

~~SECRET~~  
~~FISCHER~~  
PHASE I BOOK EXPLOITATION

POL/5981

35

Symposium on Electroacoustic Transducers. Krynica, 1958

Proceedings of the Symposium on Electroacoustic Transducers [held in] Krynica, 17-26 September, 1958. Warsaw, Państwowe Wydawnictwo Naukowe, 1961. 442 p. Errata slip inserted. 630 copies printed.

Sponsoring Agency: Polish Academy of Sciences. Institute of Basic Technical Problems.

Ed. in Chief: Janusz Kacprowski, Doctor of Sciences; Editing Committee: Ignacy Malecki, Professor, Doctor of Sciences; Wincenty Pajewski, Doctor; and Jerzy Woehr, Master of Sciences; Secretary: Juliusz Mierzejewski.

PURPOSE: This book is intended for physicists and acoustical engineers.

COVERAGE: The book is a collection of detailed research papers constituting the proceedings of a conference held in Krynica from 17 to 26 September 1958 under the auspices of the Institute of Technical Problems, Polish Academy of Sciences.

Card 1/8

35

Symposium on Electroacoustic Transducers

PEL/5981

The following basic problems are treated: 1) theoretical research on energy transformation processes; 2) experimental development of new types of transducers; 3) electroacoustic measurements; 4) technology of piezoelectric and magnetostrictive materials; 5) construction of transducers for technical needs; and 6) design of acoustical transducer systems. No personalities are mentioned. References (if any) follow the individual articles.

TABLE OF CONTENTS:

Preface	3
Problems of Research Work on Electroacoustic Transducers. Ignacy Malecki, President of the Conference	5
Ch. 1. General Problems and Theory of Electroacoustic Transducers	
1. Classification of electromechanical transformation methods in the light of the tasks faced with the design and construction of electroacoustic equipment. V. S. Grigor'yev	7

Card 2/8

Symposium on Electroacoustic Transducers

POL/5981

18. Synthetic quartz crystal. Wincenty Pajewski 197
19. Production of piezoelectric elements of barium titanate ceramics by means of hot casting method. A. A. Anan'yeva, A. V. Sosnov, and M. A. Ugryumova 203
20. Investigation of barium titanate ceramics for construction of electroacoustic equipment. A. A. Anan'yeva 211
21. Measurement of the piezoelectric constants of barium titanate ceramics, using longitudinal vibrations of bars. A. Lenk 225
22. Poisson's modulus of barium titanate. M. Grützmacher 233
23. Measurement of Poisson's ratio. Wincenty Pajewski 235
24. The application of single crystals of germanium for measuring fast variable high pressures. M. Grützmacher 243
25. New effect in barium titanate ( $BaTiO_3$ ). Provisional report. P. Greguss 247
26. Examination of the piezoelectric effect occurring when bending  $BaTiO_3$  polycrystalline transducers. Teodor Krajewski 251
27. Piezoelectric ceramics applied to high power transducers. Wincenty Pajewski 259

Card 5/8

GREGUSS, Pal, dr.

Soldering and welding by supersonic sound. Elet tud 15 no.24:763-764  
12 Je '60.

GREGUSS, Pal, dr.

Regulation of television by supersonic sound. Elet tud  
15 no.24:764 12 Je '60.

GREGUSS, Pal, dr. (Jr.)

Ultrasonic therapy. Elet tud 15 no.43:1352-1354 23 0 '60.

GREGUSS, Pal, ifj. Dr., okl. vegyész; HORVATH, Sandor, okl. gépészmérnök

Ultrasonic prevention of boiler scale deposits. Ipari energia  
2 no.4:93-94 Ap '61.

1. Vasuti Tudományos Kutatóintézet (for Greguss). 2. Pest  
és Nógrád megyei Tejipari V. (for Horvath).

GREGUSS, Pal, ifj. Dr., okl.vegyesz; LIPOVECZ, Ivan, Korsuth-dijas

Influencing of oil combustion by acoustic energy. Ipari energia 2 no.5:97-100 My '61.

1. Vasuti Tudomanyos Kutato Intezet (for Greguss).
2. Budapesti Muszaki Egyetem (for Lipovecz).



GREGUSS, Pal, dr. (Jr.)

Living beings in the fields of force. Elet tud 16 no.12:358-361  
19 Mr '61.

GREGUSS, Pal dr. (Jr)

That which is next to ultrasonic waves. Elet tud 17 no.7:219-220  
F '62.

GREGUSS, Pal, dr., Jr.

Visible sounds. Elet tud 17 no.33:1053-1055 19 Ag '62.

BERTENYI, Anna, dr.; FAMOCSAY, Dezso, dr.; GRIGUSS, Pal, dr., ifj.

Ultrasonic treatment of vitreal opacities. Orv. hetil. 103 no.40:  
1887-1889 7 0 '62.

1. Budapesti Orvostudományi Egyetem, II. Szemészeti Klinika és I. Noi  
Klinika.

(ULTRASONIC THERAPY) (VITREOUS BODY)

GREGUSS, Pal, dr.

Acoustics and technology. Technika 7 no.4:6-7 Ap '63.

GREGUSS, Pal, dr.

Sining crystals. Technika 7 no.12:8-9 D '63.

GREGUSS, Pal, dr.

Technical and physiological conditions of constructing  
buildings and cities on the moon. Technika 7 no.7:8-9  
Jl '63.

GREGUSS, Pal, dr.

Technology in criminal investigation. Technika 7 no. 9:8-9  
S '63.



GREGUSS, Pal, dr.

Diagnosis by ultrasonic waves. Technika 8 no. 6: 8-9  
Je '64.

GREGUSS, Pal, dr.

A world-famed small factory; a visit to the Bruel & Kjaer firm.  
Technika 7 no.1:3 Ja '63.

HUNGARY

BRANDSTEIN, Laszlo, Dr, GREGUSS, Sandor, Dr, LITTMANN, Imre, Dr, MATE, Karoly, Dr; Capital City Council Executive Committee Tetenyi Ave Hospital, I. Surgical, Neurological and III. Medical Wards (Fovarosi Tanacs VB. [Vegrehajto Bizottsag] Tetenyi Uti Korhaz, I. Sebeszet, Idegosztaly es III. Belosztaly).

"Organic Hyperinsulinism Diagnosed as Epilepsy for Several Years (Pancreatic Islet-Cell Adenoma)."

Budapest, Orvosi Hetilap, Vol 104, No 30, 28 July 63, pages 1416-1418.

Abstract: [Authors' Hungarian summary] The authors report a case of organic hyperinsulinism which, for years, has been diagnosed as epilepsy. The hyperinsulinism resulted from a plum-sized islet-cell adenoma located in the head of the pancreas. After removal of the adenoma, the blood sugar level became normal and the patient was completely cured. In addition to the presentation of the case, the authors discuss the causes, symptoms, course of organic hyperinsulinism and the dangers of faulty diagnosis. The importance of early diagnosis is stressed. The only course of therapy is surgical removal. 3 Hungarian, 15 Western references.

1/1

GREICIUS, Zenonas, inzh.; PUODZIUKYNAS, Leonas, inzh.;  
BECONIENE, O., red.

