"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

16,6800

35892

S/044/62/000/002/090/092
C111/C333

AUTHOR: Warmus, M.

TITLE: Floating point arithmetics for digital computers

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1962, 84-85, abstract 2V493. ("(Review). Inst. badań jądrow. PAN", 1960, no. 187/XII, 7 pp.)

TEXT: Described is a method for calculating with numbers leaving the interval (-1; +1), on digital computers with fixed point. The basis of this so-called "method of the transformed point" is the transformation of the number $x \in (-\infty, +\infty)$ into its image $X \in (-1; +1)$:

$$X = f(x) = \frac{\varepsilon x}{1 + |x|},$$

where a is a certain transformation constant ($0 < a < 1$; $a \approx 1$). Arithmetic operations with numbers of the whole real axis are replaced by algorithms for their images. There are given algorithms corresponding to the addition, subtraction, multiplication and division of real numbers, as well as such ones for the determination of the reciprocal value of a number and for the change of the sign. A complete subprogram

Card 1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

composed according to the method of the transformed point is several times shorter than the classical subprogram for the calculation in systems with floating point on computers with fixed point. The difficulties connected with the representation of zero in the classical scheme are absent. It is possible to construct a computer, in the logical structure of which there are realized the algorithms for the operations with images corresponding to the arithmetic calculations with numbers. The new ways for solving a number of problems open the possibility of transforming entire formulas or equations instead of single operations. The magnitude of the relative error of the results obtained by the method of the transformed point is investigated. The relative exactness of the method is better than for the classical subprogram, if the numbers lie near 1, and is worse, if the numbers are very small or very large.

[Abstractor's note: Complete translation.]

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

S/044/62/000/006/089/127
B166/B112

AUTHOR: Warmus, M.

TITLE: The numerical solution of cubic and biquadratic equations with real coefficients

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 37, abstract 6V173 (Zastosow. mat., v. 6, no. 1, 1961, 127-135)

TEXT: A method is suggested which enables the initial approximation to be determined simply and unambiguously in the numerical solution of cubic equations by Newton's method of successive approximations, and which gives one of the roots of the equation to an accuracy of 10 places after Newton's formula has been used only three times. Transformations are described which reduce a biquadratic equation to two quadratic equations, the calculation of whose coefficients is reduced in the general case to the solution of cubic equations. [Abstracter's note: Complete translation.]

Card 1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

37623

S/044/62/000/004/095/099
C111/C222

16.6800

AUTHOR: Warmus, M.

TITLE: Transformed point arithmetic for digital computers

PERIODICAL: Referativnyy zhurnal, Matematika, no. 4, 1962, 52, abstract 4V352. ("Bull. Acad. polon. sci. Sér. sci. math., astron. et phys.", 1961, 9, No. 4, 237-239)

TEXT: In order to extend the range of numbers that can be handled by a digital computer with fixed point, it is suggested that in place of the number x, its image X by the transformation

$$X = \frac{ax}{1+|x|}, \quad -a < X < +a$$

be used, where a is an arbitrary constant from the interval (-1,+1) which is usually not much different from 1. The inverse transformation is then $x = \frac{X}{a-|X|}$, so that the numbers x from the interval $(-\infty,+\infty)$ can be reduced to the numbers X from the bounded interval (-a,+a). The arithmetic

Card 1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

operations with the numbers x can be replaced through certain operations with their images X. The sub-program of these operations is considerably shorter than programming operations with floating points. The calculating accuracy of the arithmetic with transformed points is greater than with floating points, if the numbers x are in the vicinity of 1; it is smaller if the numbers x are very small or very large. The possibility is pointed out of creating a computer having among its commands also operations of the arithmetic with transformed points. The described method of number transformation was carried out on the Polish computer EMAL-2, where the sub-program of all arithmetic operations consisted of 163 commands when programming the arithmetic with floating points and 56 when programming it with transformed points.

[Abstracter's note: Complete translation.]

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUS, Mieczyslaw, prof.

The Computation Center; Polish Academy of Sciences new research center. Review Pol Academy 8 no.3:37-41 Jl-S'63.

1. Director of the Computation Center, Polish Academy of Sciences, Warsaw.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUS, Mieczyslaw, prof.

Computation Centre of the Polish Academy of Sciences as a new laboratory of the Academy. Nauka polska 11 no.4:101-106 Jl-Ag '63.

1. Dyrektor Centrum Obliczeniowego Polskiej Akademii Nauk, Warszawa, Palac Kultury i Nauki.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

PTA WARMUZINSKI, J.

6

1185 662.742

Nadziakiewicz J., Warmuzinski J., Malczewski A. Influence of Moisture Content in the Coal Charge on the Carbonisation Process.

„Wpływ zawartości wody w węglu wsadowym na proces koksowania". Przegląd Górniczy. No. 4, 1951, pp. 160—163, 1 fig., 5 tabs:

The lowering of moisture content from 9,6 to 8,3 per cent reduces the carbonisation time by 4,1 per cent; as a result of lowering the moisture content from 10,4 to 8,5 per cent, the crude benzole yield increases by about 4,6 per cent, the yield of ammonium sulphate by about 6,6 per cent and of gas by about 6,3 per cent. At the same time the tar yield decreases by about 1,4 per cent. The reduction of moisture content in the coal charge to an average degradation of about 80 per cent < 3 mm does not result in any apparent increase of the amount of coal spilled from the stamped coal charge.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

24

CA WARMUZINSKI, J.

