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BRYZGULOVA, Ye.V.; STOVBUK, F.I.

Viability of pathogenic enteric bacteria in milk and milk products  
and their isolation. Vrach.delo no.12:1321-1323 D '57. (MIRA 11:2)

1. Bakteriologicheskiy otdel Chernovitskoy gorodskoy sanitarno-  
epidemiologicheskoy stantsii  
(DAIRY PRODUCTS--BACTERIOLOGY)

USSR / Microbiology. Human and Animal Pathogens. F  
Bacteria of Intestinal Group.

Abs Jour: Ref Zhur-Biol., No 2, 1959, 5576.

Author : Stovbun, F. I.; Kalina, A. P.; Bryzgunova,  
Ye. V.

Inst : Not given.

Title : Dynamics of Changes in Composition of Intes-  
tinal Microflora in Dysentery and Dysenteri-  
form Diseases of Children. (Authors' Report).

Orig Pub: Zh. mikrobiol., epidemiol. i immunobiol., 1958,  
No 2, 112-113.

Abstract: No abstract.

Card 1/1

STOVBUN, Y.I., BRYZGUNIVA, Ye.B., RUDENKO, I.I., BLAT, Y.Z.

Work in improving sanitary conditions in butter production.  
Gig. i san. 23 no.5:55-57 My '58 (MIRA 11:6)

1. Iz bakteriologicheskogo i pishchevogo otdelov Chernovitskoy  
gorodskoy sanitarno-epidemiologicheskoy stantsii.

(BUTTER

improvement in sanitary conditions of production (Rus))

(SANITATION

improvement in sanitary conditions of butter productions  
(Rus))

STOVBUN, F.I.; KALINA, A.P.; BRYZGUNOVA, Ye.V.

Dynamics of changes in the composition of intestinal microflora in dysentery and in dysenterylike diseases in children; author's abstract. Zhur.mikrobiol.epid. i immun. 29 no.2:112-113 P '59. (MIRA 11:4)

1. Iz bakteriologicheskogo otdela Chernovitskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.  
(DYSENTERY, BACILLARY, in infant and child.  
intestinal bacteriol. changes in dysentery & dysentery-like infect. (Rus)

STOVBUN, F. I., Cand Med Sci -- (diss) "Dynamics of the biochemical processes involved in the cultivation of micro-organisms of the intestinal group on carbohydrate media." Chernovtsy, 1960. 21 pp; (Chernovtsy State Medical Inst); 300 copies; price not given; (KL, 25-60, 140)

STOVBUN, F.I.; LABINOVA, M.N.; BRYZOUNOVA, Ye.V.

Study of the saccharolytic properties of *Alcaligenes faecalis*. Lab.  
delo 8 no.2:40-42 P '62. (MIRA 15:2)

1. Chernovitskaya gorodskaya sanitarno-epidemiologicheskaya stantsiya.  
(ALCALIGENES FAECALIS) (CARBOHYDRASES)

... .. BENTHEMAN, I. I.

Sensitivity of the microflora of the palatine tonsils to some  
antibacterial preparations in chronic tonsillitis in children.  
Zhur.ush., nos.1 gorl.tol. 22 no.2:63-64 Mr-Apr '62.

(MIPA 15:11)

1. Iz kliniki detskikh bolezney (zav. - dotsent P.N.Gudzenko)  
na baze 1-y oblastnoy detskoy bol'nitsy (glavnyy vrach - M.E.  
Popova) i bakteriologicheskoy stantsii (glavnyy vrach - B.I.Rubin)  
g. Chernovtsy.

(TONSIL -DISEASES)

(ANTIBIOTICS)





STAVROV, B.I., zool. vet. vrach; SHALYAR, I.I.

Isolation of nongonococcal urethritis in males. Vest. serm. i  
med. 1978, 13:38-40. D 1/3 (MIA 1978)

1. Bacteriologicheskaya laboratoriya Chernovitskoy gorodskoy  
sanitarno-epidemiologicheskoy stantsii (glavnyy vrach B.I.  
Stavrov) i Chernovitskiy oblastnoy veterologicheskoy stanitsii  
(glavnyy vrach I.I. Shalyar).

STOVBUN, I.I.; KAPASIK, V.M. [Karasyk, V.M.]

Investigation of Venturi meters in hydraulic transportation.  
Visti Inst. gidrol. i gidr. AN URSR 17:126-129 '60.

(MIRA 14:8)

(Venturi tubes)

SILIN, Nikolay Aleksandrovich; PISHCHENKO, Ivan Akimovich;  
DIMINSKIY, Karol' Viktorovich; KONDAROV, Vyacheslav  
Nikolayevich; STOVBUK, Ivan Iosifovich; ROZOVSKIY,  
Izrail' L'vovich, doktor tekhn. nauk, otv. red.;  
MEL'NIK, T.S., red.; TURBANOVA, N.A., tekhn. red.

[Instruments for measuring parameters of hydraulic  
conveying of solid materials] Pribory dlia izmereniia  
parametrov gidrotransportirovaniia tverdykh materialov.  
[By] N.A.Silin i dr. Kiev, Izd-vo AN USSR, 1963. 197 p.  
(MIRA 17:3)

STOVBUN, O.T., kand.med.nauk

Vitamins in human nutrition. Nauka i zpyttia 10 no.3:46-47

Mr '60.

(MIRA 14:8)

(VITAMINS)

STOVBUN, V. T., Doc MED SCI, "ELECTRICAL ACTIVITY OF  
THE HEART DURING PHYSICAL EXERCISES." KIEV, 1961.  
(KIEV ORDER OF LABOR RED BANNER MED INST IM ACAD A. A.  
BOGOMOLETS). (KL, 3-61, 229).

376

STOVBUN, V.V.

STOVBUN, V.V.

Biology and phenology of *Anopheles bifurcatus* (L) in Stanislav.  
Med.paras. i paras.bol.supplement to no.1:31-32 '57. (MIRA 11:1)  
(STANISLAV--MOSQUITOES)

STANISLAW-ZAYNCHENKO, Ya. V. Med. Sci.

Dissertation: "The Medical-Sanitation Service in the Partisan Units of Zhitomir Oblast." Central Inst. for Advanced Training of Physicians, 11 Mar 47.

SO: Vechernyaya Moskva, Mar, 1947 (Project #17636)

STOVBUR, A.V.

KAYNARSKIY, I.S.; TSIOLER, V.D.; STOVBUR, A.V.

Continuous mixing of Dinas mixes. Ogneupory 17, 172-80 '52. (MLRA 5:5)  
(CA 47 no. PU:10819 '53)

1. Kharkov Inst. Refractories.



KAYNARSKIY, I.S., prof., doktor; TSIGLER, V.D., inzh.; STEVUR, A.V., inzh.  
SIDORENKO, Yu.P.; KALYUZHNIY, P.P.

Organizing the production of lightweight dinas bricks. Ogneupery 18  
no.7:291-300 J1 '53. (MIRA 11:10)

- 1.Khar'kovskiy institut ogneuperov (for KaynarSKIY, TSigler, Stevbur).
- 2.Dinasovyy zavod im. F. Dzerzhinskego (for Siderenko, Kalyuzhnyy).  
(Firebrick)

15(2)  
AUTHORS:

Margulis, O. M.  
Romanchenko, K. G., Stovbur, A. V.