[Technical norms and estimates in the construction  
industry] Techninis normavimas ir samatos statyboje.  
Vilnius, Valstybine politines ir mokslines lit.ros  
leidykla, 1964. 306 p. (MIRA 18:1)

GREIF, IG. M.

PA 162T106

RUMANIA/Radio - Receivers  
Printed Circuits

Mar/Apr 50

"Mass Production of Radio Receivers," Ig. M. Greif,  
Engr

"Electricitatea" No 2, pp 71-73

General introduction of radio receivers requires  
great reduction in purchase price embodying new meth-  
ods of more efficient and cheaper production. Greif  
describes circuits printed on ceramic plates.  
Claims this method is new improvement on printed cir-  
cuits.

162T106

GREIF, S;MORO, E.

The Houssey phenomenon in diabetes mellitus. Klin. Med., Wien  
5 no.7:304-312 July 1950. (CIWL 20:1)

1. Of the Second Medical Department of the Regional Hospital in  
Graz (Head--Docent Stefan Greif, M. D.).

GREIF, S.; WENNIG, F.

Cobalt, blood regeneration and the treatment of anemia. Wien.  
klin. Wschr. 63 nos. 35-36:657-659 7 Sept 1951. (CJML 21:1)

1. Of the Second Medical Department of the Regional Hospital  
in Graz (Head -- Docent St. Greif, M.D.).

GREIFOVA, V.; POLASKOVA, V.; WOLFOVA, H.

Thoracic injuries in fatal traffic accidents. Acta chir.  
orthop. traum. cech. 30 no.3:197-202 Je '63.

1. Ustav pro soudni lekarstvi fakulty vseobecneho lekarstvi KU  
v Praze, prednosta doc. dr. J. Tesar, CSc.  
(THORACIC INJURIES) (ACCIDENTS, TRAFFIC)  
(ALCOHOLIC INTOXICATION)  
(BLOOD CHEMICAL ANALYSIS)  
(STATISTICS)



GREIL, Y. A. K

2

343-K. Evaluation of Strength of Spot Welds According to Their Appearance. (In Russian.) E. A. Greil. *Autogennoe Delo (Welding)*; V. 21, Dec. 1960, p. 10-13.

Method developed for estimating strength of spot welds in sheet steel made from both sides, using two sizes of electrodes. It was found that diameter of the zone of iridescence may serve as the quality index, washout-out or non-circular iridescent zones indicating incorrect heat release during welding. (K9, K3, CN)

FROM LITERATURE SOURCE

ASB 51A METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED INDEXED SERIALIZED FILED

APR 1961

U.S. DEPARTMENT OF COMMERCE

U.S. NATIONAL BUREAU OF STANDARDS

GREIL', Ye.A.; TROYEPOL'SKIY, V.N.; KRYUKOV, V.L., redaktor; MUSH-  
TAKOV, L.P., redaktor; PETRUSHKO, Ye.I., tekhnicheskij redaktor

[Cold welding of cast iron] Kholodnaya svarka chuguna. Moskva,  
Gos.izd-vo selkhoz.lit-ry, 1955. 46 p.      (MLRA 8:10)  
(Cast iron--Welding)

GREINER, A.

Hypotensive effect of Viscum album. Orv. hetil. 94 no. 3:80-81  
18 Jan 1953. (GIML 24:1)

1. Doctor. 2. Internal Department (Head Physician -- Dr. Antal Greiner), Sopron Municipal Council Hospital.

GREINER, Antal, dr.; BRENNER, Ferenc, dr.; HAMBALGO, Gyorgy, dr.

Diagnostic value of pain caused by alcohol consumption in  
Hodgkin's disease. Orv. hetil. 97 no.21:583-584 20 May 56.

1. A Sopron Varosi Tanacs Korhaza Belosz. (igaz.-foorvos: Greiner  
Antal dr.) kozl.

(HODGKIN'S DISEASE, manifest.

pain caused by alcohol consumption, diag. value (Hun))

(ALCOHOLIC BEVERAGES, eff.

pain in Hodgkin's dis., diag. value (Hun))

(PAIN

caused by alcohol consumption in Hodgkin's dis., diag.  
value (Hun))

GREINER, H., inz.

Limits of manufacture and application of plastic materials components  
in the construction of precision and optical equipment. Pomiary 8 no.4:  
174-180 Ap '62

**GREINER, I.S.**

A case of unsuccessful smallpox prevention vaccination. Orv. hetil.  
94 no.21:576-579 24 May 1953. (CML 25:1)

1. Doctor. 2. Budapest Municipal 13th District Council 13/1 Defense  
Institute.

GREINER, Iren S --, dr.

Varicella cases in a day nursery. Orv. hetil. 98 no.16:  
405-407 21 Apr 57.

1. A Budapesti VIII. ker Tanacs V. B. 2. sz. Csacsemootthona  
VIII. Kerepesi ut 33.

(CHICKENPOX, epidemiol.  
in Hungary, epidemic in a day nursery (Hun))

S. GREINER, Iren, dr.; KENÉDI, Istvanne, dr.; F. KERÉKES, Emilia, dr.

Nutrition of newborn infants using Moll's calcium milk.  
Gyermekgyógyászat 14 no.1:28-31 Ja '62.

1. A Budapesti VIII. ker. Tanács VB. 2. sz. Csecsemőotthona, VIII.,  
Kerepesi ut 33. (Intézeti igazgató: S. Greiner Iren dr.) közleménye.  
(RICKETS) (ANDROGENS) (STEROIDS)  
(INFANT NUTRITION DISORDERS)



GREINER, J.

From the practice of an instructor pilot, p. 12, REPULES, (Magyar Onkentes Honvedelmi Szovetseg) Budapest, Vol. 8, No. 11, June 1955

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 45, No. 12, December 1955

*GREINER, JOZSEF*

SZONDY, Istvan, dr; VAJDA, Laszlo, dr; GREINER, Jozsef, dr

Application of acrylic resins in prostheses in dental practice.  
Fogorv. szemle 47 no.7:209-217 July 54.

1. Közlemény a Fogorvosi Továbbképző Intézetből (Vezető főorvos:  
Kende János dr.)

(ACRYLIC RESINS,  
dent. prosthesis)

(DENTAL PROSTHESIS,  
acrylic)

CSORBA, Lajos, dr.; SCHEERER, Eva, dr.; GREINER, Veronika, dr.

General and local anesthesia in pulmonary surgery. Orv. hetil.  
101 no.18:622-626 1 My '60.