The influence of moisture content in coal on the coking process. Julian Nadzinskiewicz, Janusz Warmuzinski, and Antoni Balczewski. *Przegląd Górniczy* 7, 160-3(1951). A decrease in H_2O content of the coal from 9.6% to 8.3% reduced the coking time by 4.1%. A decrease from 10.4 to 8.3% H_2O raised the yield of crude benzene by 4.6%, of $(NH_4)_2SO_4$ by 6.6%, and of gas by 6.3%, while tar decreased by about 1.4%. Despite the lower H_2O content, no appreciable increase in fines occurs during the usual grinding of the coal charge to an 80% content of particles less than 3 mm. size.

Bruno C. Metzner

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUZINSKI, J.

CA

Influence of pressure and temperature on the yield of benzene in carbonization process. Janusz Warmuzinski. *Przegląd Górniczy* 7, 413-18(1951).—Factors affecting the yield of benzene in the carbonization process are reviewed. There are only a few variables of the process which permit its control without affecting the quality of the coke produced. Thus the compn. of the coal charge, ash content, volatile material, and H_2O cannot be varied. To reduce the losses all leakages must be eliminated first. That is very important as the pressure varies inside the chambers from 100 mm. H_2O to −5 or −6 mm. H_2O at the end of the process. Choice of coking temp. is of the utmost importance. Optimum conditions for benzene formation are at about 1100° while the yield of toluene is highest at 800°. The temp. under the dome of the chamber is also very important. Too high temp. results in excessive graphite formation and low yield of the hydrocarbons. Optimum temp. of the dome appears to lie within 720-700°. A. J. P.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

J. WARMUZIŃSKI

3922 622.74 : 539.4

Warmuziński, J. Errors in Micum Method Determination of Coke Endurance.

„Błędy w oznaczaniu wytrzymałości koksu metodą Micum". Przegląd Górniczy. No. 5, 1955, pp. 188—192, 8 tabs.

Errors in determining coke endurance by the Micum method are due to non-standardized apparatus. The effect of the varying thickness of the drum wall, the height of the angle iron arms, etc. on the result of the investigation. Another series of errors is caused by inaccurate use of research methods which too often take an average sample which is expected to be average as regards, at once, lump size, water content, number of drum revolutions per time unit, and coke sieving after pounding in the drum. Unsatisfactory sieving is the cause of the greatest deviations in the results obtained.

GP

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUZINSKI, J.

✓ 1964. ERRORS IN DETERMINATION OF COKE RESISTANCE BY HICUM DRUM TEST.
Warmuzinski, J. (Przegl. górn. (Hin. Rev., Stalinogrod), May 1955, vol. 11,
188-192). The article surveys the causes of errors in the results of Hicum
coke strength tests on the basis of Polish and foreign literature. The
failure to use standard equipment and standard methods of analysis are blamed
for the frequently occurring errors; the size of the coke tested, its water
content, the method of sampling, and the number of revolutions of the testing
drum are particularly important factors. Suggestions with regard to a revision
of the existing Polish standard governing Hicum tests (PN/C-04305) are
advanced. (L). N.C.B.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUZINSKI, J.

Errors in the determination of coke resistance by the Micum method. p. 188, Vol. 11, no. 5, May 1955, PRZEGLAD GORNICZY
SO:MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUZINSKI, JANUSZ

POLAND/Chemical Technology. Chemical Products and Their Application. Treatment of Solid Mineral Fuels. H-22

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 15717

Author : Kowalik Jan, Warmuzinski Janusz
Inst :
Title : Critical Evaluation of the Drum Test (Micum) Utilized in Poland for Determining Strength of Coke.

Orig Pub: Koks, smola, gaz, 1957, 2, No 2, 47-55.

Abstract: Recommendations are made concerning details of equipment design and procedure of carrying out the drum test of coke (Micum drum), in particular on improved screening of the coke after the drum test, which result in greater uniformity and accuracy of the results of the analysis.

Card : 1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

Country : POLAND WARMUSINSKI, J H-22
Category : Chemical Technology. Chemical Processing of Solid Fossil Fuels
Abs. Jour : Ref Zhur-Khimiya, No 14, 1959, No 50986

Author : Romatowski. J.; Warmuzinski, J.
Institute : -
Title : Application of the New Method for the Removal of Water from Tars Through Thin Film Heating

Orig Pub. : Koks. smola, gaz, 1958, 3, No 4, 138-143

Abstract : A method for dehydration of tars is described. It differs from the majority of other methods based on density differential. Tar flows along the internal pipe surface, heated on the outside with steam of $\geqslant 170^{\circ}$ temperature, that permits, due to peculiar flow characteristics of tar and due to considerable surface area, attainment of a high water vaporization rate, The removal of vapors is achieved in the stream of coke-oven gas or by means of vacuum.