S/131/60/000/03/005/013  
B015/B005

TITLE: Dense Products of Magnesium Oxide With Increased Thermal Stability

PERIODICAL: Ogneupory, 1960, Nr 3, pp 132-137 (USSR)

ABSTRACT: In this paper the authors describe an economic procedure for the manufacture of fully sintered products of magnesium oxide with admixtures and at practically attainable temperatures. Table 1 indicates the chemical composition of the initial raw material and of the admixtures. Tables 2-4 show the characteristics of the magnesium-oxide samples with admixtures burnt at 1750°. The preparation of raw materials is thoroughly described, and the method of Grebenyuk (UNIIO) is referred to. In conclusion, the authors state that a procedure was worked out for the manufacture of plates with a porosity of 1-3% made of magnesium oxide with spinel linkage. They offer increased thermal stability and considerable durability at high temperatures. The peculiarity of this procedure lies in the use of magnesium oxide burnt at high temperatures and finely

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Dense Products of Magnesium Oxide With Increased Thermal Stability.

S/131/60/000/03/009/013  
R015/R005

ground, in the addition of highly disperse  $\alpha\text{-Al}_2\text{O}_3$ , the pressing of hot-pressed pieces from "pseudo-regular masses", and the technology burning at 1450 and 1750° in capsules. There are cited the 11 references, 7 of which are Soviet.

ASSOCIATION: Ukrainskiy nauchnoissledovatel'skiy institut ognennoy  
(Ukrainian Scientific Research Institute of Refractories)



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S/001/61/000/006/010/010  
8101/2201

AUTORS: Miroshina, O. M., Stoybur, A. V., Basalova, G. K.

TITLE: Products from molten zirconium dioxide with improved thermal stability

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 6, 1961, 367, abstract 6K241 (6K241) ("Sb. nauchn. tr. Ukr. n.-i. in-t ogneuporov", 1960 vyp. 1 (50), 153-171)

TEXT: A method of producing bricks and ZrO<sub>2</sub> products of a high thermal stability has been developed. It consists in using the cubic and monoclinic modification of molten ZrO<sub>2</sub> in a 1:1 ratio. The cubic modification of ZrO<sub>2</sub>, stabilized by means of CaO, has been found at 1500°C to have a low stability which, however, is strongly improved by the addition of 50 % of the monoclinic modification. The thermal expansion coefficient of the monoclinic modification of ZrO<sub>2</sub> and its mixtures with the cubic one is smaller than the thermal expansion

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B101, B101

Products from sinter zirconium

coefficient of the cubic  $ZrO_2$  modification. Petrographic and X-ray analyses have shown that the cubic modification of  $ZrO_2$ , stabilized by means of CaO or MgO, is disturbed when heated at some length to 1200°C. This disturbance has been found to be accompanied by a rise of the stability of products at 1500°C. [Abstracter's note: Complete translation.]

Card 2/2

S/131/62/000/012/002/004  
B117/B186

AUTHORS: Margulis, G. M., Romanchenko, K. G., Stovbur, A. V.,  
Basalova, G. K.

TITLE: Tips for immersion type thermocouples made from zirconium  
dioxide of increased resistance to heat

PERIODICAL: Ogneupory, no. 12, 1962, 552 - 554

TEXT: Basing on previous experience (G. M. Margulis et al., Stal', 1957, no. 8; Ogneupory, 1959, no. 4; Sbornik rabot UNIIO, 1960, no. 3) tips for thermocouples were made from molten zirconium dioxide (mixture of cubic and monoclinic modifications) by ceramic casting and freeze-drying. Dross with pH = 1-2, 20% moisture, and 8 - 10 poise viscosity was used for casting. The tips produced by the two methods and annealed in periodic furnaces with petroleum heating at 1750°C had a porosity of 1 - 30%. Without protective coating they withstood 2 - 6 immersions in molten chromium at 2000 - 2040°C. Tests carried out under operating conditions in induction and steel arc furnaces showed that tips produced by the two methods withstood 2 - 3 immersions in molten metal and allowed of making temperature measurements at

Card 1/2

Tips for immersion type...

S/131/62/000/012/002/004  
B117/B186

1700 - 1750°C. Their thermal inertia of 15 sec corresponded to that of quartz glass (12 - 20 sec). There is 1 table.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneporov  
(Ukrainian Scientific Research Institute of Refractories)

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Card 2/2

ACCESSION NR: AP4038902

S/0131/64/000/005/0206/0209

AUTHORS: Margulis, O. M.; Stovbur, A. V.

TITLE: Thermal stability of products made of oxides

SOURCE: Ogneupory\*, no. 5, 1964, 206-209

TOPIC TAGS: zirconium dioxide, magnesium oxide, thermal stability, refractory material, compressive strength, bending strength, heat exchange, heat insulation, corrosion resistance, erosion resistance

ABSTRACT: Objects made of zirconium dioxide and magnesium oxide were tested in temperatures up to 1900C. Zirconium dioxide blocks (produced from molten material with an addition of 8% of CaO) were ground to 2  $\mu$ , freed of iron, and mixed with monoclinic zirconium dioxide. Test specimens were pressed from material mixed with water-diluted molasses. Magnesium oxide briquettes (burned at 1750C) were dry ground to 10  $\mu$  and were processed as above. Experimental refractory columns were built up of rings 15 and 25 mm in external diameter and 10 mm high. Their wall thicknesses were 3, 3, and 2 mm. The specimens were held in rings 75 mm in diameter, 10 mm thick, and 26 mm high. Heat-insulating rings were prepared of zirconium dioxide sponge according to the method described by A. A. Pirogov (Ogneupory\*, 1962,

Card 1/3



ACCESSION NR: AP4038902

No. 6). Both oxides were chemically analyzed and tested for porosity, compressive strength, and bending strength. Their heat absorption and their coefficients of heat conductivity and of thermal expansion were determined. The two materials were also checked for chemical interaction when in contact with each other for 40 minutes at 1800C. These last tests proved that magnesium oxide should be separated from zirconium dioxide by gaskets of strontium zirconate or calcium zirconate. Thermal stability was studied at various rates of cooling, various lengths of heating-cooling cycles, and at velocities of gas flow up to 100 m/sec. In this work the sponge insulation rings, though resistant to heat, were found to suffer from erosion under the flow of hot gases. Rings made of magnesium oxide did not decrepitate even after 400 cycles in the 1900-1500C heating-cooling range, but when using them the furnace lining had to be made of the same material. Sponge made of magnesium oxide was found inferior to that made of zirconium dioxide. The authors recommend that magnesium oxide be used for manufacturing objects subjected to temperature changes of 400C for long periods and to changes of 900C for shorter periods. N. V. Gul'ko performed the petrographic investigations. Orig. art. has: 2 photographs and 3 tables.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneporov (Ukrainian Scientific Research Institute of Refractories)

Card 2/3

Card 3,

SYCHEV, V.P., starshiy elektromekhanik; STOVBYRA, I.V., starshiy elektromekhanik

Automatic device for checking signal light lamps. Avtom.telem. i  
svyaz' 4 no.11:32 N '60. (MIRA 13:11)

1. Chelkarskaya distantsiya signalizatsii i svyazi Kasakhskoy dorogi.  
(Railroads--Signaling) (Railroads--Electric equipment)

SERCI, M.; JAROS, O.; SVACINA, J.; KOVARIK, J.; NETTL, S.; ZIRAHAL, L.;  
STOVICEK, J.; LICHY, J.; JESHOVA, D.; SIMKOVA, D.; KYRAL, VI.

