

FAZAKAS, Sandor, dr.; KERTESZ, Laszlo, dr.; PETRANYI, Gyula, dr.

On iodine fluctuation of the thyroid gland. Magy.belorv.arch.
12 no.5:133-135 0 '59.

1. A Debreceni Orvostudományi Egyetem II. sz. Belklinikájának
(Igazgató: Dr. Petrányi Gyula egyetemi tanár) és az MTA
Atommagkutató Intézet (Igazgató: dr. Szalay Sándor egyetemi
tanár) közleménye.

(THYROID GLAND funct tests)
(IODINE radioactive)

VEGH, Lajos; KOCSAR, László; KERTESZ, László; SZATAI, Imre

Studies on lymph circulation in the liver with the aid of isotopes in experimental chronic hepatic diseases. Kiserletes Orvostud. 11 no.5:490-495 0 '59.

1. Debreceni Orvostudományi Egyetem I. sz. Belklinikája,
Korelettani Intézete és MTA Atommagkutató Intézete.

(LYMPH)

(LIVER DISEASES exper)

VEGH, L.; KOCSAR, L.; KERTESZ, L.; SZATAI, I.

Isotope studies on the lymphatic circulation of the liver in chronic liver lesion. Acta med.hung. 14 no.3:271-277 '59.

1. Department of Medicine No.1, and Institute of Pathophysiology, University Medical School of Debrecen, and the Nuclear Research Institute of the Hungarian Academy of Sciences.
(LYMPHATIC SYSTEM physiol.)
(LIVER DISEASES exper.)

MESZAROS, Gyorgy, dr.; BANHIDY, Endre, dr.; KERTESZ, Laszlo, dr.

Data on the technic of endobronchial application of colloidal
in bronchial carcinoma. Orv.hetil. 101 no.42:1489-1492
16 0 '60.

1. Debreceni Orvostudományi Egyetem, Tbc. Klinika, Bronchologiai
Osztály.

(LUNG NEOPLASMS radiother.)

(GOLD radioactive)

KERTESZ, Laszlo

Observation of the reaction occurring in the body of a hare
caused by an intravenously administered metallic salt colloid
injection. ATOMKI kozl 3 no. 1:17-36 '61.

KERTESZ, Laszlo

Questions relating to the metabolism of radiiodine with special regard to the state of the dynamic equilibrium of the function of the thyroid gland. ATONKI kozl 3 no. 1: 37-42 '61.

*

LAMPÉ, L.; MEDVECZKY, L.; KERTESZ, L.

Storage of iodine in the foetal thyroid. Acta physiol. acad. sci. hung.
20 no.4:385-391 '61.

1. Department of Gynaecology and Obstetrics, Medical University,
Debrecen, Institute of Nuclear Research of the Hungarian Academy of
Sciences, Debrecen.

(IODINE metab) (THYROID GLAND embryol)

LAMPE, L.; KERTESZ, L.; PETER, F.; MEDVECZKY, L.

Intrauterine iodine metabolism. Acta physiol. hung. 20 no.1:
11-22 '61.

1. Department of Gynaecology and Obstetrics, and Department of
Paediatrics, Medical University, Debrecen; Nuclear Research Institute,
Hungarian Academy of Sciences, Debrecen.

(IODINE metabolism) (PREGNANCY metabolism)
(THYROID GLAND in pregnancy) (FETUS metabolism)

HUNGARY

KERESZT, Laszlo, FETEK, Ferenc; Nuclear Research Institute of the Hungarian Academy of Sciences (MTA -- Magyar Tudomanyos Akademia -- Atomias Kutato Intezet) and Medical University of Debrecen, Pediatric Clinic (Debreceni Orvostudomanyi Egyetem, Gyermekklinika).

"Experiences With the Methodology of the in Vitro Diagnostic Radioactive Iodide Test."

Budapest, Kiserletes Orvostudomany, Vol XV, No 5, Oct 63, pages 497-502.

Abstract: [Authors' German summary] The Hamolsky test, a simple, reproducible method is described by the authors. Valuable diagnostic informations can be obtained by this method about thyroid function, without exposure to radiation. During pregnancy, in immature and mature infants, the behavior of the thyroid hormone-binding proteins of the plasma should also be determined. The influence of hematocrit anomalies on the Thybon-uptake of the erythrocytes can be corrected for by the introduction of the Adams' coefficient. 13 Western, 5 Hungarian references.

1/1

PETER, Ferenc, dr.; KERTESZ, Laszlo, dr.

The use of the Hamolsky test in pediatrics. Gyermekgyo-
gyaszat 15 no.2:56-59 F'64.

1. A Debreceni Orvostudományi Egyetem Gyermekklinikájának
(igazgató: Kulin, Laszlo, dr., egyetemi tanár), és a Magyar
Tudományos Akadémia Atommagkutató Intézetének (igazgató:
Szalay, Sándor, dr., egyetemi tanár) közleménye.

*

LAMPE, Laszlo, dr. KERTESZ, Laszlo, dr.; DZVONYAR, Janos, dr.

Iodine storage in the thyroid gland of the human fetus.
Orv. hetil. 105 no.21:981-983 24 My'64

1. Debreceni Orvostudományi Egyetem, Szülészeti-Nőgyógyászati Klinika, MTA, Atommagkutató Intézet.

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I. 11/13/65

EW (m)

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no. 12, 1964, 10;

Research (a)

HUNGARY

~~APPROVED FOR RELEASE: 09/17/2001~~ ~~CIA-RDP86-00513R000721610006-8~~
KERTESZ, J. *Journal of Medical Science No 2 (II. sz. Klinikai)* of the
the College of Medicine (Orvostudományi Egyetem), Debrecen.

"Significance of Activation Analysis in Medical Science"

Budapest, *Kiserletes Orvostudomány*, Vol 18, No 6, 1966; pp 627-634.

Abstract: Activation analysis opens up new possibilities in the field of medical isotope research. The essential feature of the described method is that the experimental system or a selected aliquot of same is activated and the isotope formed in it is measured. On the basis of author's experience with iodine activation as well as the data in the literature it is shown that under properly selected experimental conditions the measurement results, reproducibility, automation and sensitivity of the activation analysis fully satisfy the requirements of a modern medical biological laboratory. 28 references, mainly Western. Manuscript received 10 Jan 66.

JENEY, Andreas; PETER, Franz; KERTESZ, Ladislaus; JENEY, Andreas, jr.;
MEDVECKY, Ladislaus

Experiments on the strumigenic action of flavone dyes. II. Studies
with I-131. J. hyg. epidem. 6 no.2:230-235 '62.

1. Hygienisches Institut der medizinischen Universität zu Debrecen
und Institut für Atomkernforschung der Ungarischen Akademie der
Wissenschaften zu Debrecen.

(VITAMIN P pharmacology) (THYROID GLAND pharmacology)
(ICDINE metabolism)

1950, 1.

1950, 1. Development of economic conditions. . . 13.
Vol. 7, no. 20, Oct. 1950. Official Journal, Budapest.

1950, 1. Development of economic conditions 13. (MML) 10 Vol. 7, no. 20, Oct. 1950

GYORGY, L.; BORBELY, L.; KERTESZ, M.; SOMKUTI, T., with the technical assistance
of E. Seress

Pharmacology of a new spasmolytic drug. Acta physiol. hung. 15 no.2:
189-199 1959.

1. Institute of Pharmacology, the Medical University, Budapest.
(PAPAVERINE, related cpds,
6,7-dimethoxy-1-(3,4-dimethoxyphenyl)-isoquinoline
pharmacol.)