Card: 1/2

H-111

Card: 2/2

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUZINSKI, Janusz, mgr inz.

Intensification of the coking process and the quality of coke and its technical and economic indexes. Koks 7 no.5:185-191 S-O '62.

1. Instytut Chemicznej Przerobki Wegla, Zabrze.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARMUZINSKI, Janusz

State of studies on increasing the charge density in the coking process in Poland. Koks 9 no.4:134-139 Jl-Ag '64.

1. Institute of Chemical Coal Processing, Zabrze.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

CZECHOSLOVAKIA / POLAND

WDOWIAK, L.; JEDRZEJCZAKOWA, M.; WARNECKA, M.; Psychiatric Clinic, Medical Academy, Szczecin. [Original version not given].

"Pseudoencephalic Symptoms During Psychopharmacological Treatment."

Prague, Activitas Nervosa Superior, Vol 8, No 4, Nov 66, pp 421 - 422

Abstract: Extrapyramidal syndromes in handling of mental patients are discussed. The occurrence of side-effects of some drugs is reviewed and the complications caused by these are evaluated. The symptoms described as "pseudoencephalitis" are described. Observations made recently at the Szczecin Clinic on 10 patients who developed such a syndrome during treatment with neuroleptics are discussed. 6 patients were treated with Perazin, 2 with Haloperidol, and 2 with a combination of Haloperidol, Perazin and Levopromazine. The toxic effects appeared after 4 - 35 days, mainly between the 9th and 13th days. Clinical observations of the patients are presented. All the patients recovered. The factor responsible for the development of toxic encephalitis could not be determined. No references. Submitted at the 8th Annual Psychopharmacological Meeting at Jesenik, 18 - 22 Jan 66. Article is in German.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

CZECHOSLOVAKIA / POLAND

WDOWIAK, L.; JEDRZEJCZAKOWA, M.; WARNECKA, M.; Psychiatric Clinic, Medical Academy, Szczecin. [Original version not given].

"Haloperidol - a Specific in the Treatment of StuporCatatonia."

Prague, Activitas Nervosa Superior, Vol 8, No 4, Nov 66, pp 428 - 429

Abstract: Haloperidol therapy is indicated in psychoses characterized by increased psychomotor activity. The authors investigated the use of the drug in diseases where an inhibition of the psychomotor activity exists. 22 patients suffering from hypokinetic catatonia were used in the experiments. A daily dose of 2 to 5 mg was used. Only in one case where the catatonia was not accompanied by a stupor was the treatment without success; in 16 a complete remission of the symptoms was obtained, in 5 there was a partial improvement. The haloperidol treatment is usually followed by thioridazine therapy. In 2 patients pseudoencephalitic symptoms occurred after a few days and their treatment had to be interrupted. In nearly all of the cases extrapyramidal symptoms appeared. No references. Submitted at the 8th Annual Psychopharmacological Meeting at Jesenik, 18 - 22 Jan 66. Article is in German.

1/1

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

CZECHOSLOVAKIA

WARNER, Ch.R., ELVING, P.J.

The University of Michigan, Ann Arbor, Michigan, U.S.A. - (for both).

Prague, Collection of Czechoslovak Chemical Communications, No 12, December 1965, pp 4210-4218

"Polarographic reduction of adenine 1-n-oxide."
(To the 75th birthday of Academician J.Heyrovsky).

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

ALTENBERGER, Stanislaw; HINTZ, Regina; WARNOWSKI, Henryk; ZALESKA, Ewelina; CZERWINSKA, Wlodzimiera

Case of Wegener's syndrome. Polskie tygod. lek. 14 no.4:165-170 26 Jan 59.

1. Z III Kliniki Chorob Wewnetrznych; kierownik: prof. dr J. Wegierko, z Kliniki Okulistycznej; kierownik: prof. dr W.Melanowski i z Kliniki Laryngologicznej; P.O. kierownika doc. I. Cichocka-Szumilin. Adres: Warszawa, III Klin. Chor Wewn. A.M.

(GRANULOMA, case reports
Wegener's granulomatosis (Pol))
(PERIARTERITIS NODOSA, case reports
same)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

BEMBNOWSKI, Boleslaw; WARNOWSKI, Henryk

A case of osteoma of the mastoid process. Pol. przegl. radiol. 27 no.3:223-225 '63.

1. Z Wojskowego Instytutu Medycyny Lotniczej.
(MASTOID) (OSTEOMA) (RADIOGRAPHY)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARNOWSKI, Henryk; CZECH, Stanislaw

Submucosal hematomas of the frontal sinus caused by barotrauma. Otolaryng. Pol. 18 no.4:543-550 '64

1. Z Oddzialu Laryngologicznego Osrodka Patofizjologii Klinicznej Wojskowego Instytutu Medycyny Lotniczej.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

Country : Poland
Category : H-17

Abs. Jour. : 39661

Author : Elbowicz, Z., Jozkiewicz, S., and Waronski, W.
Institut. : Not given
Title : Process for Obtaining Vitamin B-12 Concentrate from Activated Municipal Sewage Sludge

Orig Pub. : Acta Polon Pharmac, 15, No 5, 345-351 (1957)

Abstract : The process consists in the extraction of the growth factors with acetate buffer solution, followed by treatment with appropriate solvents. The vitamin content in the concentrate is determined by microbiologic assay and by microbiologic-chromatographic methods, using Escherichia coli. The bibliography lists 28 titles.