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; JECNOVA, Dagmar; KOMARSKA, Milan; KOVARIK, Jaromir;  
KRYAL, Vlastimil; LICHA, Helena; LICHY, Josef; N. TIL, Sasa;  
SIMKOVA, Dagmar; STOVICK, Jaroslav; VACPA, Lubomir; ZDRAHAL,  
Leopold; TUSL, Miloslav; SVORCOVA, Stepanka; 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.4:127-140 '61.

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

SEBEL, Jaroslav; JEDRČKA, Dagmar; FOMŠKA, Miro; KOVÁČEK, Jaroslav; KYJAL, Vladimír; LIŠKA, Helena; LIŠKY, Josef; MATTL, Jana; ŠIŘOVÁ, Dagmar; ŠTOJČEK, Jaroslav; VROCHA, Libomír; ZDRÁKAL, 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. Prahy:175-182 1974.

1. Neurologická klinika (předseda: prof. MUDr. L. Sebel, DrSc.)  
Karlová univerzita v Praze, Praha.

L 12843-66 FWT(1)/EMA(j)/EMA(b)-2 RO

ACC NR: AP6005712

SOURCE CODE: CI/0082/65/000/003/0220/0223

AUTHOR: Sercl, M.; Jechova, D.; Komrska, M.; Kovarik, J.; Kyrál, V.; Licha, H.; Lichy, J.; Nottl, S.; Simkova, D.; Stovicok, J.; Vrcha, L.; Zdrahal, L.

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

TITLE: Problem of late sequelae 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 sequelae. Pseudoneurasthenic syndromes were found. The organic P compounds affect the cholinesterase 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

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L 31001-00

ACC NR: AP60240X0

SOURCE CODE: CZ/0082/66/000/001/0055/0058

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

34

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

B

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

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0915

1656



STOVIČEK, Z.; NEČHA, J.; BERAN, J.

Intermittent intestinal obstruction with mesenteric cysts in an 8-year-old girl. Cesk. pediat. 20 no.2:157-159 P 165

I. Detské oddelení (vedoucí: doc. dr. R. Gostof, CSc.);  
chirurgické oddelení (vedoucí: MUDr. V. Drasnar), rent-  
genologické oddelení (zast. vedoucí: MUDr. J. Beran) okresní  
nemocnice v Liberci.

GOSTOF, R.; STVÍČEK, V.; HUR, J.; PŘEMÍL, J.

Neurofibromatosis in 5 children. *Česk. pediat.* 1966, 31:975-976  
N 165.

1. Dětské oddělení (vedoucí doc. dr. R. Gostof, OSt.), patolo-  
gickoanatomické oddělení (vedoucí MUDr. J. Hur) a rentgenolo-  
gické oddělení (vedoucí MUDr. J. Vyskočil) nemocnice v Hliverci.

CASE OSLOVAKIA

BERAN, J.; SLOVICK, Z.; X-ray Department (Rentgenove Oddeleni) Head (Vedouci) Dr J. VYSKOCIL, and Department of Pediatrics of Newborn (Detsko-Rojnickke Oddeleni) Head (Vedouci) Dr Z. SLOVICK, Okresni Hospital (Nemocnice), Liberec.

"Occlusion of Cerebral Arteries in Childhood."

Prague, Ceskoslovenska Neurologie, Vol 29, No 4, Jul 66, pp 276-279

Abstract /Authors' English summary: Two cases of arterial occlusion (middle cerebral artery) in children are described; these caused a sudden onset and resulted in permanent hemiparesis. The cause was thought to be in one case an infection (septic tonsillitis), in the other a head injury. 2 figures, 1 Western, 2 Czech, 1 Russian reference. Manuscript received 1 Jul 65.

1/1

... , 1955: "The operation of the nervous system in the control of cardiac  
activity of the human intestine." *Mississippi Medical Jnl.*  
... , 1955. (Abstract in *Journal of the American Medical  
Association*.)

*Kriticheskiy Obzor*, No. 3, 1950. Moscow.

SFOVICHEN, J.V. (Yaroslavl', ul. Sh. Lyuskintsev, 13/6a, kv.3)

Data on the spinal afferent innervation of the esophagus in dogs.  
Arkh. anat. gist. i embr. 40 no.3:22-26 Mr '61. (MIRA 14:5)

1. Kafedra normal'noy anatomii Yaroslavskogo (zav. - prof. A.N.Alayev)  
i 2-go Moskovskogo (zav. - prof. V.V.Kupriyanov) meditsinskikh  
institutev.

(ESOPHAGUS—INNERVATION)

Товарищ, И. И.

*[Handwritten signature]*

two new pests of bromegrass (*Paracrambus  
megalarhiza* Hand-Merr.) A. V. Ivanov and  
L. N. Shtrom (Trin. Trans. Acad. Agr. Sci.  
USSR, 1946, No. 5/6, 113; Izv. Vses. 1947,  
17, 189). In laboratory (Khabarovsk) two  
specimens of these and to be recognized as pests  
have attacked bromegrass. One of them appears  
to be a species not yet recorded, another to be de-  
scribed under the name of *Thrips bromegrass* Lkh.;  
the other is *Thrips bromegrass* Lkh. Analysis  
sulphate (0.2% moisture) and 1.2% sulphate re-  
commended for control. 128311

*[Handwritten mark]*

STOVICHEK, L N

YAKHONTOV, V.V.; STOVICHEK, L.N.

Material on thrips, a pest of dandelion plants in Uzbekistan. Zool.zhur. 32  
no.5:903-914 S-O '53. (MIRA 6:10)

1. Kafedra entomologii Tashkentского sel'skokhozyaystvennogo instituta.  
(Uzbekistan--Thrips) (Thrips--Uzbekistan)

010000, 01; 0000, 01; 0000, 01.

Information on the diagnosis of chronic abdominal hepatitis in  
infants and small children. Rozhl. chir. 43 no.9:597-601. 3 Jan.

I. detske oddeleni nemocnice v Liherci (vedouci doc. dr. R. Gostaf,  
MUDr. a Chirurgické oddeleni nemocnice v Liherci (vedouci dr. V.  
Brusar).



CZECHOSLOVAKIA

PALIVCOVA, Marie; STOVICKOVA, Nadezda.

1. Geological Institute CSAV (Geologicky ustav CSAV), Prague - (for ?); 2. Institute of Applied Geophysics, (Ustav uzite geofyzicky), Prague - (for ?)

Prague, Vestnik ustredniho ustavu geologickeho,  
No 2, March 1966, pp 127-136

"Petrographical formations and the origin of magma  
in relation to tectogenesis as dealt with in modern  
Soviet literature."

VONDRAKOVA, Zdena, inz.; ZAHRADNIK, Lubomir, dr., inz., laureat statni ceny; STOVIK, Miroslav, inz., laureat statni ceny

Gallium and its raw materials in Czechoslovakia. Geol pruzkum 5 no.5:142-143 My '63.

1. Ustav nerostnych surovin, Kutna Hora, pracoviste v Praze.

CZECHOSLOVAKIA/Cosmochemistry - Geochemistry -  
Hydrochemistry.

L.

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24605

Author : Svasta, J., Zahradnik, L., Sulcek, Zd., Stovik. M.,  
Bouberle, M., Rotter, R.

Inst : -

Title : Content of Germanium in Czechoslovak Coal and Its Products

Orig Pub : Geotechnica, 1955, No 20, 142 a., 11.