KERTESZ, Miklos

Interesting and good method for appropriate feedback control.
Radiotechnika 14 no.1:39 Ja '64.

1. Budapest V.Kerületi Uttorohaz Radioszakkore.

HERTESZ, Otto (Gyor); VIRAG, Antal (Gyor)

New working methods in track maintenance. Vasut 12 no.3:22-23
Mr '62.

KERTESZ, P.

829 15011 011

34. Some problems on the opening and working of quarries, by P. Kertesz. *Építőanyag- és Bányászati Technika* - Vol. II, No. 9-10, pp. 189-191, Sept-Oct, 1950, 12 figs).

The first task is the search for adequate material. Reliable data should be available on quality, on structural conditions, and on the extensiveness of the underground area of the stone. For this purpose, trial shafts, exploratory drillings and trial lifts are required. Then follows the selection of the site, the level of the quarry and the determination of the direction to be followed in obtaining the stone. After the quarry site has been established, the height of the pit walls, respectively, the location of the angle levels must be determined. Graphs show the ratio of production to the height of the pit walls, and further the ratio of production to the lengths of the levels. The article concludes with a thorough description of the problem on how to start working the various geological formations.

ASB 55A METALLURGICAL LITERATURE CLASSIFICATION

KERTESZ, P.

Engineering-geologic exploration of volcanic tuff at Andornaktalya and Nograd-
veroce. p.59

EPITOANYAG. (Epitoanyagipari Tudományos Egyesület)
BUDAPEST, HUNGARY
Vol. 11, no.1/2, Jan./Feb. 1959

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

Uncl.

KERTESZ, P.

KERTESZ, P. Processing synthetic materials in the knitting industry. p. 448.

No. 11/12, Nov./Dec. 1955.

MAGYAR TEXTILTECHNIKA.

TECHNOLOGY

Budapest, Hungary

So: East European Accession, Vol. 5, No. 5, May 1956

BOLGAR, Istvan; KARMOS, Viktor; KERTESZ, Pal

Knitting machines at the 4th Hannover Fair of Textile
Machinery. Pt. 1. Magyar textil 16 no. 2:81-90 F '64.

1. "Magyar Textiltechnika" szerkeszto bizottsagi tagja
(for Karmos).

KERTESZ, Pal, dr., okleveles mernok, egyetemi adjunktus;
REZNAK, Laszlo, okleveles mernok, tudomanyos munkatars

Up-to-date strength testing of highway materials. Melyepitestud
szemle 14 no. 3:124-130 Mr '64.

1. Chair of Geology, Technical University of Building and
Transportation, Budapest (for Kertesz). 2. Road Research
Institute, Budapest (for Reznak).

KERTESZ, Pal, dr.

Is the hardness of rocks a correctly used term? *Építőanyag*
15 no.6:228-233 *Jé* '63.

1. *Építőipari és Közlekedési Műszaki Egyetem Ásvány- és Földtani Tanszéke.*

KERTISSA, Pal

Modern finishing machines in the hosiery industry. Magy textil
15 no.11:527-528 '63.

KERTESZ, Rudolf (Budapest); PALCSER, Erno (Budapest); GYURITS, Peter (Budapest)

Forum of innovators. Ujtit lap 17 no.5:30-31 16 Mr '65.

KERTESZ, T.

Some words about automobile implements. p. 6, (AUTÓ MUNK, Budapest, Hungary), Vol. 7, No. 16, Sept. 1954.

SC: Monthly List of East European Accessions, (ERAI), IC, Vol. 4, No. 5, May 1956, Uncl.

KERTESZ, T.

"Measurement and Instruments", P. 12. (AUTO MOTOR, Vol. 7, No. 20,
Oct. 1954, Budapest Hungary)

SO: Monthly List of East European Accessions, (EMAL), LC, Vol. 4,
No. 1, Jan. 1955, Uncl.

KERTESZ, T. 1951

(A Fovarosi Gal Beno Korhaz Laboratoriuma.)

"Can the sp. gr. of Blood Replace the Hemoglobin and Hematocrit Values.?"

Kisel, Orvostud, 1951, 3/4(301-302)
Abst: Exc. Med. 11, Vol. 5, No. 6, p. 716

KERTESZ, T.

The usage of precipitation syphilis test for screening hospital patients. Orv. hetil. 93 no. 8:253-255 24 Feb 1952. (GLML 23:3)

1. Doctor. 2. Laboratory (Head - Head Physician -- Dr. Tivadar Kertesz), Metropolitan Uzsoki-utca Hospital (Director - Head Physician -- Dr. Istvan Haldsz).

KERTESZ, T.;PALOCZY, J.;TIVADARINE, K.

Practical evaluation of the simple blood serum precipitation test (Mallen reaction). Orv. hetil. 93 no. 30 874-877 27 July 1952. (CIML 23:3)

1. Doctors. 2. Laboratory (Head Physician -- Dr. Tivadar Kertesz) of Uzsoki-utca Metropolitan Hospital and the Laboratory (Head Physician -- Dr. Jozsef Palocz) of Tetenyi-ut Hospital.

KERTESZ, Tivadarna, dr.,; MATH, Karoly, dr.

Postcholecystography pseudoalbuminuria. Orv. hetil. 96 no.19:
522 8 May 55

1. A Tetenyi-uti korhaz laboratoriumanak (foorvos: Palocsy Jozsef
dr.) es I. belosztalyanak (foorvos: Zellner Pal dr.) kozlemenye
(Hlozetes kozlemenye)

(ALBUMINURIA,
adventitious, postcholecystography)
(CHOLECYSTOGRAPHY, complications,
albuminuria, adventitious)

KERTESZ, Tivadarné, dr.; BAJKOR, Jozsef, dr.

Experiences with sensitized frog reactions in pathological pregnancies. Orv. hetil. 97 no.40:1105-1107 30 Sept 56.

1. A Fovarosi Tetenyi-uti Korhaz (igazgato: Zellner, Pal, dr.) Laboratoriumnak (foorvos: Palocsy, Jozsef, dr.) es Szulobeteg Osztalyanak (foorvos: Zagon, Andras, dr.) kozlemenye.
(PREGNANCY TESTS

Galli Mainini test in pathol. pregn. (Hun))

KERTESZ, Tivadar, dr.; KREMMER, Tibor, vegyesszernok; ROTTER, Lillian K.,
dr.; FERENCZY, Edit, dr.

Determination of serum glutamic oxalic acid transaminase in myocardial infarct. Orv.hetil. 101 no.45:1596-1599 6 N '60.

1. Fovarosí Uzsoki u. Korhaz Laboratoriuma.
(MYOCARDIAL INFARCT blood)
(TRANSAMINASES blood)

BALAZS, Marta, dr.; BARNA, Laszlo, dr.; KERTESZ, Tibor, dr.

Lipomatosis of the ileocecal valve. Orv. hetil. 103 no.5:218-220
F '62.

1. Orvostovabbkepzo Intezet, Korbonctani Intezet, Rontgen-Intezet es
Sebeszeti Osztaly.

(ILEUM neoplasms) (LIPOMA pathol)

BIRO, Istvan, dr.; KERTESZ, Tibor, dr.

Cured enteritis necrotisans. Orv. hetil. 103 no.31:1459-1460 5 Ag '62.

1. Orvostovábbképző Intézet, Kóronctani Intézet és Sebészeti Osztály.
(ENTERITIS ther)

KERTESZ, Tibor, dr.; ZAHUMENSZKY, Elemer, dr.

Unusual foreign body in the rectum. Magy. sebesz. 16 no.1:72-74 Mr '63.