1. Orszagos Koranyi Tbc. Intezet, Sebészeti Osztaly.  
(LUNG surg.)  
(ANESTHESIA LOCAL)  
(ANESTHESIA GENERAL)

~~GREJCZ, B.~~

"Leveling and telecommunication measurements in interurban stations."

p. 18 (Tele-Radio) Vol. 3, no. 1, Jan. 1958  
Warsaw, Poland

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

S/194/62/000/002/091/096  
D230/D301

AUTHOR: .Grejcz, Bolesław

TITLE: Long-distance communication network in Poland

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,  
no. 2, 1962, abstract 2-8-1a (Wiadom. telekomun., 1961,  
1, no. 1, 16-26)

TEXT: A short historical review is given of the long-distance communication network in Poland, emphasizing its rapid growth in recent years, particularly in the field of telephonic communication. The trunk network employs loaded cable lines, single and twin-cable lines with unloaded pairs, overhead cables, coaxial cables and radio links. The loaded cable lines employ spiral twists with core diameters of 1.2 and 0.9 mm. Old-type 32 l.f. amplifiers and universal amplifiers of the new type U-1 and U-2 are used in this trunk service. Single-cable lines with unloaded pairs are used in conjunction with h.f. apparatus type MF-8 or Z8/V16. It is intended, in the near future, to use these cables on a double-band apparatus

Card 1/2

Long-distance communication ...

S/194/62/000/002/091/096  
D230/D301

type TN12/24 (Poland), in the operating bands 6 - 24 and 60 to 108 kc/s. Twin-cable, 1.2 mm dia. lines with unloaded pairs are used on 12- and 24-channel h.f. systems of the type V-12, TF-941 (GDR), K-24 (USSR) and also ME-16 and U-12 made by Siemens (FRG). Work is being done in conjunction with the domestic 12-channel h.f. apparatus type AT-12 (operating frequency band 12 to 60 kc/s). The construction of the overhead lines will be considerably limited in the future. Color circuits are used on single and twin-wire lines (Cu, 3 mm dia.). Steel circuits (3 and 4 mm dia.) comprise 30% of total circuits. Overhead circuits employ single-channel apparatus made at home and by the Tesla firm (CSR); in addition, the multi-channel equipment used are the Б5073, SOS/SOT, ME-8 and MG-15 types. Between 1961 and 1965 it is planned to use multi-channel systems on coaxial and symmetric cables and to use cable lines on short links. It is intended employing 1920 and 300-channel h.f. systems on coaxial lines and 12- to 24-channel systems on symmetric cables. The main trend in the development of the telephone communication is the realization of symmetric trunking without loading, and application of the equipment to d.c. [Abstracter's note: Complete translation.]

Card 2/2

GREJCZ, Boleslaw, mgr inz.

Works of Study Commission IV of the International Telegraph and Telephone Committee (CCITT) on maintenance of the teletransmission network. Przegl telekom 34 no.9:273-276 S '61.

GREJCZ, Boleslaw, mgr inz.

Protection of cables from corrosion; works of Study Commission VI of  
the International Telegraph and Telephone Consultative Committee (CCITT).  
Przeegl telekom 34 no.9:277 S '61.



*C. 10/2 1/6*

LEVITSKIY, Ya.B.; MASKIN, M.G.; GRIGOR'YEV, G.I.; SHMIDT, A.K.; ~~GREK, A.I.~~

For radical changes to improve coal quality standards. Ugol' 32 no.10:  
44-45 0 '57. (MIRA 10:11)

(Coal--Grading)

ACC NR: AP7006064

SOURCE CODE: UR/0251/66/042/001/0011/0015

AUTHOR: Grek, A. S.

ORG: Ivanovo Chemical Technological Institute (Ivanovskiy khimiko-  
tekhnologicheskii institut)TITLE: Regular polyhedra on surfaces with an euler characteristic of  $\chi = -4$ 

SOURCE: AN GruzSSR. Soobshcheniya, v. 42, no. 1, 1966, 11-15

TOPIC TAGS: solid geometry, Euler equation

SUB CODE: 12

ABSTRACT: An article by V. A. REFREMOVICH gave a simple definition of a locally regular polyhedron of local type  $(\mu, m)$  plotted on a surface and showed that on a closed surface of negative characteristic there exists a finite number of locally regular and "completely" regular polyhedra.

The author of the present article previously showed that there are no completely regular polyhedra on a surface with  $\chi = \alpha_0 - \alpha_1 + \alpha_2 = -1$  but that completely regular polyhedra exist on surfaces with  $\chi = -2$  or  $-3$ . The present article enumerates all the completely regular polyhedra on surfaces with  $\chi = -4$ , both in the orientable case (triple torus) and in the non-orientable case. The author notes that in finding the regular polyhedra he used the results and methods given by him in an earlier article, and therefore no proof is given in the present article. There was found to be 17 polyhedra on surfaces with  $\chi = -4$  in the orientable case and 6 polyhedra in the non-orientable case.

Card 1/2

09270872

ACC NR: AP7006064

This paper was presented by Academician G. S. Chogoshvili on 15 March 1965.  
Orig. art. has: 1 figure and 8 formulas. [JPRS: 37,330]

Card 2/2

GREK, A.S.

Regular polyhedra on a closed surface with the Euler characteristic  $\chi = -1$ . Trudy Mat. inst. AN Gruz. SSR 27:103-112  
'60. (MIRA 15:3)

(Polyhedra) (Topology)

GREK, A.S.

Regular polyhedra of simple hyperbolic type. Uch.zap.Ivan.gos.ped.  
inst. 34s27-30 '64. (MIRA 18s4)



G R E K, A V

KHARITONOV, S.I.; SHTUMPF, A.G.; GREK, A.V.; ~~TSYMBALYUK, A.G.~~; KAZNACHEYEV, I.M.; BOGACHEVA, A.G.

Response to V.D. Avramenko's article "For a fundamental change in the system of standardizing the quality of coal" ("Ugol'" no.2. 1955). Ugol' 30 no.9:43-45 S'55. (MLRA 8:12)

1. Trest Molotovugol' kombinata-Kuzbassugol' (for Kharitonov)
2. Shakhta "Kapital'naya-1" tresta Molotovugol' (for Shtumpf)
3. Nachal'nik Otdela standartizatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta Ugleobogashcheniya (for GreK)
4. Toplivnaya inspektsiya M.P.S. po Kuzbassu "Sibtranstop" (for TSymbalyuk and Kaznachev)
5. Nachal'nik Otdela tekhnicheskogo kontrolya shakhty no.4 "Yurkovskaya" (for Bogacheva)  
(Coal--Standards) (Avramenko, F.D.)

GREK, A.V., inzh.

Basic principles for establishing a classification of coals.  
Sber. inform. po obog. i brik. ugl. no.3:36-40 '57.  
(Coal grading) (MIRA 12:9)



GREK, A.V., ekonomist; KOZKO, A.I., inzh.

The Scientific Research Institute of Coal Preparation is the basic  
organization for coal standardization. Obog.i prik. ugl. no.21:  
141-148 '61. (MIRA 16:5)  
(Coal preparation) (Coal standards)

GREK, F.Z.; KISEL'NIKOV, V.N.

Determination of the porosity of fluidization systems using the acoustic method. Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.4:659-667 '63. (MIRA 17:2)

1. Ivanovskiy khimiko-tehnologicheskii institut. Kafedra protsessov i apparatov khimicheskoy tekhnologii.

GREK, F.Z.; KISEL'NIKOV, V.N.