Abstract : Presentation of the results of oxidimetric, potentiometric, phenylfluoronic, spectral and also the polarographic and roentgenos- spectral (with the use of Ge K line) analyses, developed by the authors, of samples collected from all the coal fields and of ash from gas plants. The last mentioned method is considered best, yielding qualitative and quantitative results with an accuracy of  $3 \cdot 10^{-3}\%$  with coal and of  $0.05\%$  with fly ash. Highest concentration of Ge was found in coal of western Bohemia in

Card 1/2

COUNTRY : Czechoslovakia  
SOURCE :

H-22

REF. JOUR. : *Chem. Průmysl*, 9, 1959, No. 8/897

AUTHOR : Zahradnik, L.; Stovik, M.; Tyroler, J.

TITLE : Distribution of Germanium in Products of the Combustion of Coal in Fire Boxes with Moving Grate

REF. JOUR. : *Chem. Průmysl*, 1959, 9, No 8, (2-64)

ABSTRACT : The authors have studied the feasibility of securing starting raw materials for Ge production, from products of air-ox. combustion of coal. A material balance is presented for a boiler with conveyor grate, considered from the standpoint of Ge-distribution among individual products of combustion. More than 70% of Ge originally contained in the coal are distributed between volatilized ash and furnace cinders. Cinders, because of low Ge-content (concentration of about 10-3%) can not be processed. Flying ash containing from 0.3 to 0.5% Ge can provide excellent raw material for the production of this element.  
Authors' summary.

S/001/62/000/019/019/053  
B144/B180

AUTHORS: ~~Stoyik, Miroslav, Zahradnik, Lubozir, Tyroler, Jifi, Vozira-  
ova, Sedek, Fojtacek, Zdenek~~

TITLE: Prediction of concentrations of germanium and other trace elements by burning coal in furnace grates

ABSTRACT: Referativnyi zhurnal. Khimiya, no. 19, 1967, 340, Abstract 1.55 (Czechoslovakian patent :99414, April 15, 1961)

NOTE: When coal is burned in furnaces, almost all the Ge is carried away with the finer fractions in the form of volatile compounds. For more complete recovery it is suggested that the coal should be burnt in a reducing atmosphere. To this end the entry of primary air from below is restricted to a minimum and that of secondary air above the grate is increased. The amount of Ge compounds adsorbed in the thin fractions then rises to 80% the Ge content of the coal. The combustion gases are led through a cyclone, where the largest particles are separated, and then through an electrostatic filter and a second cyclone. Alternatively, after separating the large particles, the gas is passed through a scrubber, (with either mineral or sil-

Card 1/2

Production of concentrates ...

5/051/62/000/019/011/053  
B144/B100

cone oil), and then conducted through a hydrocyclone and a centrifuge, where the thin fraction is separated. The wash liquid is continuously recycled. Additions of 2-3% by weight sulfur (19.1%) to the coal promote the formation of volatile  $SO_2$  compounds ( $SO_2$ ,  $SO_3$ ). Diagrams of the process are shown. [abstracter's note: Complete translation.]

Card 2/2

23568

Z/009/61/000/007/001/004  
E112/E135

Properties of furnace flue dusts and their use for the recovery of germanium

from the gaseous phase by the flue dust particles. The sorption process was studied by determining the concentrations of the various elements in the original coal and the flue dust. Spectroscopic methods of analysis were used and results are tabulated. On the average, the flue dusts contained between 27 and 33% combustible materials. Their concentration decreased on extraction with 0.2 N-H<sub>2</sub>SO<sub>4</sub>, indicating that they did not consist entirely of carbon. Results for three types of flue dust are tabulated, showing the following: 1) loss of weight of flue dust on calcination; 2) loss of weight of flue dust on calcination, after extraction with H<sub>2</sub>SO<sub>4</sub>; and 3) loss of weight of flue dust on extraction with H<sub>2</sub>SO<sub>4</sub>. Results of spectrographic analyses of flue dusts, H<sub>2</sub>SO<sub>4</sub>-extracts and extraction residues are submitted, listing all elements occurring in the three different fractions in the following concentrations: 1) higher than 1%; 2) 1.0-0.1%; 3) 0.1-0.01%; and 4) lower than 0.01%. The following values are tabulated for germanium: original sample of flue dust, 1 - 0.1%;  
Card 2/4

23568

Z/009/61/000/007/001/004  
E112/E135

Properties of furnace flue dusts and their use for the recovery of germanium

H<sub>2</sub>SO<sub>4</sub>-extract, 1 - 0.1%; ashing residue of H<sub>2</sub>SO<sub>4</sub>-extract, 0.1 - 0.01%. Extraction methods for germanium from flue dusts, using water, acids, and alkalis, are described. Water extraction recovered about 50% of the available germanium. Extractability with H<sub>2</sub>SO<sub>4</sub> was inversely proportional to the concentration of the latter, (20 N-H<sub>2</sub>SO<sub>4</sub> extracted 64.5% Ge, while 0.05 N-H<sub>2</sub>SO<sub>4</sub> gave 96.7% recovery). On the other hand, extractability with HCl increases with increased concentration. Recovery of Ge by means of HNO<sub>3</sub> was not feasible. The separation of Ge by means of HCl from the coarser fly ashes is also described. An addition of HF (in the form of CaF<sub>2</sub>) is recommended to convert the SiO<sub>2</sub> to SiF<sub>4</sub>, which is driven off by heating. Extraction with weakly alkaline solutions was somewhat inferior to processing with dilute acids. In order to obtain additional information about the isolation of germanium from flue dusts, the volatility of germanium dioxide at different temperatures was studied and results are tabulated. It was found that up to 400 °C germanium was not volatile and was

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E112/E135

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Properties of furnace flue dusts ....

assumed to be present as  $GeO_2$ , easily soluble in alkalies. On the other hand, samples of flue dust, heated under identical conditions, showed poor extractability of Ge by means of dilute sulfuric acid. This is explained by the poor solubility of  $GeO_2$  in  $H_2SO_4$ . It is concluded from laboratory experiments that flue dusts containing 0.3-1.0% Ge present a suitable raw-material for a Czechoslovak germanium recovery industry. Extraction with dilute sulfuric acid or treatment with HCl and distillation as  $GeCl_4$ , optionally in a stream of HCl, are suggested. The described laboratory methods were utilized for industrial scale production, details of which are to be published later.

There are 7 figures, 12 tables and 12 references: 3 Czech, 7 English and 2 German.

ASSOCIATION: Ústav nerostných surovin, Praha  
(Institute for Mineral Raw-Materials, Prague)

SUBMITTED: January 16, 1961

Card 4/4

Z/003/61/000/012/001/005  
E112/E953

AUTHORS: Zahradník, Lubomír, Formánek Zdeněk, Šťovík,  
Miroslav, Tyroler Jiří and Vondráková Zdena

TITLE: Recovery of germanium dioxide from flue dusts

PERIODICAL: Chemický průmysl, no.12, 1961, 625-629

TEXT: The only domestic sources of germanium in Czecho-  
slovakia are the flue dusts from certain coals (germanium contents  
range from 0.2 to 0.8%) and the present paper discusses three  
possible methods of recovery via germanium dioxide: 1) Extraction  
with water or inorganic solvents, such as  $H_2SO_4$ ,  $HCl$ ,  $HNO_3$ ,  $NaOH$   
and  $(NH_4)_2S_x$ . Best results are achieved with 0.05 N- $H_2SO_4$ ,  
yielding up to 97% of the available germanium. Extraction  
efficiency is closely connected with the physical characteristics  
of the flue dusts, good recoveries being obtainable only with flue  
dusts of very fine particle size. Furthermore, only germanium  
available in soluble form will respond to the method. 2) Chlorin-  
ation of flue dusts. This process can be operated either at lower  
temperatures, in presence of steam, or at high temperatures, in  
presence of air. Compared to the distillation method with  $HCl$ ,  
Card 1/5 ✓

Recovery of germanium ...