1. Az Orvostovabbkepzo Intezet Sebeszeti Osztalya.
(FOREIGN BODY) (RECTUM) (HOMOSEXUALITY)

KERTESZ-MURESAN, INDITA

RUMANIA/Physical Chemistry - Colloid Chemistry.
Disperse Systems

B-14

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4033

Author : Kertesz-Muresan Indita

Title : On the Position of Macromolecular Solutions in the System
of Colloid Chemistry

Orig Pub : Rev. chim., 1956, 7, No 5, 279-282

Abstract : Description of the views of a number of Soviet authors concerning the fundamental difference between macromolecular solutions -- homogenous, reversible systems that are thermodynamically equilibrated, aggregatively stable and are formed spontaneously, in the absence of specific stabilizer, and the colloid systems proper. The author adheres to the opinion that the designation of "colloids" even in combination with "lyophilic", is incorrect theoretically and detrimental in practice. Inclusion of macromolecular solutions among colloids is based on a

Card 1/2

- 236 -

KERTESZ-MURESAN, Fudita; KACSO, Elena

On the transition mechanism of latices of the copolymer
acrylate of ethyl-acrylic acid in homogenous solutions.
Pts. 1-2. Studia Univ. B-B S. Chem. 8 no.1:57-78 '63

1. "Babes-Blyai" University, Cluj.

X

Production of SPINELLS and radium sulphate by electrolysis

KERTI, J.

101. Instrumental checking of the alumina content of alumina-cryolite melts. J. Kerti. *Koldvezi Lapok*, Vol. 13(11), 1978, No. 7, pp. 353-354, 2 figs. 2

It is desirable to know the alumina content of alumina-cryolite melts in order to ensure the proper operation of the electrolytic cells and the economy of the electrolytic process (dissociation voltage, conductivity, exploitation of the current) as well as to estimate the anode effect. Certain breakdowns in operation can also be rapidly discovered by measuring the alumina content. A method of measurement, based on the critical current density, was elaborated permitting a simple, rapid checking of the alumina content. Workers can be easily trained to conduct the measurements, an operator making and recording the observations while a helper controls the auxiliary electrode used in the process.

363
1/1

949

KERTI, Jozsef

Anodic properties of aluminium. Magyar kem folyoir 67 no.3:97-99
Mr '61.

1. Eotvos Lorand Tudomanvegyetem Fizikai-Kemiai es Radiologiai
Tanszeke, Budapest.

OSORBA, Lorinc; KERTI, Jozsef

Fuel elements. Pt. 1. Magyar lap 19 no. 4:189-195
Ap '64.

1. Department of Physicochemistry and Radiology, Lorand
Eotvos University, Budapest (for Kerti).

CSORBA, Lorinc; KERTI, Jozsef

Fuel elements. Pt. 2. Magy kem lap 19 no.5:240-249 My '64.

1. Accumulator and Dry Battery Factory (for Csorba).
2. Chair of Physicochemistry and Radiology, Lorand Eotvos University, Budapest (for Kerti).

KERTIK, M. P.

J

Country : USSR
 Category: Soil Science Mineral Fertilizers.

Abs Jour: RZhDiol., No 14, 1958, No 63067

Author : Kertik, M.P.
 Inst : Poltava Agricultural Institute
 Title : The Effect of Fertilization Around the Roots on
 the Yield of Agricultural Crops

Orig Pub: Nauchn. tr Poltavsk. s.-kh. in-t, 1955 (1957), 2,
 156-165

Abstract: According to the results of field experiments carried out in the experimental field and at the educational farm of the Poltava Agricultural Institute, by which a comparison was made of the effectiveness of fertilizing around the roots of potatoes a month before harvest with superphosphate (Pg), potassium-magnesium

Card : 1/3

J-29

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721610006-8"

Country : USSR
 Category: Soil Science Mineral Fertilizers

Abs Jour: RZhDiol., No 14, 1958, No 63067

(M), and H_2PO_4 (D) - the tuber harvest increased in comparison with the control in the wet year of 1953 by 29% due to D, by 11.9% due to M, and by 8.3% due to P (at a concentration of 1/10); in 1954 and 1955 (dry years) the tuber harvest increased by 11.7%, on the average, due to Pg (1/20) only. With irrigation in 1954 the harvest of tubers increased by 36.9% due to Pg + D, by 34% due to D, by 31.5% due to M, by 27.3% due to Pg (1/10). In the dry years, an only twice-repeated sprinkling with low concentrations of fertilizers was effective, and in the wet years a single sprinkling with fertilizers of a somewhat higher concentration was enough. When moisture is normal a sprinkling in the flowering period makes

Card : 2/3

DZHUMAYEV, Oraz Muradovich; KERTIKOV, Kh., kand.biolog.nauk, red.;
ATAYEV, G., red.; KASPAR'YANTS, L.T., tekhred.

[Brief Russian-Turkmen dictionary of agricultural terms]
Kratkii russko-turkmenskii slovar' sel'skokhoziaistvennykh
terminov. Ashkhabad, Izd-vo Akad.nauk Turkmenskoi SSR, 1958.
290 p. (MIRA 13:2)

(Agriculture--Dictionaries)
(Russian language--Dictionaries--Turkmen)
(Turkmen language--Dictionaries--Russian)

KERTIKOVA, Z., student; SILIANOVA, B., student; OSMANLINA, R., student;
DASKALOVA, E., student

Distribution of tuberculosis among students of the I.P. Pavlov
Medical Academy in Plovdiv. Suvrem. med., Sofia 5 no.12:25-30
1954.

1. Iz kruzhoka po ftiziologija (rukovoditel: D. Dimitrov) i
Klinikata po ftiziatrila pri Meditsinskata akademiia I.P. Pavlov
(direktor: prof. As. Shopov)

(TUBERCULOSIS, epidemiology,
in Bulgaria, in med. students)

(SCHOOLS, MEDICAL,
tuberc. in med. students in Bulgaria)

KERMAN, D.Ye., prof. (Perm')

Transactions of the Scientific Historicomical Conference of
the Ural and Siberian Provinces. Trudy Perm. gos. med. inst.
43:5-12 '63 (MIRA 17:6)

AKSHINSKAYA, N.V.; DAVYDOV, V.Ya.; ZHURAVLEV, L.T.; KERTOYZ, Dzheffri
[Curthoys, Geoffrey]; KISELEV, A.V.; KUZNETSOV, B.V.; NIKITIN,
Yu.S.; RYBINA, V.V.

Effect of hydrothermal treatment in an autoclave on the structure
and adsorptive properties of silica gel. Koll. zhur. 26 no.5:
529-537 S-0 '64. (MIRA 17:10)

1. Moskovskiy universitet, khimicheskiy fakul'tet i Institut
fizicheskoy khimii AN SSSR.

KERTSELLI, L.I., and RYZHKIN, V. Ya.

"Steam Power Stations ". Gosenergoizdat, Moscow/ Leningrad , 1949, 556 pp, 85 rubles.

SO: W-14151 11 Oct 1950.

KERTSELLI, L.I., professor; RYZHKIN, V.Ya., dotsent, kandidat tekhnicheskikh nauk; DELINSKIY, S.Ya., dotsent, kandidat tekhnicheskikh nauk.

Development of Russian steam-generated electric power plants with high steam parameters. Trudy MFI no.11:8-19 '53. (MLRA 7:11)
(Electric power plants)

KERZELLI, L.I.

USSR/ Engineering - Heat utilization

Card 1/1 Pub. 77 - 7/23

Authors : Kerzelli, L. I., Prof.; and Belinskiy, S. Ya., Cand. Tech. Sci.