Viscosity of the fluidized bed. Zhur.prikl.khim. 35 no.10:  
2235-2241 0 '62. (MIRA 15:12)

1. Kafedra protsessov i apparatov Ivanovskogo khimiko-tekhnologicheskogo instituta.

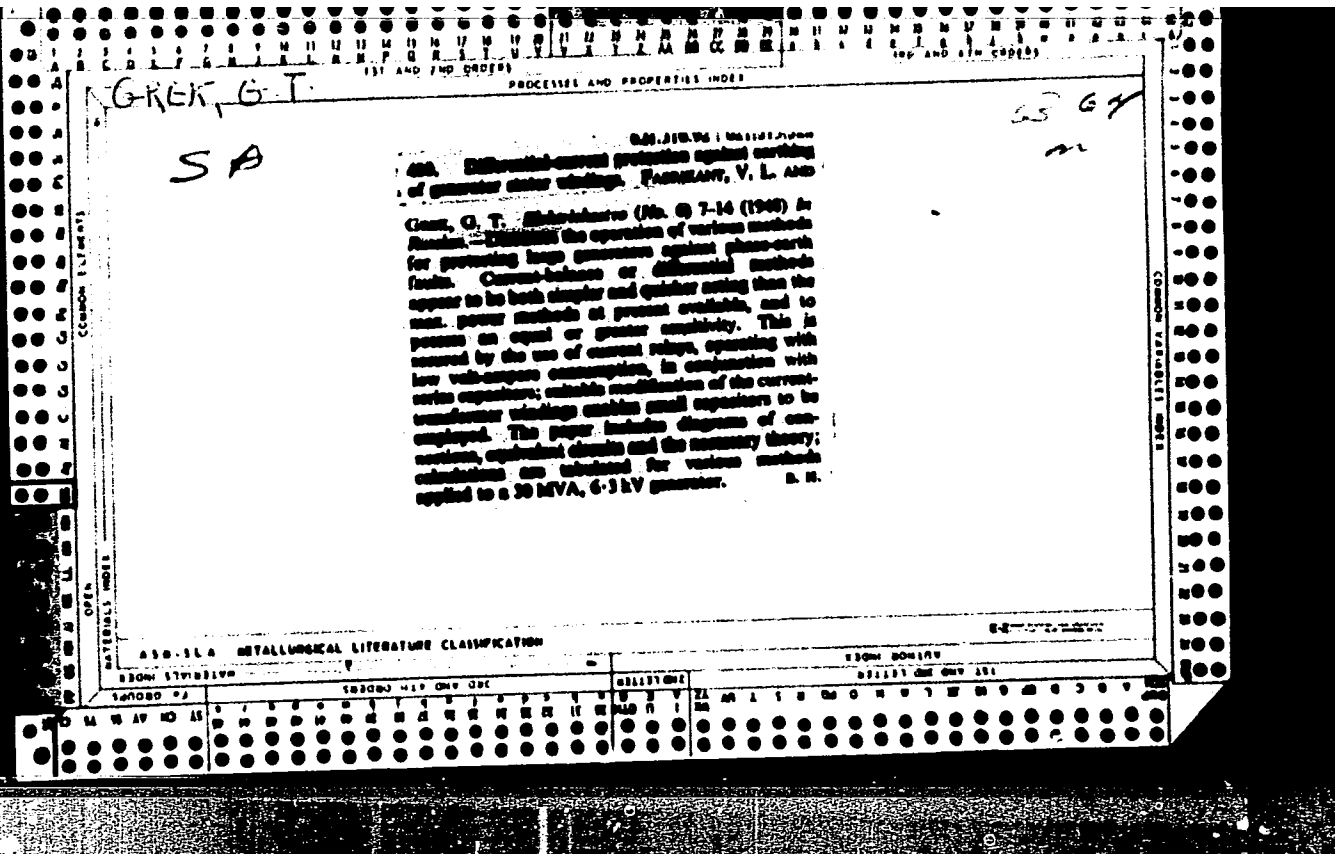
(Fluidization) (Viscosity)

GREK, F. Z.; KISELNIKOV, V. N.

"Apparent viscosity of fluidized bed as a measure of its aggregation."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12  
May 1964.

Ivanov Chemical Technology Inst.



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

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

GRIK, G. T.  
SA

28 64

2877. Sensitivity and methods of determining the settings of the longitudinal differential protection of lines. GRIK, G. T. AND POPOV, I. N. *Elektr. St.*, 20, 35-8 (April, 1969) in Russian.—The calculation is shown with reference to a typical example of a protective system, with vector diagrams of the filter for all possible cases of faults, working characteristics of the whole system (type NSV) for any possible phase relation of the operating currents of the two relays, and angular characteristics. B. V. K.

ASME-ISA METALLURGICAL LITERATURE CLASSIFICATION

GROUPS

1ST AND 2ND ORDERS

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

GREK, G. T.

USSR/Electricity - Relay Protection Aug 51  
Transformers, Instrument

"Determination of the Optimum Parameters for  
Fast-Saturation Current Transformers Used in  
Relay Protection," Docent V. L. Fabrikant,  
G. T. Grek, Engr, Moscow

"Elektrichestvo" No 8, pp 30-37

Gives method of detg the optimum parameters of  
fast-satn current transformers used in protective  
relaying by tests with dc magnetization. Deter-  
mines optimum parameters for transformer steel,  
high-permeability cold-rolled steel, and permalloy.  
Submitted 20 Jan 51. 196r26

GREK. G.T., inzh. (Moskva)

High-speed differential relay protection using semiconductors.  
Elektrichestvo no.3:14-20 Mr '60. (MIRA 13:6)  
(Electric relays) (Electric protection)



DROZDOV, Aleksandr Dmitriyevich; GREK, G.T., inzh., red.

[Electric circuits with ferromagnetic cores in relay  
protection] Elektricheskie tsepi s ferromagnitnymi  
serdechnikami v releinoi zashchite. Moskva, Energiia,  
1965. 239 p. (MIRA 18:2)

GREK, Ivan

Waste water from cellulose and paper factories; survey of 1963 literature. *Papir a celuloza* 19 no.12:322-324 D '64.

1. Research Institute of Paper and Cellulose, Worksite Prague.

GREK, I.

Development of the fat industry in Slovakia.

p. 117  
Vol. 6, no. 3, 1955  
PRUMYSL POTRAVIN  
Praha

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

GREK, N. V., ekonomist

Basic requirements for fuel sampling and sample processing  
machines. Obog. i brik. ugl. no.24:45-48 '62.  
(MIRA 15:10)

(Fuel—Analysis) (Testing machines—Standards)

GEL'MAN, N.E.; BRESLER, P.I.; RUZIN, B.N.; GREK, N.V.; SHEVELEVA, N.S.;  
MEL'NIKOVA, A.A.

New method for the automatic microdetermination of carbon and  
hydrogen in organic compounds. Dokl. AN SSSR 161 no.1:107-110  
Nr 65. (MIRA 18:3)

1. Institut elementoorganicheskikh soedineniy AN SSSR i Spetsial'-  
noye konstruktorskoye byuro analiticheskogo priborostroyeniya AN  
SSSR. Submitted July 29, 1964.

GREKH, I.F.

Data on the characteristics of the anti-inflammatory effect of sulfapyridine. *Farm. i toks.* 16 no.6:31-37 N-D '53. (MLRA 7:1)  
(Sulfapyridine)

GRUNE, I. F.