Z/009/61/000/012/001/009  
E112/E953

yields of germanium are inferior and the recovered products less pure. A further rectification is therefore necessary. The chlorination method, on the other hand, offers the advantage that even very low-content flue dusts can be processed. 3) Direct distillation with HCl. This method is considered the simplest from the technological point of view. It is only suitable for raw materials, containing germanium in a volatilisable form and is not economical for flue-dusts with low germanium content. The method consists of treating the flue dust with HCl, and procedures for the separation of the formed  $GeCl_4$  are described in detail. So far, this has been effected in two ways: a) Absorption of the gaseous mixture in water, containing 20% HCl. A recovery of 2-15 g germanium per 1 litre is feasible but this is considered unsatisfactory. b) Separation of germanium tetrachloride by condensation. However, considerable amounts of  $GeCl_4$  are entrained by HCl, and the method is, therefore, rejected as uneconomical. The authors now offer a new procedure for  $GeCl_4$  absorption, based on the use of non-polar solvents, of which carbon tetrachloride has proved the most suitable. The efficiency of a 0.2%  $GeCl_4$  solution in  $CCl_4$

Card 2/5

Recovery of germanium ...

Z/009/61/000/012/001/005  
E112/E953

is given as 97-99.5% at 20°C. As practical processing would require large volumes of  $\text{CCl}_4$  (1500 kg/kg Ge) a two-step absorption process is suggested. A diagram of a laboratory arrangement for the continuous recovery of germanium tetrachloride by the carbon tetrachloride method is shown (Fig.6). The apparatus operates under slight vacuum and has a capacity of 30 kg flue dust per day. The solution of  $\text{GeCl}_4$  in  $\text{CCl}_4$  is preliminarily refined by extraction with concentrated hydrochloric acid, containing 10% nitric acid. Hydrolysis of  $\text{GeCl}_4$  is carried out in the usual way. The experience gained in laboratory trials led to the construction of a semi-technical batch-wise unit, which in two months produced 10 kg germanium dioxide from 1000 kg flue dust. There are 5 tables, 5 figures and 5 references: 2 Soviet-bloc and 3 non-Soviet bloc. The English-language references read as follows: Ref.1: Journal of Metals, 979(1953); Ref.2: Johnson O.H., Chemical Reviews, vol.51, 432 (1952); Ref.5: Aubrey K.V., Nature, vol.176, 2 (1955). ✓

ASSOCIATION: Ústav nerostných surovin, Praha  
(Institute for Mineral Raw Materials, Prague)

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Recovery of germanium ...

Z/009/61/000/012/001/005  
E112/E953

SUBMITTED: January 16, 1961

Fig. 9. Legend.

- 1 - mixing vessel, with stirrer, for absorption of flue dust in hydrochloric acid.
- 2,4 - steam-heated boiling tubes.
- 3 - separator.
- 5 - condenser.
- 7 - absorption vessel.
- 8 - absorption column with Raschig rings.
- 10 - separating funnel with  $\text{CCl}_4$ .
- 9 - condenser, cooled to  $0^\circ\text{C}$ .
- 11 - reservoir, to which a slight vacuum is applied.

Card 4/5

34697

Z/009/62/000/002/001/002  
E112/E453

183100  
AUTHORS:

Zahradník, Lubomír; Formánek, Zdeněk; Štovík, Miroslav;  
Tyroler, Jiří; Vondráková, Zdena

TITLE: Refining of germanium dioxide  
PERIODICAL: Chemický průmysl, no.2, 1962, 60-63

TEXT: For semiconductors extremely pure germanium of 99.9999999999% purity, usually called "eleven nines", is required. The production of this pure metal, carried out by reduction of germanium dioxide and zone refining of obtained germanium, is economical only if an oxide with at least three nines is used as starting material. Therefore, germanium dioxide is refined for the elimination of various contaminants, above all of arsenic. The following preliminary refining methods were studied on a laboratory scale: 1) elimination by reduction with Zn, Al or SnCl<sub>2</sub>; germanium tetrachloride is unaffected by the above reducing agents, while AsCl<sub>3</sub> is reduced to arsenic; 2) absorption of AsCl<sub>3</sub> and GeCl<sub>4</sub> in carbon tetrachloride, followed by oxidative extraction with HCl and HNO<sub>3</sub>. In this procedure AsCl<sub>3</sub> is oxidized to the water-soluble H<sub>3</sub>AsO<sub>4</sub> which can be extracted with  
Card 1/2

tables

Materials, Prague)

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S/081/63/000/001/048/061  
B144/B186


AUTHORS: Pyroler, Jiří, Formánek, Zdeněk, Vondráková, Zdena, Jáhradník, Lubomír, Štovík, Miroslav

TITLE: Production of pure germanium dioxide from germanium concentrates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1963, 347, abstract 1138 (Czechosl. patent 161148, October 15, 1961)

TEXT: Ge concentrates are distilled continuously with concentrated HCl (ratio 1 : 1 - 2) with simultaneous bubbling of Cl<sub>2</sub> (gas) through the solution or addition of oxidants (K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> + H<sub>2</sub>SO<sub>4</sub>). The GeCl<sub>4</sub> vapors together with HCl, vapors Cl<sub>2</sub> and impurities are washed out of the gas mixture by organic solvents (CCl<sub>4</sub>); then, the GeCl<sub>4</sub> dissolved in the organic solvent is washed with HCl (acid) and hydrolyzed. Example. The apparatus comprises 2 containers with agitators of 70 l capacity (the mixture is tapped from one container, while at the same time the other

Card 1/2



Production of pure germanium ...

S/081/63/000/001/048/061  
B144/B186

tank is filled), a metering pump, a cooking boiler, a foam separator and an absorber. In the containers, the mixture of 25-30 kg concentrate and 50 kg HCl (acid) is prepared. The absorber is filled with  $\text{CCl}_4$ . The operation of the metering pump and the heating of the boiler is controlled in such a way that the foam entering the separator has a temperature of  $100^\circ\text{C}$ . From the separator the suspension is drained-off to waste, but the vapors are led into the absorber, from which  $\text{GeCl}_4$  dissolved in  $\text{CCl}_4$  is drawn off intermittently or continuously and hydrolyzed thrice with distilled water. The product contains 0.005 - 2% As and is a suitable raw material for semiconductors. [Abstractor's note: Complete translation.]