Title : Modern thermo-power plants

Periodical : Nauka i Zhizn' 21/10, 17-19, Oct 1954

Abstract : The question of the waste of heat in the operation of steam turbines is discussed. A description is given of successful work in effecting economy of fuel by not permitting the steam to expand fully in driving the turbine, but after reducing the pressure to two or three atmospheres passing it through a factory to be used in dryers and other devices. Illustrations.

Institution : ...

Submitted : ...

KERTSELLI, L. I., professor; TUMANOV, V. Ye., kandidat tekhnicheskikh
nauk

An electric steam boiler. Nauka i zhizn' 22 no.7:54-55 J1 '55.
(Boilers) (MLRA 8:9)

KERTSELLI, L. I.

PAVLENKO, A.S.; YERMAKOV, V.S.; UGOBETS, I. I.; SMIRNOV, M.S.; CHIZHOV, D.G.;
KOGTEV, G. I.; BAUSIN, A.F.; VINTER, A.V.; NEKRASOV, A.M.; LAVREHENKO,
K.D.; KRYLOV, N.A.; KERTSELLI, L. I.

Sergei TSalikovich Faerman; obituary. A.S.Pavlenko and others.
Elek.sta.26 no.10:62 0 '55. (MIRA 8:12)
(Faerman, Sergei TSalikovich, d.1955)

KERTSELLI, Leontiy Ivanovich; RYZHKIN, V.Ya; SHUKHMR, S.M., redakter;
LARIONOV, G.Ye., tekhnicheskij redakter.

[Thermal electric power stations] Teplyye elektricheskie stantsii.
Izd. 2-oe, perer. Pod obshchei red. L.I.Kertselli. Moskva, Gos.
energ. izd-vo, 1956. 488 p. (MLRA 9:5)
(Electric power-plants)

KERTSELLI, L. I. (Professor)

Moscow. Energeticheskiy institut

Istoriya energeticheskoy tekhniki SSSR v trekh tomakh. t. 1: Teplo tekhnika
(History of Power Engineering in the USSR in Three Volumes. v. 1: Heat Engineering)
Moscow, Gosenergoizdat, 1957. 479 p. 5,000 copies printed.

Ed.-Compiler: Konfederatov, I. Ya., Doctor of Technical Sciences; Authors: Badyl'kes, I. S., Doctor of Technical Sciences; Belinsky, S. Ya., Candidate of Technical Sciences; Gimmel'farb, M. L., Candidate of Technical Sciences; Kalafati, D. D., Candidate of Technical Sciences; Kertselli, L. I., Professor; Kovalev, A. P., Doctor of Technical Sciences; Konfederatov, I. Ya., Doctor of Technical Sciences; Lavrov, V. N., Doctor of Technical Sciences; Lebedev, P. D., Doctor of Technical Sciences; Lukinskiy, V. V., Doctor of Technical Sciences (deceased); Petukhov, B. S., Doctor of Technical Sciences; Satanovskiy, A. Ye., Doctor of Technical Sciences; Semenenko, N. A., Doctor of Technical Sciences; Smel'nitskiy, S. G., Candidate of Technical Sciences; Sokolov, Ye. Ya., Doctor of Technical Sciences; Chistyakov, S. F., Candidate of Technical Sciences, and Shcheglyayev, A. V., Corresponding Member, USSR Academy of Sciences; Editorial Board of set: Bel'kind, L. D., Doctor of Technical Sciences; Glazunov, Doctor of Technical Sciences; Golubtsova, V. A., Doctor of Technical Sciences; Zolotarev, T. L., Doctor of

Technical Sciences; Izbash, S. V., Doctor of Technical Sciences; Kirillin, V. A., Corresponding Member, USSR Academy of Sciences; Konfederatov, I. Ya., Doctor of Technical Sciences; Margulova, T. Kh., Doctor of Technical Sciences; Meshkov, V. V., Doctor of Technical Sciences; Petrov, G. N., Doctor of Technical Sciences; Sirotinskiy, L. I., Doctor of Technical Sciences; Styrikovich, M. A., Corresponding Member, USSR Academy of Sciences; and Shneyberg, Ya. A., Candidate of Technical Sciences. Ed.: Matveyev, G. A., Doctor of Technical Sciences; Technical Ed.: Medvedev, L. Ya.

PURPOSE: The book is intended for technicians in all branches of heat engineering.

COVERAGE: This book presents the development of the basic branches of heat engineering in the Soviet Union and it is the first volume of 3 volumes entitled History of Power Technology in the USSR. The first chapter gives a concise history of the development of heat engineering from its very beginning to the middle of the 19th Century when the fundamentals of the theoretical heat engineering were established. A detailed description of the development of heat engineering in pre-Revolutionary Russia is given in Ch. 2 to 5 and its status before 1917 is described. In the main part of the volume, Ch. 6 to 16, the development of various branches of the Soviet heat engineering is presented. The theoretical fundamentals of heat engineering, of manufacturing boilers, turbine installations of heat power plants, district heating, heat control, automation of thermal processes and cooling techniques are covered extensively. Each chapter is supplemented with a bibliography. The book is illustrated with photographs, charts and diagrams, worked out by the authors of the respective chapters. At the end of the book there is a chronological list of significant events in the development of heat engineering.

KERTSELLI, L.I.; RYZHKIN, V.Ya.; ALEKSANDROV, A.A.

Investigation of thermal efficiency of electric power plants equipped with high capacity turbine installations of high and superhigh steam parameters. Nauch.dokl.vys.shkoly: energ. no.3:109-120 '58. (MIRA 12:1)

1. Rekomendovano kafedroy teplovykh elektricheskikh stantsiy Moskovskogo energeticheskogo instituta.
(Electric power plants)

BELINSKIY, Semen Yakovlevich; VEDYAYEV, Vladimir Andreyevich; KERTSELLI,
L.I., prof., red.; GRIGOR'YEV, S.N., prof., red.; VORONIK, K.P.,
tekhn. red.

[Thermal sections of electric power plants; heat engineering systems]
Teplovaia chast' elektricheskikh stantsii; teploenergeticheskie usta-
novki. Pod red. L.I.Kertselli. Moskva, Gos. energ. izd-vo, 1961.
303 p. (MIRA 14:6)

(Steam power plants)

RYZHKINA, V.Ya., red.; KERTSELLI, L.I., red.; BAKHUSOVA, V.N.,
red.

[Thermal electric-power plant; study charts] Teplovaia elek-
tricheskaja stantsiia; uchebnye tablitsy. n.p. Gosenergoiz-
dat, 1963. 20 fold. plates in portfolio. (MIRA 16:11)
(Electric power plants--Tables, diagrams, etc.)

KERTSELLI, Yu.L.