"Data on the Comparative Characteristics of the Anti-Inflammatory Effect of Sulfidine, Pyrazidon, and Ascorbic Acid in Thermal Burns." Cand Med Sci, Naval Medical Academy, Leningrad, 1954. (RZhBiol, No 4, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (1/4)

U S S R .

Antiphlogistic effects of metacyl and pentoxyl. L. F. Grekh. *Farmakol. i Toksikol.* 17, No. 5, 30-9(1931). (Rabbit ears (distal half of helix) were inflamed by 3-min. contact with water at 53°. Metacyl and pentoxyl were given *per os*, 40 mg./kg. in 3 ml. distd. water, 3 hrs. before, half doses 5 and 9 hrs. after, full doses 24, 48, 72, and 96 hrs. after treatment. Both drugs ameliorated exudative changes and had antipvretic effects. Julian F. Smith



GREKH, I. F.

"The Influence of Pentoxyl on the Course of Radiation Sickness in White Mice," by I. F. Grekh, Chair of Pharmacology (Prof N. V. Lazarev, chief, Honored Scientific Worker), Naval Medical Academy, Meditinskaya Radiologiya, Vol 1, No 5, Sep-Oct 56, pp 51-55

White mice were irradiated by 800 r, 1036 r, and 633 r, and then treated by pentoxyl. Series 1, 2, 3, and 4 of the experiments proved that treatment with pentoxyl and isotonic salt solution prolonged the life of the mice and there was a greater survival from radiation sickness. Results proved, also, that the effect was more pronounced if treatment was started immediately after irradiation. Series 5 of these experiments combined pentoxyl with chemotherapeutic agents, and the results proved that pentoxyl was most effective when combined with streptomycin or streptomycin combined with penicillin.

Experimental results coincided with clinical observations which reflected a decrease in the severity of radiation sickness due to pentoxyl or pentoxyl combined with chemotherapeutic agents. The author concludes that pentoxyl increases the effectiveness of chemotherapeutic agents in radiation sickness and evidently in other sicknesses in which infection plays an important role.

Sum 1274

GREKH, I.F. (Leningrad)

Protective effect of certain pyrimidine derivatives against X rays  
in white mice. Med.radiol 3 no.6:67 N-D '58. (MIRA 12:1)

(PYRIMIDINE)

(RADIATION PROTECTION)

GREKH, I.F. (Leningrad)

Combined treatment of radiation sickness in white mice. Med.rad.  
3 no.6:68 N-D '58. (MIRA 12:1)  
(RADIATION SICKNESS)

LAZAREV, N.V., prof., zasl.deyatel' nauki RSFSR; GREKH, I.F., kand.med.nauk  
(Leningrad)

Pyrimidines and therapy. Vrach.delo no.2:113-118 F '59.  
(MIRA 12:6)

1. Kafedra farmakologii, farmatsii i farmakognozii (zav. -  
zasl.deyatel' nauki RSFSR, prof.N.V.Lazarev) Voenno-meditsin-  
skoy akademii imeni S.M.Kirova.

(PYRIMIDINES--THERAPEUTIC USE)

GREKH, I. P.

Potentialtion of the therapeutic effect of chlortetracycline by certain pyrimidine derivatives. Antibiotiki 4 no.3:90-94 My-Je '59. (MIRA 12:9)

1. Kafedra farmakologii, farmatsii i farmakognozii (nach. - prof.N.V.Lazarev) Voenno-meditsinskoy ordena Lenina akademii ineni S.M.Kirova.

(ROENTGEN RAYS, eff.

eff. of chlortetracycline potentiated by pyrimidine deriv. on radiation sickness (Rus))

(CHLORTETRACYCLINE, eff.

on exper. radiation sickness, potentiation by pyrimidine deriv. (Rus))

(PYRIMIDINES, eff.

on exper. radiation sickness, potentiation of chlortetracycline (Rus))

GREKH, I.F., dotsent

Conference on adaptive reactions and methods for increasing  
the resistance of the body. Voen.med.zhur. no.5:93-95 My  
'59. (MIRA 12:8)

(IMMUNITY)

GREKH, I.F. (Leningrad)

Effect of certain drugs on blood aspiration from the pleural cavity  
in rabbits. Pat. fiziol. i eksp. terap. 4 no. 6:53-57 N-D '60.  
(MIRA 14:2)

1. Iz kafedry farmakologii i farmakognozii (zav. - zasluzhennyy  
deyatel' nauki prof. N.V. Lazarev) Voenno-meditsinskoy ordena  
Lenina akademii imeni S.M. Kirova.  
(HEMOTHORAX)

GREKH, I.F.

Conference on the regulation of inflammatory and regenerative  
processes. Farm.i toks. 23 no.4:370-372 J1-Ag '60. (MIRA 14:3)  
(INFLAMMATION) (REGENERATION (BIOLOGY))



LAZAREV, N.V.; GRUKH, I.F.

Conference on the problem of accommodation reactions and methods  
for increasing the resistance of the organism to unfavorable  
influences. Zhur.mikrobiol.epid.i immun. 31 no.1:156-158 Ja '60.  
(MIRA 13:5)

(ADAPTATION (BIOLOGY))

ABRAMOVA, Zh.I., kand. med. nauk; ANICHKOV, S.V., prof.; BELEN'KIY, M.L.,  
prof.; VAL'DMAN, A.V., doktor med. nauk; VEDENEYEVA, Z.I., kand.  
med. nauk; VINOGRADOV, V.M., kand. med. nauk; GERSHANOVICH, M.L.,  
kand. med. nauk; GINETSI'SKIY, A.G., prof.; GORBOVITSKIY, S.Ye.,  
prof.; GREENKINA, M.A., dotsent; GREKH, I.F., dots.; DENISENKO,  
P.P., kand. med. nauk; D'YACHENKO, P.K., kand. med. nauk; ZHESTYANIKOV,  
V.D., kand. med. nauk; ZAUGOL'NIKOV, S.D., prof.; ZEYMAL', E.V., kand.  
med. nauk; ISKAREV, N.A., kand. med. nauk; KARASIK, V.M., prof.;  
KIVMAN, G.Ya., kand. med. nauk; KOZLOV, O.D., kand. med. nauk; KROTOV,  
A.I., doktor veter. nauk; KUDRIN, A.N., doktor med. nauk; LAZAREV, N.V.,  
prof.; LAPIN, I.P., kand. med. nauk; MEL'NIKOVA, V.F., prof.;  
MESHCHERSKAYA, K.A., prof.; MIKHEL'SON, M.Ya., prof.; MOSHKOVSKIY,  
Sh.D., prof.; PADEYSKAYA, Ye.N., kand. med. nauk; PAILEOK, V.P., prof.;  
PERSHIN, G.N., prof.; PLANEL'YES, Kh.Kh., prof.; PONOMAREV, G.A.,  
prof.; POSKALENKO, A.N., kand. med. nauk; MUKHIN, Ye.A., dots.;  
ROZOVSKAYA, Ye.S., dots.; RYBOLOVLEV, R.S., starshiy nauchnyy sotr.;  
SALYAMON, L.S., kand. med. nauk; SAFRAZBEKYAN, R.R., kand. biol. nauk;  
TIUNOV, L.A., kand. med. nauk; TOMILINA, T.N., dots.; FELISTOVICH,  
G.I., kand. med. nauk; FRUYENTOV, N.K., kand. med. nauk; KHAUNINA,  
R.A., kand. med. nauk; TSYGANOV, S.V., prof.[deceased]; CHERKES, A.I.,  
prof.;

(Continued on next card)

ABRAMOVA, Zh.I.---(continued) Card 2.