02.1 2/2



AUTHORS: Mirshin, S. M., Stovpchenko, P. I. 307/151-58-7-10/14

TITLE: Cast-Iron Bottom Plates for Edge Mills (Podoyye plity begunov iz chuguna)

PERIODICAL: Ogneupory, 1958, No 7, pp 328 - 329 (USSR)

ABSTRACT: Manganese steel (G15) is usually used for the production of parts of milling machines. The dinas works imeni Dzerzhinskiy produced the bottom plates of mixers and edge mills from cast iron of the following composition (in per cent): C 2.4-2.6; Si 1.5-2.0; Mn 0.7; Cr 1.3-1.5; Ni 0.0-0.1. The melting of the low-carbon cast iron was carried out in the converter working with an oxygen blower. In order to obtain the required content of chromium and nickel the cupola furnace charge was prepared with 80% of cast iron of the Khalilovo works. After blowing an addition of 7 kg ferromanganese and 3 kg of 75% ferro-silicon was added per 0.9 t of metal in the converter. The plates were cast in sand molds with the working surface downward, the casting temperature was from 1350 to 1380°. The plates reached a hardness of from 450 to 460 H<sub>L</sub>.

Card 1/2

Cast-Iron Bottom Plates for Edge Mills

SOV/ 131-59-7-10/14

The strength of these plates was equal to those produced from manganese steel; the costs, however, were only half as compared to the others.

ASSOCIATION: Dimaevyy saved in Dzerzhinskogo (Dinas Works in: Dzhuz'kaskiy)

1. Machine-Production 2. Pearlite--Applications 3. Pearlite--Properties 4. Pearlite--Processing

Doc 2/7

STOVPCHENKO, P.I.

Converter -ladle with oxygen blast. Lit. proizv. no.1:48 Ja '59.  
(MIRA 12:1)

(Converters)

VORONVA, N. A., doktor tekhn. nauk; GOLYBISHNIKOV, P. I., inzh.;  
KRYVONOSYEV, V. A., inzh.; KROKHIN, M. Ye., inzh.;  
ZAYAT, A. P., inzh.; NESTEROVA, G. V., inzh.

Ball instead of cone mandrels for automatic pipe mills.  
Me. i gornorud. prom. no. 3:30-31 My-Je '63.

1. Nikopol'skiy yuzhnotrubnyy zavod (for Iratskiy, Zayats, Nesterova).

VORONOVA, N.A., doktor tekhn. nauk; STOPCHENKO, P.I., inzh.;  
KRIVOSHEYEV, V.A., inzh.; PROTSKIY, N.Ye., inzh.; ZAYATS, A.P.,  
inzh.; NESTEROVA, G.V., inzh.

Cast ball mandrels for pipe-rolling mills. Mashinostroenie  
no.3:54-55 My-Je '63. (MIRA 16:7)

1. Institut chernoy metallurgii AN UkrSSR (for Voronova,  
Stovpchenko, Krivosheyev). 2. Nikopol'skiy yuzhnotrudnyy  
zavod (for Protskiy, Zayats, Nesterova).  
(Pipe mills)

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STOVPIVSKIY. I.M.

Modification of the technology for the production and storage  
of pickles and sauerkraut. Kons. i ov. prom. no.7:12-14, JI  
'63. (MIRA 16:9)

1. Upravleniye konservnoy promyshlennosti "Ukeepsyuzn".

... ..

Electric breakdown in eye on solutions of sulfur chloride.  
Chem. tekhn. fiz. 34 no.5:207-211 1974

1. ... ..



... .., .....

... .. and turning circles. Brodogradnja 6 no.1 11-22 '55.

1. Brodogradiliste "3 Maj," Rijeka.

Stojanović, Ernest, ing.

Stability and overturning. Brodogradnja 6 no.3.102.108 '55.

STOWASJER, Ernst, inz.

Trim and stability of submarines. (To be contd.) Brodogradnja 6  
no.6:284-288 '55.

of 1955. (Part 1 of 2).

Trim and stability of submarines. (Conclusion). Brodogradnja 7 no.1.  
24-31 '56.

1. Safety equipment.

2. Safety appliances and rescue equipment in submarines. Brodogradnja  
no. 1117-128 196.

STOWASSER, Ernst, inz.

Some considerations on the resistance of small destroyers.  
Brodogradnja 8 no.1:16-27 '57.

2015, ...

✓ Difficulties in spinning polyamides. A. Stoy. *Chem. Rev.* 40, 195 (1955). The production of caprolactam fibers spun directly from the polymerization reactor is discussed. The fibers produced by this method are not as regular as those obtained by separate polymerization and melt spinning of the extracted and polyhomogenized polymer. The difficulties in attaining a required regularity of the polymer makes this one-step process applicable only for the production of staple fibers which are homogenized later, but not suitable for continuous filament. I. A. Helwich

SPY, A.

1 2

✓ Purification and polymerization of acrylonitrile from direct synthesis. A. Stax. *Chem. papers* 5, 373 (1950).—Small amounts of dichloroacetic acid (up to approx. 0.5%) do not inhibit appreciably the oxidation-reduction polymerization in aq. medium if O<sub>2</sub> is completely eliminated from the system or if the pH is kept at 6.7. The inhibiting effect of O<sub>2</sub> is the stronger the more acid is present regardless of the amt. of I present. I persists in act as initiator under the absence of O<sub>2</sub>. The H<sub>2</sub>O<sub>2</sub> added prior to the oxidation-reduction initiator is a very strong inhibitor; however, its effect can be overcompensated by a careful addition of hydroxide. If the crude acrylonitrile (III) is not too contaminated, a directly polymerizable aq. soln. can be obtained by a partial extraction with H<sub>2</sub>O so that the upper layer would contain a max. of 10-15% of the monomer. If by any circumstance of the lower layer III can be obtained with only approx. 0.01% I. Also, the amt. of H<sub>2</sub>O water added can be effectively reduced by a partial contact with rubber which absorbs this substance. The synergistic inhibiting effect of O<sub>2</sub> and I can be eliminated by the addition of a suitable peroxide radical scavenger.

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Polymerization of acrylonitrile in concentrated zinc, calcium, or magnesium chloride solutions. *Atter, Petr* (Vysoká škola chem.-technol., Pardubice, Czech. *Průmysl. říd. prakt. Vysoká škola chem.-technol. Pardubice* 1959, 257-58; cf. CA 47, 11807s—Oxidn.-redn.-initiated polymerization of acrylonitrile in concd. aq. solns. of ZnCl<sub>2</sub>, CaCl<sub>2</sub>, or MgCl<sub>2</sub> was faster than in H<sub>2</sub>O, esp. in the presence of Fe<sup>2+</sup>, Cu<sup>2+</sup>, and more-than-bivalent Mn ions. At subzero temps., mol. wts. of about 10<sup>6</sup> were obtained. The viscous polymer soln. was coagulated in H<sub>2</sub>O and cold-drawn in 3-mm.-thick filaments which, after drying, became brittle. Fibers which were not adequately washed, achieved, by rapid diffusion, uniform distribution of salts which resulted in elastomeric properties of the polymer. When the fiber was stretched and washed, it became firm and partially crystall. Alexej B. Bokros

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1-808 (NB)  
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STOY, Artur

"Methods of organic chemistry; macromolecular substances" by  
Houben Weyl. Pt. 1. Reviewed by Artur Stoy. Chem prum 13  
no.10:544 0 '63.

1. Ceskoslovenska akademie ved.

KUNA, Vladimir; STOY, Artur

Preventing the formation of incrustations by magnetization of liquids. Chem pram 13 no. 12: 644 D '63.

1. Státní ústav Chemoprojekt, Praha (for Kuna).
2. Československá akademie věd (for Stoy).

MEL'NIKOV, N.P.; OSTROUMOV, G.A.; STOYAK, M.Yu.