SOV/96-59-4-5/21

AUTHORS: Afanas'yev, A.F., Engineer and
Kertseili, Yu.L., Engineer

TITLE: On Raising the Efficiency of Existing Industrial Power
Stations (K voprosu o povyshenii ekonomichnosti
deystvuyushchikh promyshlennykh elektrostantsiy)

PERIODICAL: Teploenergetika, 1959, ⁶ Nr 4, pp 27-31 (USSR)

ABSTRACT: The subject is discussed in relation to an article by
V.N.Yurenev published in Teploenergetika, 1958, Nr 4.
The improved thermal efficiency that can result from the
use of high initial steam conditions in large turbo-
generators is discussed. Conditions are somewhat different
in small turbines where the effect on the internal
efficiency of the turbine that results from changes in
temperature and pressure must be considered. The
relationship between the internal efficiency of a turbine
and the amount of steam passed through it is plotted
graphically in Fig.1. The advantages of superposing on
existing stations new sets with high steam conditions are
discussed and it is stated that complex modernization of
large uneconomic existing power stations burning expensive

Card 1/3

SOV/96-59-4-5/21

On Raising the Efficiency of Existing Industrial Power Stations

fuel is an important measure of fuel economy. The greatest effect is obtained from modernization when superposed turbines are used with the highest possible steam conditions particularly when the existing turbines can be used for heat supply and the existing medium and low pressure boilers can be used as reserve for the industrial steam load, taking the peak of this and of the district heating loads. Although the authors are in general agreement with Yurenev, in the light of the discussion so far they raise objection against a number of particular points made by Yurenev. In particular, they do not like his suggestion to use steam pressures of 35 atm in super-position. Steam conditions of 130 atm and 240 atm, which are not considered in the original article, are to be preferred. Yurenev recommends the use of impaired

Card 2/3

SOV/96-59-4-5/21

On Raising the Efficiency of Existing Industrial Power Stations

vacuum in the old turbines but these authors prefer to use back pressure wherever possible. There are 4 figures, 2 tables and 4 references of which 3 are Soviet and 1 German.

ASSOCIATION: Promenergoprojekt-Tsentroenergochermet

Card 3/3

KERTSELLI, Yu.L., inzh.

Some problems in the modernization of electric and air blast plants
in ferrous metal plants. Trudy NTO chern. met. 20:68-75 '60.
(MIRA 13:10)

1. TSentroenergochermet.
(Metallurgical plants)

AFANAS'YEV, A.F., inzh.; KERTSELLI, Yu.L., inzh.

Some problems of electric power supply for small and medium capacity industrial enterprises. Teploenergetika 8 no.11:67-72 N '61. (MIRA 14:10)

1. Promenergoprojekt i Tsentroenergochermet.
(Heating from central stations)
(Electric power plants)

KERTSELLI, Yu.L., inzh.

Effectiveness of intermediate heating in back-pressure
turbines. Prom. energ. 18 no.5:23-27 My '63. (MIRA 16:6)

(Steam turbines)
(Electric power plants)

KERTSELI, Yu.L., inzh.

Use of steam-gas systems in industrial thermal electric
power plants. Prom. energ. 18 no.12:17-21 D '63.

(MIRA 17:1)

L 24693-66

ACC NR: AF6015828

SOURCE CODE: UR/0096/65/000/006/0041/0046

AUTHOR: Afanas'yev, A. F. (Engineer); Kertselli, Yu. L. (Engineer)

ORG: State Industrial Commission for Power and Electrification SSSR (Gosudarstvennyy proizvodstvennyy komitet po energetike i elektrifikatsii SSSR); Promenergoprojekt

TITLE: Increasing the effectiveness of middle-power industrial-heating heat-power stations

SOURCE: Toploenergetika, no. 6, 1965, 41-46

TOPIC TAGS: electric power plant, steam boiler, turbine, steam power plant

ABSTRACT: An analysis of the question of increasing the single-unit power of heat-power station equipment in order to reduce capital investment and increase economy. Three plans are presented, involving the usage of peak-reserve boilers to avoid a closed reserves situation and allow low pressure cross-connection, reduction of power aggregates to one per station to reduce investment in cases where commercial power is available, with or without a full-power steam reserve to continue operation of the power operation in case of boiler shutdown. It is concluded that such stations should be constructed for heat usage as well as when there is a requirement for a large power application; that the number of turbines should be reduced to the minimum at each station; that turbines of less than 50 Mw power should not be supplied with

Card 1/2

UDC: 621.186.2.004.15

L 24693-66

ACC NR: AP6015828

condensation equipment, as a rule; that peak-reserve boilers should be used at 50 Mw and higher stations; that low pressure gas-fuel oil boilers to 50-100 G cal/hr capacity should be constructed at such stations to increase flexibility of operation; that the PT-60/75-130-13 power unit with two peak-reserve boilers should be used in many such stations; that intermediate heating should be used in this boiler only for a heating steam flow and when the steam can be directed to intermediate heating with a pressure of about 25 atm.; that gas-fuel oil type fuel should be set aside for heat-power stations in cities and industrial areas. Orig. art. has: 6 figures and 2 tables. [JPRS]

SUB CODE: 10, 13 / SUBM DATE: none / ORIG REF: 009 / OTH REF: 001

Card 2/2 FW

NERTSELLI, Yu.L., inzh.; KORYTNIKOV, V.F., inzh.

Universal standard project of the main building of an industrial
heat and electric power plant. Energetik. 13 no.4:15-18 Ap '65.
(MIRA 18:6)

ACC NR: AP7004589

SOURCE CODE: UR/0094/66/000/010/0002/0005

AUTHOR: Kertsell, Yu. L.

ORG: Promenergoprojekt

TITLE: Prospects for development of large industrial heating and electric power stations

SOURCE: Promyshlennaya energetika, no. 10, 1966, 2-5

TOPIC TAGS: electric power plant, heating engineering

ABSTRACT: The growth of heating requirements and their concentration in small areas create the conditions for construction of large industrial heating heat and electric power stations with unit capacities up to 300 megawatts. This increase in power of stations and of units installed in stations will allow construction of highly economical stations. The new more powerful heat and electric power stations should be constructed on the block principle without transverse pipelines, which will simplify the thermal circuits and facilitate automatic control. Orig. art. has: 3 figures and 2 tables. [JPRS: 39,548]

SUB CODE: 10,13 / SUBM DATE: none / ORIG REF: 003

Card 1/1

0986

1438

KERTSELLI, Yu.S.; LISITSINA, L.P.

Treatment of bronchial tuberculosis with cortisone aerosols.
Probl. tub. no.4:86-87 '64. (MIRA 18:11)

1. Sanatoriy No.7, Vyborg.

OREL, M.A.; USPENSKIY, Ya.V.; SHVETSOV, V.Ya.; KERTSGUR, V.A.

Dressing graphite ores of the Tas-Kazgan deposit. Uch.zap. SAIGIMSa
no.10:161-166 '63. (MIRA 17:2)

KERTSMAN, D. (Odessa)

Thromboembolic disease. Vrach. delo no.4:130-131 Ap '61.
(MIRA 14:6)
(EMBOLISM)

KERTSMAN, D.A. (Odessa)

Diagnosis of acute pancreatitis under polyclinical conditions.
Vrach. delo no.6:132-134 Je'63. (MIRA 16:9)

1. Il'ichevskaya rayonnaya bol'nitsa.
(PANCREAS—DISEASES)

L 18726-66 EWT(m)/ENP(j) DS/RM
ACC-NR: AP6005090 (A) SOURCE CODE: UR/0251/65/040/003/0607/0612

AUTHOR: Nogaydeli, A. I.; Dzhaparidze, K. G.; Brodzeli, M. I.; Devadze, L. V.;
Maysuradze, D. P.; Kertsman, E. L.; Chubabriya, M. Ya.