CHERNOV, V.A., doktor med. nauk; SHADURSKIY, K.S., prof.;  
YAKOVLEV, V.Ya., doktor khim. nauk; MASHKOVSKIY, M.D., red.;  
NIKOLAYEVA, M.M., red.; RULEVA, M.S., tekhn. red.; CHUHAYEVA,  
Z.V., tekhn. red.

[Manual on pharmacology] Rukovodstvo po farmakologii. Leningrad,  
Medgiz. Vol.2. 1961. 503 p. (MIRA 15:1)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for  
Anichkov, Karasik, Cherkos). 2. Chlen-korrespondent Akademii medi-  
tsinskikh nauk SSSR (for Belen'kiy, Ginetsinskiy, Moshkovskiy,  
Planel'yes).

(PHARMACOLOGY)

GREKH, I.F.; BOGNIBOV, Ye.A.

Method of determining pepsinogen (uropepsinogen). Lab. delo 7  
no.5:16-17 My '61. (MIRA 14:5)

1. Kliniko-diagnosticheskaya laboratoriya (zav. - dotsent I.F.  
Grekh) Instituta onkologii AMN SSSR, Leningrad.  
(PEPSINOGEN)

GREKH, I.F., dotsent (Leningrad)

Conference on the problem of the medical use of pyrimidine  
derivatives (January 20 - 22, 1961 in Rostov-on-Don).  
Kaz. med. zhur. no.5:92-93 S-0 '61. (MIRA 15:3)  
(PYRIMIDINE)

GREKH, I.F.

Comparative evaluation of the determination of the blood coagulation rate according to the methods of Bazaron and Sukharev. Lab.delo 7 no.7:28-31 JI '61. (MIRA 14:6)

1. Kliniko-diagnosticheskaya laboratoriya (zav. - dotsent I.F.Grekh) Instituta onkologii AMN SSSR, Leningrad. (BLOOD--COAGULATION)

GREKH, I.F.; BOGNIBOV, Ye.A.

Method for determining calcium in the blood plasma by means of  
flame photometry. Lab.delo 8 no.8:15-18 Ag '62. (MIRA 15:9)

1. Kliniko-diagnosticheskaya laboratoriya (zav. - dotsent I.F.  
Grekh) Instituta onkologii (dir. - deystvitel'nyy chlen AMN SSSR  
prof. A.I.Serebrov) AMN SSSR, Leningrad.  
(CALCIUM IN THE BODY) (FLAME PHOTOMETRY)

GREKH, I.F.; BOGNIBOV, Ye.A.

Evaluation of the incretory activity of the stomach and its importance in the diagnosis of malignant neoplasms. Vop. onk. 8 no.9:68-75 '62. (MIRA 17:6)

1. Iz kliniko-diagnosticheskoy laboratorii (zav.- dotsent I.F. Grekh) Instituta onkologii AMN SSSR (dir.-deystvitel'nyy chlen AMN SSSR, prof. A.I. Serebrov). Adres avtorov: Leningrad, P-129 2-ya Berezovaya alleye, 3, Institut onkologii AMN SSSR.



GREKH, I.F.

Conference on the Problem of Medical use of Pyrimidine Derivatives.  
Sov.med. 25 no.5:151-153 My '62. (MIRA 15:8)  
(PYRIMIDINE)

GREKH, I.F.; TURBINA, I.L.; KARLINSKAYA, R.S.

Effect of some pyrimidine derivatives on the toxic and antineoplastic action of sarcolysine. Vop. onk. 9 no.8:41-48 '63

(MIRA 17:4)

1. Iz laboratorii eksperimental'noy onkologii ( zav. - zasluzhennyy deyatel' nauki prof. N.V. Lazarev) i kliniko-diagnosticheskoy laboratorii ( zav. - dotsent I.F. Grekh) Instituta onkologii AMN SSSR ( direktor - deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov). Adres avtorov: Leningrad, P-129, 2-ya Berezovaya alleya, 3, Institut onkologii AMN SSSR.

GREKH, I.F.; KARLINSKAYA, R.S.; TURBINA, I.L.

Effect of some pyrimidine derivatives on the metastasis of  
inoculated SSK sarcoma in rats. Vop. onk. 9 no.9:23-27 '63.

(MIRA 17:9)

1. Iz laboratorii eksperimental'noy onkologii (zav.. zasluzhennyy  
deyatel' nauki prof. N.V. Lazarev) i kliniko-diagnosticheskoy  
laboratorii (zav.- dotsent I.F. Grekh) Instituta onkologii AMN  
SSSR (dir.- deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov).  
Adres avtorov: Leningrad, P-129, 2-ya Berezovaya alleya, 3,  
Institut onkologii AMN SSSR.

GREKH, I.F.; ZEL'DOVICH, D.R.; BOGNIBOV, Ye.A.

Effect of radiotherapy on the content of some electrolytes in erythrocytes, blood plasma and urine of patients with cancer of the cervix uteri. Med. rad. 9 no.2:52-56 F '64.

(MIRA 17:9)

1. 3-ye khirurgicheskoye otdeleniye (zav.- prof. V.P. Tobilevich) i kliniko-diagnosticheskaya laboratoriya (zav.- dotsent I.F. Grekh) Instituta onkologii AMN SSSR.

GREKH, I.F.; KARLINSKAYA, R.S.; TURBINA, I.L.

Effect of some pyrimidine derivatives on the metastasis of  
transplantable SSK rat sarcoma. Vop. onk. 10 no.2:98-105 '64.  
(MIRA 17:7)

1. Iz laboratorii eksperimental'noy onkologii (zav. -zasluzhennyy  
deyatel' nauki prof. N.V. Lazarev) i kliniko-diagnosticheskoy  
laboratorii (zav.- dotsent I.F. Grekh) Instituta onkologii AMN  
SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov).  
Adres avtorov: Leningrad, P-129, 2-ya Berezovaya alleya, Institut  
onkologii AMN SSSR.

GREKH, I.F., dotsent

Conference on the use of pyrimidine derivatives in oncology and other  
branches of medicine. Vop. onk. 10 no.4:112-114 '64. (MIRA 17:11)

GREKH, I.F. (Leningrad, K-156, B. Osipovskaya ul., d.6, kv.22); KARLINSKAYA, R.S.;  
TURBINA, I.L.

Results of the treatment of rats with transplanted SSK sarcoma  
with ThioTEPA associated with some pyrimidine derivatives. Vop onk.  
10 no.8:84-87 '64. (MIRA 18:3)

1. Iz laboratorii eksperimental'noy onkologii (zav. - zasluzhennyy  
deyatel' nauki prof. N.V.Lazarev) i kliniko-diagnosticheskoy  
laboratorii (zav. - dotsen I.F.Grekh) Instituta onko' gii AMN SSSR  
(dir. - deystvitel'nyy chlen AMN SSSR prof. A.I.Serebrov).