A. Vavilova

Card: 1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

Waronski W.

CYGAN, Z.; WARONSKI, W.; ZIELINSKI, J.

Urinary lithiasis in Upper Silesia. II. Chemical composition of urinary calculi. Acta physiol. polon. 8 no.3:301-303 1957.

1. Z Zakladu Chemii Fizjologicznej Slaskiej A. M. w Rokitnicy Kierownik: doc. dr St. Jozkiewicz. Z II Kliniki Chirurgicznej Slaskiej A. M. w Zabrzu Kierownik: prof. dr J. Gasinski.

(URINARY TRACT, calculi,
chem. composition (Pol))

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

CYGAN, Zbigniew; WARONSKI, Wlodzimierz; ZIELINSKI, Jerzy

Relationship between the chemical structure of urinary calculi and the clinical picture of lithiasis. Postery hig.med.dosw. 13 no.6:721-740 '59.
(URINARY CALCULI)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

CYGAN, Zbigniew; WARONSKI, Wlodzimierz; ZIELINSKI, Jerzy

Chemical composition of urinary calculi in relation to sex & age of patients. Polski tygod. lek. 14 no.21:957-959 25 May 59.

1. Z Zakladu Chemii Fizjologicznej Slaskiej Akademii Medycznej w Zabrzu; kierownik: doc. dr St. Jozkiewicz i z II Kliniki Chirurgicznaj w Slaskiej Akademii Medycznej w Zabrzu; kierownik: prof. dr J. Gasinski). Zabrze 8 --Roklinica. Zaklad Chemii Fizjolog. Sl. AM.

(URINARY TRACT, calculi
relation of chem. composition to sex & age of patients (Pol))
(AGING, eff.
on chem. composition of urinary calculi (Pol))
(SEX CHARACTERISTICS
relation of sex of patient to chem. composition of urinary calculi (Pol))

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

KUDLA, Teodor; WARONSKI, Wlodzimierz

Basic phosphatase in the blood of pregnant women. Gin.polska 30 no.5:563-570 S-O '59.

1. Z Kliniki Chorob Kobiecych i Poloznictwa Sl. A.M. w Zabrzu Kierownik: doc. dr Wojciech Starzewski i Z Zakladu Chemii Fizjologicznej Sl. A.M. w Rokitnicy Kierownik: prof. dr S. Jozkiewicz.

(PREGNANCY blood)
(PHOSPHATASES blood)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

KUDLA, Teodor; WARONSKI, Wlodzimierz

Interrelationship between the level of basic phosphatase and the phase of normal pregnancy. Gin.polska 31 no.2:179-185 Mr-Ap '60.

1. Z I Kliniki Chorob Kobiecych i Poloznictwa Slaskiej A.M. w Zabrzu. Kierownik: prof.dr W. Starzewski; oraz z Zakladu Chemii Fizjologicznej oraz Sl. A.M. w Zabrzu. Kierownik: doc.dr S. Joskiewicz.
(PREGNANCY blood)
(PHOSPHATASES blood)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

STARZEWSKI, Wojciech; GLOWINSKI, Mieczyslaw; MUSIOLIK, Marian; SIERON, Gerard; SMOK, Jan; WARONSKI, Wlodzimierz

Blood coagulation during pregnancy, labor and puerperium. Communication I. Fibrinogen and fibrinolysis during pregnancy, labor and puerperium. Gin.polska 31 no.3:359-366 My-Je '60.

1. Z I Kliniki Poloznictwa i Chorob Kobiecych Slaskiej A.M. w Zabrzu Kierownik: prof. dr W.Starzewski.

(PREGNANCY blood)
(LABOR blood)
(PUERPRIUM blood)
(FIBRINOGEN)
(FIBRINOLYSIS)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

STARZEWSKI, Wojciech; GLOWINSKI, Mieczyslaw; MUSIOLIK, Marian; SIERON, Gerard; SMOK, Jan; WARONSKI, Wlodzimierz

Blood coagulation in pregnancy, labor and puerperium. III. Prothrombin and factor VII in pregnancy, labor and puerperium. Gin. polska 31 no.6:661-667 N-D '60.

1. Z I Kliniki Poloznictwa i Chorob Kobiecych Slaskiej AM. w Zabrzu Kierownik: prof. dr W. Starzewski.

(PREGNANCY blood) (LABOR blood)
(PUERPERIUM blood) (BLOOD COAGULATION)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

STARZEWSKI, Wojciech; GLOWINSKI, Mieczyslaw; MUSIOLIK, Marian; SIERON, Gerard; SMOK, Jan; WARONSKI, Wlodzimierz

Studies on blood coagulation in normal and pregnant subjects in the Upper Silesia. Polski tygod.lek. 15 no.24:897-902 13 Je '60.