ORG: none

TITLE: Synthesis and certain photochemical properties of 7-nitro-1', 3', 3'-trimethyl-spiro-naphthopyran- 2,2'-indoline

SOURCE: AN GruzSSR. Soobshcheniya, v. 40, no. 3, 1965, 607-612

TOPIC TAGS: photoeffect, spiropyran compound, UV irradiation, spectrophotometry, cryogenic effect / 7-nitro-1', 3', 3'-trimethyl-spiro-naphthopyran- 2,2'-indoline

ABSTRACT: On the assumption that the change in color on heating of 1', 2', 3'-trimethyl-indoline-β-naphthopyrilo-spiran, a substance synthesized by Wizinger and Wenning in 1940 (Helv. Chem. Acta, v. 23, 1940, 247) is associated with the splitting of the pyran cycle and hence also with a change in internal configuration and re-distribution of bonds in the molecule, and in view of the importance of this problem, the authors synthesized yet another representative of nonsymmetric spiropyrans, namely, 7-nitro-1', 3', 3'-trimethyl-spiro-naphthopyran- 2,2'-indoline (yellowish acicular crystals) through condensation of 8 g of Fisher's base with 8 g of 6-nitro-2-oxy-β-naphthaldehyde (Fig. 1) by heating to 60°C for 1 hr, thus obtaining a thermo-

Card 1/3

I. 18726-66

ACC NR: AF6005090

0

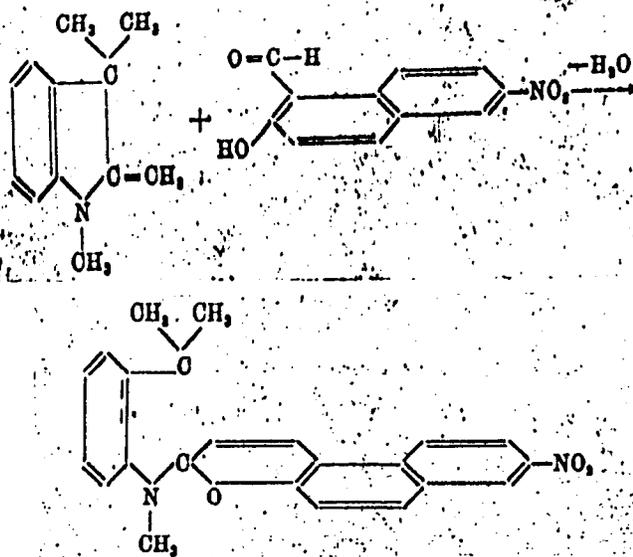


Fig. 1.

Card 2/3

I 18726-66
ACC NR: AP6005090

chromic compound which, in a ligroin solution, is colorless at room temperature but acquires a purple color when heated to 100-150°C. The photochromic properties of this new spironpyran were investigated in a specially designed cryostat (attachment to an SF-10 spectrophotometer). The investigation was performed in liquid (paraffin oil and a mixture of ethanol and methanol in the mutual ratio of 4:1) and solid (polystyrene-ethyl cellulose) solutions. Findings: ultraviolet irradiation at room temperature does not change the color of solution. A reduction in temperature to -10°C in the liquid solution, however, along with a subsequent brief irradiation with $\lambda = 366 \text{ m}\mu$ causes the solution to acquire a purple color. A peak in the 580 m μ region appears in the absorption spectrum. The process is reversible with time. At still lower temperatures (-90 to +100°C), on the other hand, the process becomes irreversible so long as these temperatures apply. Increasing the temperature instantaneously restores the original pale-yellow color. Orig. art. has: 5 figures, 2 formulas.

SUB CODE: 03, 07, 20/ SUBM DATE: 06Jul65/ ORIG REF: 000/ OTH REF: 007

Card

3/35m

KERTSMAN, G.I. (Moskva); LYAKHOV, I.I. (Moskva)

Let's lead a persistent struggle for the improvement of the quality
of students' knowledge. Fiz. v shkole 21 no.2:53-55 Mr.-Ap '61.
(MIRA 14:8)

(Physics--Problems, exercises, etc.)

KERTSMAN, I.G.

Essential oil industry in the U.S.S.R. Trudy Bot. Inst. Ser. 6
no. 7:63-67 '59. (MIRA 13:4)

1. Glavparfumer, Moskva.
(Essences and essential oils)

KERTSMAN, L. L.

BULANOVA, N.K.; KERTSMAN, L.L.; PLISITSKAYA, M.A.; SOKHOR, N.M.

Medical and sanitary services for industrial workers of Leningrad District in Moscow. Zdrav.Ros.Feder. 1 no.6:11-15 3a '57.

(MIRA 10:8)

1. Iz sanitarno-epidemiologicheskoy stantsii Leningradskogo rayona Moskvy

(MOSCOW—INDUSTRIAL HYGIENE)

TITLE: Use of low temperatures in producing synthetic rubber

73

...tic rubber output is supposed to give ...
... essential to improve high capacity refrigeration equipment. Orig. art. has:

