

SPACILOVA, Marie

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