1. Z I Kliniki Poloznictwa i Chorob Kobiecych Sl. A.M. w Zabrzu, kierownik: prof dr W. Starzewski.
(BLOOD COAGULATION)
(PREGNANCY blood)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

CYGAN, Zbigniew; WARONSKI, Wlodzimierz

Effect of sulfoguanidine and chloromycetin on the course of experimental atherosclerosis in pigeons. Acta physiol.polon. 11 no.4:615-621 '60.

1. Z Zakladu Chemii Fizjologicznej Slaskiej A.M. w Zabrzu-Rokitnicy. Kierownik: doc.dr. St. Jozkiewicz.
(ARTERIOSCLEROSIS exper)
(CHLORAMPHENICOL pharmacol)
(SULFONAMIDES pharmacol)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

STARZEWSKI, Wojciech; GLOWINSKI, Mieczyslaw; MUSIOLIK, Marian; SIERON, Gerard; SMOK, Jan; WARONSKI, Wlodzimierz

Blood coagulation in pregnancy, labor and puerperium. IV. Factor V in pregnancy, labor and puerperium. Gin.polska 31 no.6:669-674 N-D '60.

1. Z I Kliniki Polozmictwa i Chorob Kobiecych Slaskiej AM w Zabrzu Kierownik: prof. dr W. Starzewski.

(PREGNANCY blood) (LABOR blood)
(PUERPERIUM blood) (BLOOD COAGULATION)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

CYGAN, Zbigniew; JOZKIEWICZ, Stanislaw; WARONSKI, Wlodzimierz

Effect of liver extract "hepafort" on cholesterol metabolism in experimental atherosclerosis in pigeons. Pat.polska 12 no.1: 33-39 '61.

1. Z Zakladu Chemii Fizjologicznej Sl. A.M. w Rokitnicy Kierownik: doc. dr Stanislaw Jozkiewicz.
(LIVER EXTRACTS pharmacol) (CHOLESTEROL metab)
(ARTERIOSCLEROSIS exper)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARONSKI, Wlodzimierz; KUDLA, Teodor

Behavior of basic phosphatase in the placenta and blood serum in normal pregnancy. Gin. polska 32 no.4:521-527 '61.

1. Z I Kliniki Poloznictwa i Chorob Kobiecych Slaskiej AM w Zabrzu Kierownik: prof. dr W. Starzewski. Z Zakladu Chemii Fizjologicznej Slaskiej AM w Zabrzu-Rokitnicy Kierownik: prof. dr S. Joskiewicz

(PREGNANCY metab)
(PHOSPHATASES metab)
(PLACENTA metab)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

STARZEWSKI, Wojciech; GLOWINSKI, Mieczyslaw; MUSIOLIK, Marian; SIERON, Gerard; SMOK, Jan; WARONSKI, Wlodzimierz

Blood coagulation disorders in pregnancy and labor. Gin.polska 32 no.6:709-717 '61.

1. Z Kliniki Poloznictwa i Chorob Kobiecych Slaskiej AM w Zabrzu Kierownik: prof. dr med. W. Starzewski.
(PREGNANCY compl) (HEMORRHAGE POSTPARTUM)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

STARZEWSKI, Wojciech[deceased]; WARONSKI, Wlodzimierz

Histochemical studies on the activity of beta-glucuronidase in cervical cancer. Ginek. pol. 34 no.1:39-48 '63.

1. Z I Kliniki Poloznictwa i Chorob Kobiecych Sl. AM w Zabrzu Kierownik: prof. dr med. W. Starzewski[deceased].
(GLUCURONIDASE) (CERVIX NEOPLASMS)
(ENZYME TESTS) (HISTOCHEMISTRY)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

KACZMARCZYK, Henryk; KUDLA, Teodor; WARONSKI, Wlodzimierz

Effect of gynecological surgery on the alkaline reserve level of the blood. Ginek. pol. 34 no.3:353-356 '63.

1. Z I Kliniki Poloznictwa i Chorob Kobiecych Sl. AM w Zabrzu Kierownik: prof. dr med. W. Starzewski[deceased].
(GYNECOLOGY) (SURGERY, OPERATIVE)
(ACID-BASE EQUILIBRIUM)
(BLOOD CHEMICAL ANALYSIS)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

GLOWINSKI, Mieczyslaw; STEPLEWSKI, Zenon; WARONSKI, Wlodzimierz

A study of the reticuloendothelial system (RES) in experimental toxoplasmosis. Wiad. parazyt. 10 no.4:367 '64

1. I Klinika Polozmictwa i Chorob Kobiecych Slaskiej Akademii Medycznej, Zabrze.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARPECHOWSKI, Bernard

Neurological manifestations in children in acute cases of phenactyl poisoning. Pediat. pol. 37 no.12:1311-1315 D '62.

1. Z Wojewodzkiego Szpitala Dzieciecego w Poznaniu Dyrektor: dr med. M. Stabrowski.

(PHENOTHIAZINES) (POISONING)
(NEUROLOGIC MANIFESTATIONS)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

GAN, K.H.; MAMOEN, R.; WARSA, R.