REF ID: A6404578

FIGURE 01

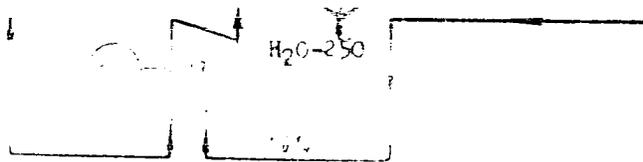


Figure 1. Schematic diagram of system. (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) (p) (q) (r) (s) (t) (u) (v) (w) (x) (y) (z) (aa) (ab) (ac) (ad) (ae) (af) (ag) (ah) (ai) (aj) (ak) (al) (am) (an) (ao) (ap) (aq) (ar) (as) (at) (au) (av) (aw) (ax) (ay) (az) (ba) (bb) (bc) (bd) (be) (bf) (bg) (bh) (bi) (bj) (bk) (bl) (bm) (bn) (bo) (bp) (bq) (br) (bs) (bt) (bu) (bv) (bw) (bx) (by) (bz) (ca) (cb) (cc) (cd) (ce) (cf) (cg) (ch) (ci) (cj) (ck) (cl) (cm) (cn) (co) (cp) (cq) (cr) (cs) (ct) (cu) (cv) (cw) (cx) (cy) (cz) (da) (db) (dc) (dd) (de) (df) (dg) (dh) (di) (dj) (dk) (dl) (dm) (dn) (do) (dp) (dq) (dr) (ds) (dt) (du) (dv) (dw) (dx) (dy) (dz) (ea) (eb) (ec) (ed) (ee) (ef) (eg) (eh) (ei) (ej) (ek) (el) (em) (en) (eo) (ep) (eq) (er) (es) (et) (eu) (ev) (ew) (ex) (ey) (ez) (fa) (fb) (fc) (fd) (fe) (ff) (fg) (fh) (fi) (fj) (fk) (fl) (fm) (fn) (fo) (fp) (fq) (fr) (fs) (ft) (fu) (fv) (fw) (fx) (fy) (fz) (ga) (gb) (gc) (gd) (ge) (gf) (gg) (gh) (gi) (gj) (gk) (gl) (gm) (gn) (go) (gp) (gq) (gr) (gs) (gt) (gu) (gv) (gw) (gx) (gy) (gz) (ha) (hb) (hc) (hd) (he) (hf) (hg) (hh) (hi) (hj) (hk) (hl) (hm) (hn) (ho) (hp) (hq) (hr) (hs) (ht) (hu) (hv) (hw) (hx) (hy) (hz) (ia) (ib) (ic) (id) (ie) (if) (ig) (ih) (ii) (ij) (ik) (il) (im) (in) (io) (ip) (iq) (ir) (is) (it) (iu) (iv) (iw) (ix) (iy) (iz) (ja) (jb) (jc) (jd) (je) (jf) (jg) (jh) (ji) (jj) (jk) (jl) (jm) (jn) (jo) (jp) (jq) (jr) (js) (jt) (ju) (jv) (jw) (jx) (jy) (jz) (ka) (kb) (kc) (kd) (ke) (kf) (kg) (kh) (ki) (kj) (kk) (kl) (km) (kn) (ko) (kp) (kq) (kr) (ks) (kt) (ku) (kv) (kw) (kx) (ky) (kz) (la) (lb) (lc) (ld) (le) (lf) (lg) (lh) (li) (lj) (lk) (ll) (lm) (ln) (lo) (lp) (lq) (lr) (ls) (lt) (lu) (lv) (lw) (lx) (ly) (lz) (ma) (mb) (mc) (md) (me) (mf) (mg) (mh) (mi) (mj) (mk) (ml) (mm) (mn) (mo) (mp) (mq) (mr) (ms) (mt) (mu) (mv) (mw) (mx) (my) (mz) (na) (nb) (nc) (nd) (ne) (nf) (ng) (nh) (ni) (nj) (nk) (nl) (nm) (nn) (no) (np) (nq) (nr) (ns) (nt) (nu) (nv) (nw) (nx) (ny) (nz) (oa) (ob) (oc) (od) (oe) (of) (og) (oh) (oi) (oj) (ok) (ol) (om) (on) (oo) (op) (oq) (or) (os) (ot) (ou) (ov) (ow) (ox) (oy) (oz) (pa) (pb) (pc) (pd) (pe) (pf) (pg) (ph) (pi) (pj) (pk) (pl) (pm) (pn) (po) (pp) (pq) (pr) (ps) (pt) (pu) (pv) (pw) (px) (py) (pz) (qa) (qb) (qc) (qd) (qe) (qf) (qg) (qh) (qi) (qj) (qk) (ql) (qm) (qn) (qo) (qp) (qq) (qr) (qs) (qt) (qu) (qv) (qw) (qx) (qy) (qz) (ra) (rb) (rc) (rd) (re) (rf) (rg) (rh) (ri) (rj) (rk) (rl) (rm) (rn) (ro) (rp) (rq) (rr) (rs) (rt) (ru) (rv) (rw) (rx) (ry) (rz) (sa) (sb) (sc) (sd) (se) (sf) (sg) (sh) (si) (sj) (sk) (sl) (sm) (sn) (so) (sp) (sq) (sr) (ss) (st) (su) (sv) (sw) (sx) (sy) (sz) (ta) (tb) (tc) (td) (te) (tf) (tg) (th) (ti) (tj) (tk) (tl) (tm) (tn) (to) (tp) (tq) (tr) (ts) (tt) (tu) (tv) (tw) (tx) (ty) (tz) (ua) (ub) (uc) (ud) (ue) (uf) (ug) (uh) (ui) (uj) (uk) (ul) (um) (un) (uo) (up) (uq) (ur) (us) (ut) (uu) (uv) (uw) (ux) (uy) (uz) (va) (vb) (vc) (vd) (ve) (vf) (vg) (vh) (vi) (vj) (vk) (vl) (vm) (vn) (vo) (vp) (vq) (vr) (vs) (vt) (vu) (vv) (vw) (vx) (vy) (vz) (wa) (wb) (wc) (wd) (we) (wf) (wg) (wh) (wi) (wj) (wk) (wl) (wm) (wn) (wo) (wp) (wq) (wr) (ws) (wt) (wu) (wv) (ww) (wx) (wy) (wz) (xa) (xb) (xc) (xd) (xe) (xf) (xg) (xh) (xi) (xj) (xk) (xl) (xm) (xn) (xo) (xp) (xq) (xr) (xs) (xt) (xu) (xv) (xw) (xx) (xy) (xz) (ya) (yb) (yc) (yd) (ye) (yf) (yg) (yh) (yi) (yj) (yk) (yl) (ym) (yn) (yo) (yp) (yq) (yr) (ys) (yt) (yu) (yv) (yw) (yx) (yy) (yz) (za) (zb) (zc) (zd) (ze) (zf) (zg) (zh) (zi) (zj) (zk) (zl) (zm) (zn) (zo) (zp) (zq) (zr) (zs) (zt) (zu) (zv) (zw) (zx) (zy) (zz)

KERTSMAN, R. Yu

Glycogen in the lungs, liver, muscles and spleen of normal and diabetic dogs. S. G. Gees and R. Yu. Kertsman. *J. Physiol. (U. S. S. R.)* 25, 731-734 (1958).
 739-740 (UDIS).—The storage of glycogen (I) is favored by carbohydrate feeding and to a greater extent by intravenous glucose injection. The most marked effect was observed in the liver, followed by muscles, lungs and finally the spleen. The injection of insulin along with carbohydrate feeding does not result in an increase in I storage in the organs. The I content of lungs, spleen and muscles is lowered in dogs on a meat diet. Diabetes of short duration does not change muscle I, but in the liver and spleen it is lowered, while it is substantially increased in the lungs. Regardless of the increased introduction of sugar in diabetes, the I stores of the spleen and to some extent of the muscles are depleted. S. A. Karjala 7

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

DUDKIN, M.S.; FERTSMAN, R.Ya.

Quantitative determination of organic substances found in Black Sea
seaweeds. Ukr.khim.zhur.17 no.2:217-223 '51. (MLRA 9:9)

1.Odesskiy uchitel'skiy institut.
(Black Sea--Algae)

RUSTAMOV, I.G.; KERTYKOV, Kh.N., red.

[Vegetation of the Tashauz oasis] Rastitel'nost' Tashauz-
skogo oazisa. Ashkhabad, Turkmenskii gos. univ., 1963.
66 p. (MIRA 18:3)

RUSTAMOV, I.G.; KERTYKOVA, Kh.I., red.

[Vegetation in the middle and lower part of the western Uzboy.]
Rastitel'nost srednei i nizhnai chasti Zapadnogo Uzboia.
Ashkhalad, 1962. 160p. (Ashkhabad, Turkmenskii gosudarstvennyi
universitet. Uchenye zapiski, no.9, pt.4). (MIRA 16:11)

KERUNTU, TOFAN

RUMANIA/ Microbiology. Microorganisms Pathogenic to Humans and Animals F-5

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24266

Author : Keruntu, Tofan
Inst : NOT given
Title : New Concepts of Tetanus Treatment.

Orig Pub: Med. interna, 1957, 9, No 4, 505-514

Abstract: No abstract.

Card 1/1

APPROVED FOR RELEASE: 09/17/2001

KERUTSKIE, M.K., KRABOVA, L.M., SHCHERBOV, S.A., DREBINSKIY, V.M.

Effect of triethanolamine and organic dyes on the sensitivity of ammonium chromate gelatin layers. Zhur. nauch. i prikl. fot. i kin. 8 no.4:303-304 J1-Ag '63. (MIRA 16:7)

1. Moskovskiy poligraficheskoy institut i Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut (NIKFI).
(Photographic sensitometry) (Ethanol)

KERVALIDZE, V.A.D.; POLITOV, A.K.

Readers' letters. Zashch. rast. ot vred. i bol. 6 no.9:14
S '61. (MIRA 16:5)

1. Starshiy agronom Rostovskogo otryada po bor've s vreditelyami i boleznymi rasteniy (for Kervalidze). 2. Gorodskaya sanitarno-epidemiologicheskaya stantsiya, Groznyy (for Politov).
(Plants, Protection of)

KERVALIDZE, D. N.

89-8-12/26

AUTHOR PLYUTTO A.A., KERVALIDZE D.N., KVARTSKHAVA I.F.,
 TITLE A Spark Source of Multiple-Charged Ions.
 PERIODICAL (Iskrovy istochnik mnogozaryadnykh ionov - Russian).
 Atomnaya Energiya, 1957, Vol 8, Nr 3, pp 153-156 (U.S.S.R.)