Development of an electric discharge in aqueous electrolytes.  
Dokl. AN SSSR 148 no.5:1057-1059 P '63. (MIRA 16:3)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.  
Predstavleno akademikom M.A.Leontovichem.  
(Electric discharges)

ACCESSION NR: AP4035709

S/0057/64/034/005/0949/0951

AUTHOR: Mel'nikov, N.P.; Ostroumov, G.A.; Stoyak, M.Yu.

TITLE: Development of electric breakdown in aqueous sodium chloride solutions

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.5, 1964, 949-951

TOPIC TAGS: electric breakdown, sodium chloride

ABSTRACT: This paper reports a continuation of earlier work on electric breakdown in sodium chloride solutions (N.P.Mel'nikov, G.A.Ostroumov and A.A.Shteinberg,DAN SSSR,147,4,1962; N.P.Mel'nikov, G.A.Ostroumov and M.Yu.Stoyak,Ibid.148,5,1963). The 12 to 13 kV discharges (normally, positive point to negative plane) took place between electrodes separated by 5 mm and immersed in the solution. The discharges were photographed at  $2.5 \times 10^6$  frames/sec with back illumination provided by an auxiliary spark. Continuous time resolved photographs were also obtained of limited portions of the discharge. In low concentration solutions the discharge begins with the development of dark branching filaments which propagate from the positive point electrode with the velocity  $1.2 \times 10^5$  cm/sec. When a filament reaches the negative plane a luminous plasma discharge propagates backward along it with much greater velocity,

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ACCESSION NR: AP4035709

covering the 5 mm gap in a time much shorter than the 0.4 microsec between successive photographs. The luminous discharge increases for a time in width and intensity. A sequence of 24 photographs is reproduced showing this development. From the continuous time scan photographs it can be seen that the luminous discharge fills its expanding channel for 3 or 4 microsec, after which the luminous discharge begins to contract, while the channel continues to expand at a decreasing rate. In more concentrated solutions the initial filaments propagated somewhat more rapidly and were luminous. In very concentrated solutions the filaments were not formed and no plasma discharge between the metal electrodes occurred. In this case only a small region about the positive point electrode was luminous. This luminosity is ascribed to an arc discharge within a bubble formed at the electrode by thermal effects. Orig.art. has: 1 formula and 4 figures.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im.A.A.Zhdanova (Leningrad State University)

SUBMITTED: 25Apr63

DATE ACQ: 20May64

ENCL: 00

SUB CODE: EM

NR REF SOV: 002

OTHER: 000

Card 2/2

L 13613-65

ACCESSION NR: APL046793

S/0115/64/000/008/0055/0056

AUTHOR: Stoyakina, O. V.

B

TITLE: Reference step attenuator

SOURCE: Izmeritel'naya tekhnika, no. 8, 1964, 55-56

TOPIC TAGS: attenuator, reference attenuator/ ASO-3M attenuator

ABSTRACT: A new ASO-3M reference attenuator has these characteristics: attenuation range, 0-90 db in 10-db steps; frequency range, 0-5 Mc; input and output resistance, 37.5 ohms; max input voltage, 1.5 v; error,  $\pm 0.05$  db in the upper subrange. The attenuator has a  $\Pi$ -type ladder-network scheme; its sections are wound with 0,05-mm manganin wire; it is mounted in a heavy sectionalized brass housing. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii  
(All-Union Scientific Research Institute of Metrology)

SUBMITTED: 00

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 000

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AO52/A001

9.6000 (1012, 1024, 1099, 1331)

Translation from: Referativnyy zhurnal, Elektrotehnika, 1958, No. 14, p. 243.  
# 30273

AUTHORS: Rabinovich, B.Ye., Kshimovskiy, V.V., Stoyakina, O.V.

TITLE: New Development in the Field of Radiotechnical Measurements

PERIODICAL: Tr. Vses. n.-i. in-ta metrol., 1958, No. 33 (93), pp. 94-100 14

TEXT: The state of individual branches of radiotechnical measurements in institutes and laboratories of the Committee of Standards, Measures and Measuring Instruments is reviewed. 1) The frequency measurement is performed by groups of reference piezocrystal generators and frequency multipliers. The 1st order frequency measuring appliance of Avangard type enables one to measure frequencies up to 50,000 Mc. At present radiotechnical control laboratories are equipped with master instruments measuring frequencies with an error of  $\pm 5 \cdot 10^{-5}$ . 2) The power measurement on VHF at 3- and 10-cm range by means of calorimetric meters with water load and a comparison of methods developed in several laboratories have shown a good coincidence of the results. An isothermal calorime-

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A052/A001

New Development in the Field of Radiotechnical Measurements

ter with a cooling element and a calorimeter with phase transition (ice calorimeter) have been designed. The ponderomotive force method has been investigated. An automatic thermistor direct current bridge with an error of the measuring circuit of 1.5-2% has been developed. 3) For testing and checking tube voltmeters and standard-signal generators, OKV-1 and OKV-2 master voltmeter have been developed having voltage range of 20 mv-100 volts and frequency range of 30 cycles-300 Mc with a basic error of  $\pm (0.2 + \frac{0.08}{\sqrt{f}})\%$ . Also have been developed master photovoltmeter, pulse voltmeter, millivoltmeter and UGSS-1 and UGSS-2 devices for checking standard-signal generators of meter and decimeter band (20-700 Mc) at a voltage of 5 microvolts and higher. For checking standard-signal generators in up to 25 Mc band at voltages of 1 microvolt-1 volt a device has been designed working on a principle utilizing master h-f voltage dividers of a film type. 4) Various attenuators for precise checking of attenuators in a broad frequency band, including meter, decimeter and centimeter bands, have been developed. 5) For measuring the amplitude modulation factor the UAM-1 device has been developed for carrier frequency band of 0.1-5 Mc with an error of 1%. The MKG-3 and MKM-2 master devices make it possible to use a standard-signal

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New Development in the Field of Radiotechnical Measurements

generators with an accuracy of 2% at a modulation factor of 15-80%. For measuring the non-linear distortion factor from 0.3 to 50% a device has been designed working in a 60 cycle-20 kc band with an error of 2%. 6. For current measurement an electrodynamic ammeter with an error of 1% and a photo-ammeter with an error of 2.5% are mentioned. A master device is being developed for measurements within a range of 0.001-100 amp on frequencies up to 100 Mc. A device for checking standard signal generators in a pulse operation has the following characteristics: radio pulse duration 0.1-250 microseconds, front duration > 0.1 microsecond, repetition frequency 50-10,000 cycles and delay time from 1 to 2,000 microseconds. There are 43 references.

R.S.M.

Translator's note. This is the full translation of the original Russian abstract.

Card 3/3

ZALUTSKAYA, T.L.; KRZHIMOVSKIY, V.I.; KSHIMOVSKIY, V.V.; MOROZOVA, T.B;  
RABINOVICH, B.Ye.; STOTAKINA, O.V.

Standard unit for measuring low power in the microwave range.  
Izm. tekhn. no. 1:35-37 Ja '61. (MIRA 14:1)  
(Electric measurements) (Microwaves)

RABINOVICH, B.Ye.; STOYAKINA, J.V.

Study of the frequency errors of an attenuator using wire-bound resistances. Trudy inst. Kon. stand., ser i izm. prib. no.53: 75-79 '61. (MIRA 15:2)

I. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im. D. I. Mendeleyeva.

(Attenuators (Electronics))

STOYAKINA, O.V.