Observations on the influenza epidemic of 1957 in Djakarta (Indonesia) and on antibodies to influenza virus in sera from the general population in Djakarta. J. Hyg. Epidem., Praha 2 no.4:484-491 1958.

1. Medical Faculty, University of Indonesia, Pegangsaan Timur 16, Djakarta, Pegangsaan Timur 16, Indonesia. (for Gan).
(INFLUENZA, epidemiol.
in Indonesia, 1957 epidemic & antibody level in general population)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

BARCLAY, T.L.; CROCKETT, D.J.; WARSHAVSKI, E.

Mortality in a burns unit, with reference to antibiotics. Acta chir.plast. 3 no.1:5-10 '61.

1. Plastic Surgery and Burns Centre, Mount Vernon Hospital, Northwood (England).
(BURNS statist)
(ANTIBIOTICS ther)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

PYTASZ, Marian; JUCWA, Witold; WASIKOWA, Renata

Effect of age and sex on renal function in children. Pediat. Pol. 39 no.5:519-527 My '64.

1. Z Zakladu Fizjologii Akademii Medycznej we Wroclawiu (Kierownik: prof. dr. A. Klisiecki) i z Kliniki Pediatrycznej Akademii Medycznej we Wroclawiu (Kierownik: prof. dr. H. Hirszfeldowa [deceased]).

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

SASSOWA, Janina; WASIKOWA, Renata

Possible cure of Mauriac's syndrome in the light of our experiences. Pediat. Pol. 39 no.5:579-582 My '64.

1. Z I Kliniki Pediatrycznej Akademii Medycznej we Wroclawiu (Kierownik: prof. dr. med. H. Hirszfeldowa [deceased]).

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WASOWICZ, Stefan, inz.

Safety device of the rewinding and cutting machine. Przegl papier 20 no.6:198-199 Je '64.

1. Paper Mill, Zywiec.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYNSKI, Marian, mgr inz.; ZAJĄCZKOWSKI, Konrad, mgr inz.

Remarks on burnishing machine parts used in metallurgy.
Wiad hut 16 no.12:381-384 D '60.

1. Katedra Czesci Maszyn, Akademia Gorniczo-Hutnica, Krakow.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZ, H.

"Sack elevators." P. 17 (GOSPODARKA RYBNA, Vol. 5, No. 3, Mar. 1953 Warszawa, Poland)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 4, April, 1954

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

"Dust-removal chambers and cyclones." (p. 18) GOSPODARKA ZBOZOWA (Polskie Wydawnictwa Gospodarcze) Warszawa, Vol 4, No 4, April 1953.

SO: East European Accessions List, Vol 3, No 8, Aug 1954

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

For useful mechanization of the grain storehouses. p. 12.
The best project in the competition for the mechanization of flat grain storehouses and the improvement fo the Kusbas work. p. 14.
GOSPODARKA ZBOZOWA. (Polskie Wydawnictwa Gospodarcze) Warszawa.
Vol. 6, no. 10, Oct. 1955.

So. East European Accessions List. Vol. 5, no. 1, Jan. 1956

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA H.

WARSZA, H., Making use of sugar dryers for drying the grain. p. 15.

Vol. 6, no. 7, July 1955, Warszawa, Poland AGRICULTURE

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, No. 2 Feb. 1956

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

Aspirating of mill rollers.

p. 11 AGRICULTURE
Vol. 6, no. 8, Aug. 1955
GOSPODARKA ZBOZOWA
Warszawa

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 2
Feb. 1956

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

Warsza, H.

Functions of the mill rollers in the process of grinding. p. 20.
Vol. 6, no. 11, Nov. 1955 Warszawa GOSPODARKA ZABOZOWA

SOURCE: East European Acession List (EEAL) Library of Congress
Vol. 5, no. 8, August 1956

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

The mechanical transfer of grain from the freight cars and trucks to the flat nonmechanized granaries. p. 6.

GOSPODARKA ZBOZOWA, Vol. 7, no. 2, Feb. 1956.

POLAND

SOURCE: EAST EUROPEAN ACCESSIONS LIST LC Vol. 5, no. 7, August 1956.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

Conditions of receiving and weighing in mechanized granaries.
p. 20. GOSPODARKA ZBOZOWA. Vol. 7, No. 5, May 1956. Warszawa.

East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 11, August 1956

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

Devices improving the work of transportable band conveyers. p. 20.
(j) The importation grain and the maritime department of the State Grain Enterprises. p. 22. GOSPODARKA ZBOZOWA. Vol. 7, No. 6, June 1956. Warszawa.

East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 11, August 1956.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

WARSZA, H. How to build a wooden hoist for loading grain. p. 20. Vol. 7, no. 8, Aug. 1956. GOSPODARKA ZBOZOWA. Warszawa, Poland.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April. 1957

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

WARSZA, H. Improvement in the cleaning of grain by hand winnowing machines and their adaptation to mechanical drive. p. 14. Vol. 7, no. 9, Sept. 1956. GOSPODARKA ZBOŻOWA. Warszawa, Poland.

SOURCE: East European Accessions List (EEAL), Vol. 6, No. 4--April 1957

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, H.