ABSTRACT By means of a spark source, which is described in detail, it is possible to obtain multiply charged ion fluxes of high intensity. As a current source for the formation of the spark a condenser with 10^3 to 10^5 nF, 10-70 kV, average spark current 10^2 - 10^4 A was used. For sucking off the ions condensers with 10^4 - 10^6 nF and 15-70 kV were used. The ions were analyzed by means of a Thompson parabola - mass spectrograph. The following ion currents (not focussed) were obtained:

- C⁺³, C⁺⁴, N⁺³, N⁺⁴, O⁺³, O⁺⁴ ~ 10 to several 100 m A
- N⁺⁵, O⁺⁵ ~ 100 μA to several m A
- O⁺⁶ ~ 100 μA.
- Cu⁺⁶, Cu⁺⁷, Ni⁺⁶, Ni⁺⁷ ~ 100 μA.

By fitting a magnetic focussing device focussed ion currents (30 kV suction voltage) were obtained:

- H⁺¹ 10 m A
- H⁺² 1 m A
- C⁺⁴ 6 m A
- C⁺³ 15 m A.

Card 1/2 (3 illustrations and 3 Slavic references).

SUBMITTED 29.12.1956
 AVAILABLE Library of Congress.
 Card 2/2

KERVALIDZE, K.N.

PLYUTTO, A.A.; KERVALIDZE, K.N.; KVARTSKHAVA, I.F.

A spark source of multiply-charged ions. Atom. energ. 3 no.8:153-
156 Ag '57. (MLRA 10-8)
(Electric discharges through gases) (Ion beams)

9.3150,24.2120

11-11
001/31-50-3-4/15

AUTHORS: Kvantskhava, I. F., Kervallise, K. N., Gvaladze, Yu. S.

TITLE: Some Magneto-Hydrodynamic Effects Observed During the Pulse Compression of Plasma

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1966, Vol 30, Nr 3, pp 297-305 (USSR)

ABSTRACT: In connection with the problem of controlled thermonuclear reactions there is a growing interest in the properties of plasmas compressed by pulses in strong magnetic fields. As known, attempts to use linear and induction pinch for heating deuterium plasma up to thermonuclear temperatures were not successful, mainly because of significant reduction in ohmic heating of plasma at high ($> 10^8$ K) temperatures and presence of instabilities which lead to a worsening of magnetic thermal insulation of high temperature compressed plasma. The authors show the presence of instabilities consisting of ejections of plasma formations from

Card 1/1

Some Magneto-Hydrodynamic Effects Observed
During the Pulse Compression of Plasma

77341
SOY/57-10-3-1/15

Induction and linear pinches representing apparently one of the forms of type $m > 1$ instabilities. They deduce from theoretical considerations and experimental evidence that it should be impossible to achieve thermonuclear temperatures by single pulse compression of plasmas. Also they investigated some other properties of induction pinch using the apparatus in Fig. 1. The battery of capacitors (10-200 μ F) was connected by means of special leads reducing total inductance of the system to a minimum of 0.01 μ H. Working potential was 50 kv; maximum rate of increase of current was 10^{10} a/sec. Firing system allowed a synchronization of discharge time to approximately 1 μ sec. Continuous photoregistration was performed by photo-camera SFR-3M synchronized with discharge time, oscillograph sweep, and rotation of the spread-out mirror. Currents were measured by pulsed two-ray oscillograph OK-17 with a waiting sweep. Tests were performed

Card 2/9

Some Magneto-hydrodynamic Effects Observed
During the Pulse Compression of Plasma

1954
SOV/57-80-3-1/15

In hydrogen at various pressures. Pictures were taken in the radial and axial direction with respect to the chamber axis, having the apparatus tilt perpendicular or parallel to the chamber, respectively. In general, during discharge of condensers through the system of windings, a uniform axial magnetic field H appears in the chamber. This field varies with current variations and induces electrical fields which ignite the electrodeless discharge. Secondary currents circulate in planes perpendicular to the axis of the chamber. Whenever these currents are opposed to primary currents in the windings, the field inside the plasma decreases. The resulting drop in magnetic field pushes the plasma away from the walls of the chamber, squeezing it into the pinch. The equilibrium diameter of the pinch is determined by the equilibrium of pressures of the outside field, the magnetic field trapped inside the pinch, and the gas inside the pinch. Analyzing pictures for the case of hydrogen pressure $P_H = 0.3$ mm Hg,

$C = 40 \mu f$, and $U_0 = 30$ kv, the authors found that

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Some Magneto-Hydrodynamic Effects Observed
During the Pulse Compression of Plasma

1981
SOV/67-50-3-7/15

during the final stage of the formation. The plasma oscillates radially around its equilibrium diameter. During the middle of the half-period the pinch diameter decreases with a simultaneous decrease in luminosity. Primary currents reach their maximum, secondary currents disappear, and the pinch cools down somewhat. During the second half of the half-periods the pinch again starts to shine because of reversed eddy currents, conserving the original diameter. Only after the end of the half-period when the external field vanishes, the plasma begins slowly to spread out. In these and similar pictures the authors did not observe any $m = 0$ or $m = 1$ instabilities, nor did they find them in the case of linear pinches. These findings are contrary to the theory that allows axial motion of plasma through the magnetic "envelope" of the pinch and would cause $m = 0$ or $m = 1$ instabilities. The authors conclude that existing theories do not take sufficiently into

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77(34)
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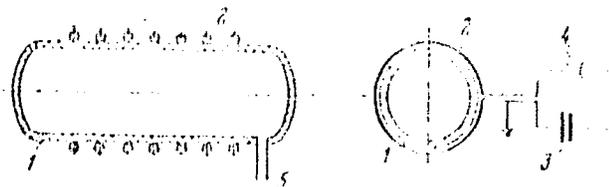


Fig. 1. (1) Discharge chamber; (2) windings;
(3) battery of capacitors; (4) triggering spark
discharge; (5) pumping tube.

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During the Pulse Compression of Plasma

77841
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account the real processes occurring during the pinch formation. Analysis of pictures taken under changed conditions shows, among other things, that with $C = 13 \mu\text{f}$ and $U_0 = 40 \text{ kv}$ one can observe excitation shock waves reflected from the axis of the induction pinch which produce radial oscillations of the pinch and ejection of plasmoids. Apparently this represents one of the $m \times 1$ type instabilities which the authors call eruptive instability. To achieve an ejection of the surface layers of the plasma one needs a magnetic field under that layer which could separate it from the rest of the plasma and compensate the outside field. This can occur at the expense of the kinetic energy of radial motion, and using appropriate probes registering dh/dt quantity the authors showed existence of such a strong inverse magnetic field. Any asymmetry in radial motion then could be responsible for asymmetry in ejection of the plasmoid. Using such asymmetries and conservation of momentum.

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Some Magneto-Hydrodynamic Effects Observed
During the Pulse Compression of Plasma

(1961)
SOV/4-50-3-1/15

the authors found mass of the plasmoids to be $1 \cdot 10^{-6}$ - $4 \cdot 10^{-7}$ gm, which constitutes a few percent of its total mass. Although this could not produce any appreciable consumption of energy, it leads to a worsening of thermal insulation of the pinch which could represent an effect of fundamental importance. The authors note that the eruptive instabilities of pinches could be suppressed by choosing appropriate field configurations; e.g., a field increasing with increase of its radius R. Finally, the authors note that the heating of the plasma occurs at the expense of the kinetic energy of its electrodynamic compression, and the aim of experiments is, therefore, to achieve a high velocity of compression. Starting from field energy equations, the authors develop an equation for the average velocity of plasma motion

$$\bar{v} = \frac{8kI_0^2}{H^2(R-r_0)}$$

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