GREKH, I.F.; NIECHIKOV, L.Z.; VASBININ, V.M.; TURBINA, I.I.

Correactive protein in benign neoplasms and cancer. Vop. onk.  
11 no.7:37-40 '65. (MIRA 18:9)

1. Iz kliniko~diagnosticheskoy laboratorii (zav.- dotsent I.F. Grekh Instituta onkologii AMN SSSR (dir.- deystvitel'nyy chlen AMN SSSR prof. A.I. Serebryov)).



GREKH, S.P., inzh.; GOL'DIN, G.B., inzh.

Tubular joint for joining bundles of coiled strands and straight  
wire. Transp. stroi. 14 no.4:50-51 Ap '64. (MIRA 17:9)

1958. M.M. Greig, GREIG, A.C., LEVYMAN, A.C., 1958.

Building a multispan bridge across the Irtys. Transp. str. (MIRA 18+3)  
19 nr. 3014-22 F 165.

GREKH, V.D.

Cost accounting in the Oil Field Administration of the Dolina  
Petroleum Trust of the Lvov State Farm. Neft. i gaz. prom.  
no.2:36-39 Ap-Je '64. (MIRA 17:9)

**GREKHNEV, A.N.**

Studying local agriculture as part of the course in economic geography of the U.S.S.R. Geog. v shkole 20 no.3:39-40 My-Je '57. (MIRA 10:6)

1. Bol'she-Klyuchishchenskaya shkola Ul'yanovskoy oblasti.  
(Agriculture--Study and teaching)  
(Geography, Economic--Study and teaching)

OREKHNEV, A.N.

Excursion as a method of reviewing material covered in  
geography. Geog.v shkole 23 no.2:61-63 Mr-Ap '60.  
(MIRA 13:6)

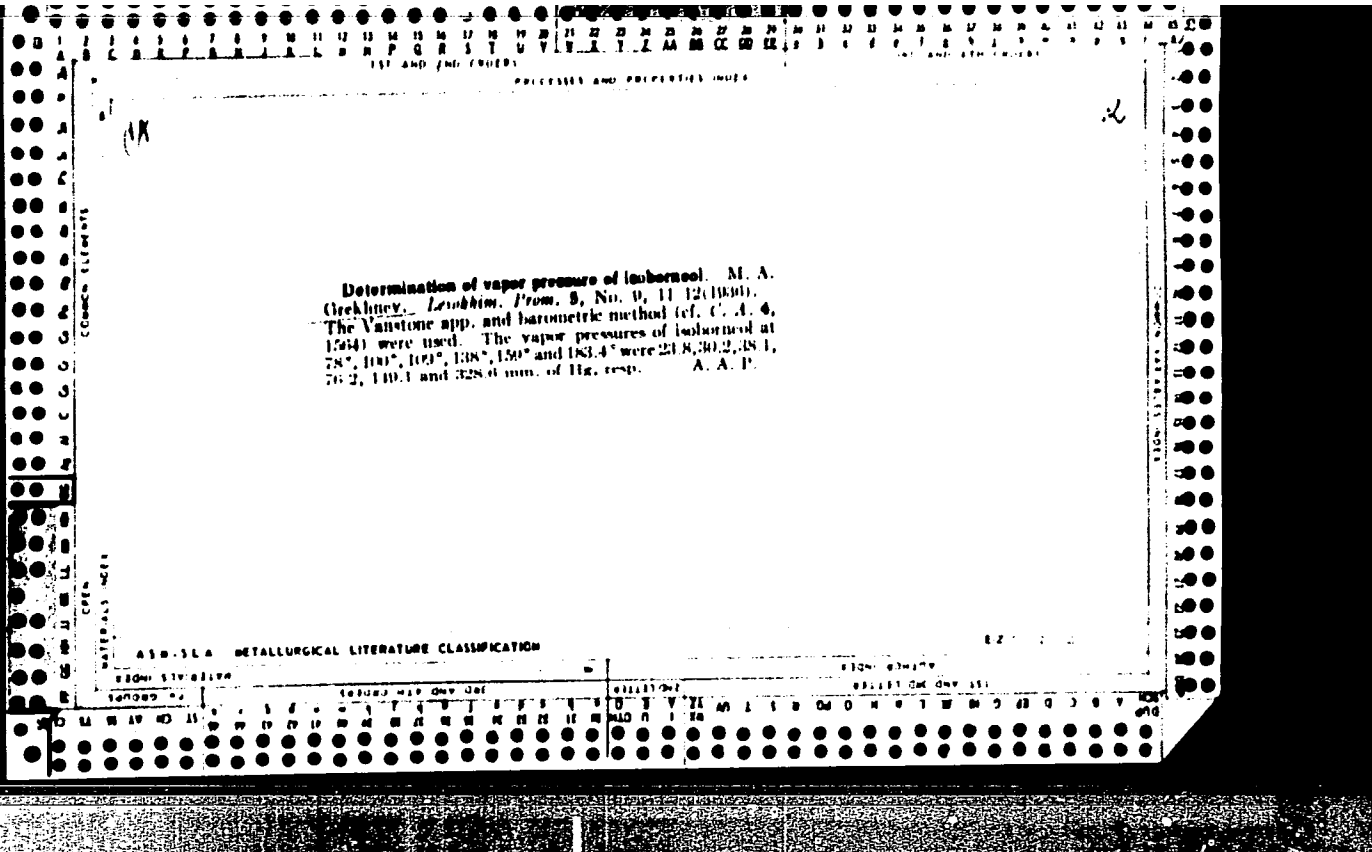
1. Bol'she-Klyuchishchenskaya shkola Ul'yanovskoy obl.  
(Ul'yanovsk Province--School excursions)  
(Geography--Study and teaching)

GREKHNEV, A.N.

Excursions for the study of the natural resources of a local province.  
Geog. v shkole 26 no.1:52-53 Ja-F '63. (MIRA 16:5)

1. Bol'sheklyuchishchenskaya srednyaya shkola Ul'yanovskoy  
oblasti.

(Geography, Economic--Study and teaching)  
(School excursions).



Catalytic production of campher from borneol and iso-borneol. V. E. Tishchenko and M. A. Grekhnev. *Org. Chem. Ind. (U. S. S. R.)* 3, 481-3(1937).—Dehydrogenation of borneol in the presence of 1.5-2% KOH, 6% xylene and 6-10% Ni-C catalyst (corresponding to 1-2% Ni) at the terminal temp. of 205° (external temp. 250-30°) resulted in 92-7% campher, m. 174-5°. A Co-C catalyst under these optimum conditions gave somewhat better results. The catalysts were prepd. by treating activated C with 50% NiNO<sub>3</sub> (CoNO<sub>3</sub>) in H<sub>2</sub>O for 3-3.5 hrs. and igniting the filter residue at 385-95° in H for 2 hrs. It is then cooled in H and stored in an air-tight container. Isoborneol similarly treated gave 78-82% campher.  
Chav. Blanc

ASB-568 METALLURGICAL LITERATURE CLASSIFICATION



IT AND THE SERIES PROCESSING AND PROPERTIES INDEX

Common ELEMENTS

Common VARIABLES INDEX

2

all-Union Sci. Res. Inst. Sulfite alcohol Hydrolysis Industry.