WARSZA, H. The mechanized drying of grain on the transportable Kuzbas dryers p. 25

Vol 7, no. 12, Dec 1956
GOSPODARKA ZBOZOWA
AGRICULTURE
WARSZAWA, Poland

So: East European Accession vol 6, no. 3, March 1957

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZA, Z.

Relationship between the measurement error and deflection error of the hand in electric measuring instruments. p. 52.

POMIARY, AUTOMATYKA, KONTROLA. (Naczelna Organizacja Techniczna Warszawa, Poland. Vol. 5, no. 2, 1959.

Monthly list of East European Accessions (EEAI) LC, vol. 8, no. 8, Aug. 1959.

Uncl.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

L 35578-65 EWP(k)/EWT(d) SWP(h) EWA(d)/EWP(1)/EWP(v) Pf-4
ACCESSION NR: AP4042120 P/0034/64/000/006/0238/0244

AUTHOR: Warsza, Zygmunt L. (Master engineer)

TITLE: Analysis of the static measurement errors of industrial pH meters and some design conclusions

SOURCE: Pomiary, automatyka, kontrola, no. 6, 1964, 238-244

TOPIC TAGS: pH meter, pH measurement, static measurement error, industrial pH meter

ABSTRACT: The paper is a continuation of a previous study (W. Borejko, Z. L. Warsza, Pomiary, Automatyka, Kontrola, No. 10-11/63, pp. 585-588) of fundamental problems in industrial pH measurements. Some conclusions reached previously are developed further and substantiated analytically. This study was made in connection with investigations on industrial pH measurements and the design of a universal industrial pH-meter for automatic control of industrial processes which were initiated in 1958 in the Zaklad automatyki i miernictwa Instytutu elektrotechniki (Automation and measurement department of the Electrical engineering institute). A detailed analysis of measurement errors and their causes as well as of the conclu-

Card 1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

L 35578-65

ACCESSION NR: AP4042120

sions reached concerning the design of industrial pH-meters and the associated auxiliary equipment is given. A block diagram of a non-symmetrical pH-meter system with several interference inputs is investigated analytically. Input circuit errors, the effect of DC components of insulation currents, the effect of induced constant and alternating voltages in the solution, and errors due to the amplifier are discussed. Some results of measurements on industrial pH-meters of non-Polish manufacture, made in the Electrical engineering institute, are evaluated. Methods of eliminating the errors investigated are described. A recorder for use with several pH-meters is also described. "The author expresses his thanks to Prof. S. Lebson for his assistance in formulating the problem and to Prof. T. Konopinski and Master Eng. W. Borejko for valuable practical advice." Orig. art. has: 12 figures and 8 formulas.

ASSOCIATION: Katedra miernictwa elektrycznego Politechniki Warszawskiej (Electrical measurement department, Warsaw polytechnic institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: IE, EE

NO REF SOV: 001 OTHER: 014

Card 2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

ACC NR: AP6034963 SOURCE CODE: PO/0034/66/000/08-/0393/0394

AUTHOR: Nalecz, Maciej (Professor, Doctor); Warsza, Zygmunt L. (Master engineer)

ORG: Institute for Automation, PAN (Instytut Automatyki PAN); Warsaw Polytechnic Institute (Politechnika Warszawska)

TITLE: The use of Hall effect devices in closed loop displacement transducers

SOURCE: Pomiary, automatyka, kontrola, no. 8-9, 1966, 393-394

TOPIC TAGS: Hall effect, ~~application~~, halotron, transducer, closed loop device, mechanical ~~measurement~~ measuring tool

ABSTRACT: The article deals with the general problem of the measurement of small mechanical displacements through readings of the output voltage of a Hall effect device located in a high-gradient magnetic field. The difficulties encountered in improving the limiting characteristics of simple transducers without an amplifier are reviewed. The principal disadvantage here is the Hall effect device itself, as the primary cause of inaccuracy and nonlinearity. On the other hand, it is also found that the halotron displacement sensor (detector) is useful only when the permanent magnet already present in the transducer (for feedback) is simultaneously employed to create the magnetic induction gradient. A closed-loop displacement transducer with induction compensation is discussed. The operational principle of the device is described and the error, which in a function of the stability and linearity of the

Card 1/2 UDC: 531.717.3:538.632

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

ACC NR: AP6034963

field delivered by the magnets as well as the uniformity and single-valuedness of the electromagnetic field, is analyzed. Orig. art. has: 2 formulas and 1 figure.