Study of the errors of approximation formulas for calculating the dielectric permeability measured by a resonance method. Trudy inst. kom. stand., ser 1 izm. prib. no.53:80-87 '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im. D.I.Mendeleyeva.

(Dielectrics) (Electric measurements)

STOYAKINA, O.V.

Standard stepped attenuator. Izv. tekhn. no. 8:55-56 Ag '64.  
(MIRA 17:12)

KRAYEV, V.I., kand. ekon. nauk; DMITRIYEV, A.A.; STOYAKOV, A.K.

Results of studying the fitness of the "Poltava" type ships for  
the discharging and receiving of cargo. Trudy TSNIIMF no.61:  
64-79 '64. (MIRA 19:1)



Methods of studying nematodes of the roots and the rhizosphere

soil of cotton in the Uzbek S.S.R. Trudy Gel'm. lab. 16:128-130  
165. (MIRA 19:2)

FORTUNATOV, A.V.; L'VOVA, L.A.; Prinizala uchastiye STOYAKOVA, O.N.,  
studentka

Anodic oxidation of cadmium in concentrated solutions of alkali.  
Part 2. Zhur.fiz.khim. 37 no.8:1712-1717 Ag '63. (MIRA 16:9)

1. Saratovskiy gosudarstvennyy universitet.  
(Cadmium) (Oxidation, Electrolytic)

STOYAKOVICH, M. [Stojakovic, M.], (Novi Sad, Yugoslavia)

Inversion of matrices appearing in connection with the use  
of the method of least squares. *Zhur. vych. mat. i mat. fiz.*  
4 no.5:911-919, 1964. (MIPA 17:12)

STOYALOV, S.P.

Arberastakh massif of ultrabasic and alkali rocks. Trudy VAGT  
no.7:74-84 '61. (MIRA 14:7)  
(Aldan Plateau—Rocks, Igneous)

S/081/62/000/012/036/063  
B166/B101

AUTHORS: Stoyan, D., Celetsanu, I.

TITLE: Behavior of the water in the primary circuit of the BBP-C  
(VVR-S) reactor in BucharestPERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 377, abstract  
12K23 (Rev. phys. Acad. RPR, v. 6, no. 3, 1961, 325-328)

TEXT: The first portion of distilled water in the primary circuit of the reactor was used for 5-6 months without filtration, then it was replaced completely by a new portion of water containing 4-5 mg/l insoluble salts and organic substances corresponding to 10-12 mg/l  $\text{KMnO}_4$  and having a pH of 5.7. The water was then subjected to filtration after 5 months and again after 3 months of operation of the reactor on a filter containing KY-2 (KU-2) cation exchange resin washed with 3%  $\text{H}_2\text{SO}_4$ , ЭАЭ-1 (EDE-1) anion exchange resin washed with 3% NaOH, and activated carbon in accordance with БАУ-ГОСТ 6217-52 (BAU-GOST 6217-52). The duration of the filtration was 2-10 hours, the water rate of flow 9-10  $\text{m}^3$ /hour. Filtration Card 1/2

Behavior of the water in the ...

S/081/62/000/012/036/063  
B166/B101

of the water during the operation of the reactor increases the useful life  
of the water and reduces corrosion of the plant. [Abstracter's note:  
Complete translation.]

Card 2/2

STOYAN, F. . . .

New book on socialist industrialization of the Ukraine ("Victory of  
the policy of socialist industrialization in the Ukraine." O.B.  
Sluts'kyi. Reviewed by F.Stoian). Visnyk AN URSS 27 no.10:71-73  
O '56. (MLRA 10:1)

(Ukraine--Industrialization)  
(Sluts'kyi, O.B.)

LUDMER, Yu.V.; STOYAN, L.V., khimik; YURKOVA, A.P., khimik

Dyeing of cotton and staple yarn in bobbins with vat dyes.  
Tekst.prom. 21 no.6:66-67 Je '61. (MIRA 15:2)

1. Zaveduyushchiy khimicheskoy laboratoriyey Khersonskogo khlopchatobumazhnogo kombinata (for Ludmer)  
(Dyes and dyeing—textile fibers)



STOYAN, P. K.

USSR/ Miscellaneous - Political economy

Card 1/1 Pub. 138 - 3/10

Authors :Stoyan, P.K.

Title :Growth of the Ukraine within the family nations of the USSR

Periodical :Visnik AN URSR 1, 24-31, Jan 1954

Abstract :The economical and industrial growth of the Ukraine, since its annexation by Russia, and especially, since the establishment of the Soviet state, is described. The economical advantages, derived through industrialization of the country and collectivization of agriculture, are listed. The cultural gains of the Ukraine for the past three decades are mentioned. Two USSR references.

Institution: .....

Submitted: .....

SHEVCHUK, Grigoriy Mikhaylovich [Shevchuk, H.M.]; STOYAN, P.K., kand.  
istor.nauk, red.; VER, A.Ya., red.

[Improvement in the welfare of the Soviet people in the sixth  
five-year plan] Pidnesennia dobrobutu radians'koho narodu v  
shostii p'iatyrichtsi. Kyiv, 1958. 43 p. (Tovarystvo dlia  
poshyrennia politychnykh i naukovykh znan' Ukrain's'koi RSR.  
Ser.1, no.8) (MIRA 12:3)

(Russia--Economic conditions)

S/138/60/000/005/001/01  
A051/A020

AUTHORS: Vazan, M., Pekh, Ya., Stoyan, S.  
TITLE: The Synthetic Rubber Industry in the Czechoslovakian Republic  
PERIODICAL: Kauchuk i Rezina, 1960, No. 9, PP. 1 - 2

TEXT: Czechoslovakia is one of the first countries in the world in the consumption of rubber ( 4 kg per head ), but as to production it occupies one of the last places. During the second world war a semi-industrial plant was established for the production of chloroprene rubber, but the output was lower than the demand. In 1952, with the help of the USSR and the GDR, a plant for the production of butadiene-styrene rubber, but which served as a basis for the subsequent development of this industry. The USSR gave Czechoslovakia the CKC-30A (SKS-30A) rubber production project. Two circumstances had to be considered in the development of the rubber industry: selection of raw materials and selection of the synthetic rubber type. After numerous economic investigations it was decided to produce butadiene from synthetic alcohol and later from its derivatives. Now Czechoslovakia can obtain homologues of methane and isopentanes, in adequate amounts.

Card 1/3

S/136/60/000/007/001/012  
A051/A020

The Synthetic Rubber Industry in the Czechoslovakian Republic

titles from the USSR and the problem of raw material is mostly solved. The total overhead cost of production has been decreased from 39 to 22 thousand korunas per ton of capacity in the production of synthetic rubber. The main problems involved in the production of synthetic rubber are being solved at the scientific research institute of the "Kauchuk" Plant in the city of Gottvaldov. A technology has been developed for the production of a high-plastic rubber, using colophony as the emulsifier and separation of the rubber in the form of grains. Several scientific research institutes participated in the solution of this technological problem: the Rybitva Organic Synthesis Institute, the Prague Thermal Engineering Institute, as well as the Chemical Projects and Machine-Building Institutes, also in Prague. The production costs will be about 25 million korunas per year without considering quality improvement and economy of capital investments. Work on the elimination of waste from the sewage has been carried out, the purpose of it being to eliminate the synthetic emulsifiers of the Nekal type from the pollution waters for its regeneration. The Scientific Research Institute of Oil and Gas Industries in the city of Bratislava has developed a new type

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