The order of reaction of hydrogenation and dehydrogenation. M. A. Gorbunov and I. G. Eroshevskii. *J. Gen. Chem. (U. S. S. R.)* 19, Nos. 23-4, 2005-13 (1944).-- If at any given moment the whole reacting mass is under the influence of active points of the catalyst, then the reactions are of the 1st or the 2nd and 3rd order. If at any given moment a considerable part of the reaction mass A is under the influence of the catalyst (i. e., if there is an insufficiency of the catalyst) and the greater part is in reserve [A (reserve)] then there are 3 possible variants. (a) If A (reserve) is very great, i. e. A (reserve)  $\rightarrow$  A = B + C, then the reaction always seems to be of the zero order. If A (reserve) is small then there are possible the 2 following conditions. (b) If the reaction A = B + C proceeds rapidly A (reserve) = B + C, which is a 1st-order equation. (c) If the reaction A = B + C proceeds slowly then A is increasing constantly from A (reserve) and A (reserve)  $\rightarrow$  A = B + C, where the rate of formation of B and C is uniform and the reaction seems to be of the zero order. The expl. part of the investigation conducted in the dehydrogenation of isoborneol with a Co catalyst (1, 1.5, 3.5 and 6%) according to  $C_{10}H_{17}OH = C_{10}H_{15}O + H_2$  in the presence of CaO (as promoter) and xylene. The velocity of dehydrogenation is proportional to the amt. of the catalyst. The dehydrogenation const. for the reactions with 1 and 1.5% of the catalyst correspond to a zero-order reaction and with 5 and 0% of the catalyst to a 1st-order reaction. Twenty references. W. R. H.

ASS-55A METALLURGICAL LITERATURE CLASSIFICATION

FROM DONATED

180000 183000 187000 191000 195000 199000 203000 207000 211000 215000 219000 223000 227000 231000 235000 239000 243000 247000 251000 255000 259000 263000 267000 271000 275000 279000 283000 287000 291000 295000 299000 303000 307000 311000 315000 319000 323000 327000 331000 335000 339000 343000 347000 351000 355000 359000 363000 367000 371000 375000 379000 383000 387000 391000 395000 399000 403000 407000 411000 415000 419000 423000 427000 431000 435000 439000 443000 447000 451000 455000 459000 463000 467000 471000 475000 479000 483000 487000 491000 495000 499000 503000 507000 511000 515000 519000 523000 527000 531000 535000 539000 543000 547000 551000 555000 559000 563000 567000 571000 575000 579000 583000 587000 591000 595000 599000 603000 607000 611000 615000 619000 623000 627000 631000 635000 639000 643000 647000 651000 655000 659000 663000 667000 671000 675000 679000 683000 687000 691000 695000 699000 703000 707000 711000 715000 719000 723000 727000 731000 735000 739000 743000 747000 751000 755000 759000 763000 767000 771000 775000 779000 783000 787000 791000 795000 799000 803000 807000 811000 815000 819000 823000 827000 831000 835000 839000 843000 847000 851000 855000 859000 863000 867000 871000 875000 879000 883000 887000 891000 895000 899000 903000 907000 911000 915000 919000 923000 927000 931000 935000 939000 943000 947000 951000 955000 959000 963000 967000 971000 975000 979000 983000 987000 991000 995000 999000

18

CA

Dehydrogenation of isoborneol by copper catalyst  
V. B. Fishchenko and M. A. Girkhney. *J. Applied Chem. (U.S.S.R.)* 14, 200-201(1941); cf. *C.A.* 35, 2005.  
[In prep. of Cu catalyst suitable for dehydrogenation of isoborneol, it is not necessary to reduce it in a H stream ordinary heating at 200-300° is sufficient to produce an active catalyst. The activity of a given catalyst is greatly augmented by very small additions of Na, K, and Ba.  
G. M. Kosolapoff

ASAP-51A METALLURGICAL LITERATURE CLASSIFICATION

CA

Relation between the rate of catalytic reactions and the quantity of catalyst used. M. A. Grekhnev and I. G. Kremnevskii. *J. Gen. Chem. (U.S.S.R.)* 19:106-50(1948) (English summary). --(On the basis of expts. with dehydrogenation of isoborneol over Cu-Ni catalyst at 125-60° it was shown that with increase in the quantity of catalyst used the reaction rate increases to a limiting value, beyond which almost no increase is achieved. It is suggested that each active point in the catalyst acts not on one mol. of a reactant but on several of them simultaneously.)  
G. M. Kosolapoff

2

All-Union Sci. Res. Inst. Sulphite-Alcohol + Hydrolysis Industry

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

100 AND SYN COVERED

PROCESSING AND PROPERTIES INDEX

147 AND THE GREAT

2

*M*

Dehydrogenation of isoborneol with a copper catalyst made without reduction in hydrogen. M. A. Ushakov, *J. Applied Chem. (U.S.S.R.)* 19, 1271-6(1946)(in Russian).—With a catalyst prep. by impregnating char-meslin with a 20% soln. of Cu(NO<sub>3</sub>)<sub>2</sub> drying and heating at 200°, the amt. of H<sub>2</sub> liberated from isoborneol (25 g. + 2 ml. xylene + 1.5 g. KOH + 8 g. catalyst; theoretical amt. of H<sub>2</sub>, 2800 ml.) at 200°, 3 1/2 hrs., was about 90% of the theory; catalysts heated to 300 and 400° gave only about 80 and 60% resp. Heating the catalyst on charcoal results in partial reduction to Cu which progresses further in the course of the reaction; water is evolved much more abundantly than usual in the dehydrogenation of borneol. Addn. of KOH is more effective than NaOH, the latter more effective than CaO. Addn. of Ba(NO<sub>3</sub>)<sub>2</sub> to the Cu(NO<sub>3</sub>)<sub>2</sub> soln., optimum 0.1% (in vol. Ba soln. to vol. Cu soln.), promoted the reaction particularly in the initial stages and shortened its completion; the curves for 0.5 and 0.05% Ba are better than for 0.1%; with the promoted catalyst, too, KOH is still more effective than NaOH, the latter more effective than ignited CaO; nonignited CaO has a still lower effectiveness. The 0.1% Ba-promoted catalyst, heated at 200-270°, 1.5 hrs., suffered no loss of activity on 5 days standing in air. Promotion with NaNO<sub>2</sub> (0.5% in vol. of 20% soln.) is a little less effective than with Ba(NO<sub>3</sub>)<sub>2</sub>. With tech. isoborneol, the dehydrogenation is completed (90.5% H<sub>2</sub>) in about 3 1/4 hrs. N. Thom

COMMON ELEMENT

MATERIALS INDEX

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

LIBRARY ONE ONLY LIST

147 AND THE GREAT

100 AND SYN COVERED