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 001/ SOV REF: 001/ OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

ACC NR: AP6034969 SOURCE CODE: PO/0034/66/000/08-/0400/0401

AUTHOR: Warsza, Zygmunt L. (Master engineer); Zyla, Bogdan (Master engineer)

ORG: Department of Electrical Metrology, Warsaw Polytechnic Institute (Katedra Miernictwa Elektricznego Politechniki Warszawszkiej)

TITLE: Compensation differential type gaussmeter based on the Hall effect

SOURCE: Pomiary, automatyka, kontrola, no. 8-9, 1966, 400-401

TOPIC TAGS: Hall effect, gaussmeter, ~~test instrument~~, test ~~equipment~~ facility, test instrumentation

ABSTRACT: The authors discuss some of the problems encountered at the Department of Electrical Metrology, Warsaw Polytechnical Institute (Katedra Miernictwa Elektricznego Politechniki Warszawszkiej) in the course of a program directed at improving the sensitivity and accuracy of test equipment based upon, or utilizing, the Hall effect. Such problems as temperature compensation, nonlinearity in the relation of output voltage to inductance, nonuniformity of wafer material, and others are briefly discussed. With particular attention to metrology problems involving the detection of narrow-band field changes (for example in ferrite resonance testing), the shortcomings of conventional multirange gaussmeters of the compensation of helipot potentiometer type are noted. Many of these difficulties can be successfully avoided in a gaussmeter employing a Hall effect meter based on a differential system. One such device, designed by the authors (Warsza Z. L., Zyla B. Zgloszenie patentowe) and using a Zener

Card 1/2 UDC: 621.317.44

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

ACC NR: AP6034969

diode, is described in this article. The instrument has differential test ranges of 0—20 kGs, 0—10 kGs, or 20 switchable differential ranges of 500 Gs each. Maximum sensitivity is 7 Gs/mm, and the inherent error is in the order of 1%. A CH-4 germanium Hall effect device, measuring 7 x 3.5 mm, is used, and the entire unit is powered from the 220-V 50-Hz industrial a-c net. Orig. art. has: 1 figure.

SUB CODE: 09, 14/ SUBM DATE: none/ ORIG REF: 003

Card 2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZAWA, P.Z.H.

POL.

Importance of proteins in the Gram reaction. P. Z. H. Warszawa (*Acta microbiol. polon.*, 195 , 3, 11—20).—A no. of Gram-positive bacteria were rendered G im-negative by treatment with bile salts or ribonuclease. It as found that a variety of proteins (*e.g.* lysozyme, aldolase, clu ein sulphate, triosephosphate dehydrogenase) in the presence of f rmaldehyde were able to convert these organisms to the original G ram-positive state so suggesting that nucleic acids do not play an xclusive rôle in the Gram reaction.

I. M. Rotz.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZEWSKI, Stefan

Preventive therapy of pleural abscess. Wiadomosci lek. 8 no.5:193-199 May '55.

1. Z Oddzialu Ftyzjochirurgii Sanatorium Bokowiec (Zespol Kowary) Ordynator: dr Med. S.Warszewski, dyr. dr M. Sobek.

(PLEURA, abscess
ther.,current status)
(ABSCESS
pleura, ther.,current status)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZEWSKI, S

WARSZEWSKI, Stefan

Early results if Kiselev's modified thoracoplasty; preliminary report. Gruzlica 23 no.3:173-176 Mar '55.

1. Z Oddziału Ftyzjochirurgii Sanatorium Bukowiec. Ordynator: dr med. S. Warszewski, w Państwowym Zespole Sanatoriów Przeciwgruźliczych w Kowarach Dyrektor: dr M. Sobek. Sanatorium Bukowiec w Kowarach.

(COLLAPSE THERAPY
modified method of Kiselev, early results)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

KONKOLEWSKI, Leon; WARSZEWSKI, Stefan

In memoriam of Dr. Zdzislaw Dandelski; Nov. 18, 1880 - July 1, 1954. Polski przegl. chir. 27 no.12:1169-1170 Dec 55.

(BIOGRAPHIES
Dandelski, Zdzislaw)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZEWSKI, Stefan

Personal modification of corrective thoracoplasty. Polski przegl. chir. 27 no.12:1197-1204 Dec 55.

1. Z Oddzialu Ftyzjochirurgii Sanatorium Bukowiec. Ordynator: dr. med. S. Warszewski, Dyrektor: dr. M. Sobelk, w Panstwowym Zespole Sanatoriow Przeciwgruzliczych w Kowarach Kowary, Sanatorium, Bukowiec.

(COLLAPSE THERAPY
thoracoplasty, modification of technic)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZEWSKI, Stefan; GARDULSKI, Jozef

Value of wedge resections in the treatment of pulmonary tuberculosis. Postepy hig. med. dosw. no.2:171-172 '60.

1. Z Sanatorium "Bukowiec" w Kowarach.

(PNEUMONECTOMY)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZEWSKI, Stefan

Subnormal blood coagulability as a complication after pulmonary resection. Postepy hig. med. dosw. no.2:212-213 '60.

1. Z Sanatorium "Bukowiec" w Kowarach.

(PNEUMONECTOMY compl) (AFIBRINOGENEMIA etiol)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZEWSKI, Z.

Modernizing steam economy in old iron plants. p. 176

HUTNIK. vol. 21, no. 6, June 1956

Poland

so. EAST EUROPEAN ACCESSIONS LIST vol. 5, no. 10 Oct. 1956

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYLEWICZ, L.

Leukocyte index in typhoid and paratyphoid B. Patol. polska 3 no. 1:37-55 Jan-Mar 1952. (CLML 22:4)

1. Of the First Clinic for Internal Diseases (Head--Prof. B. Szczeklik, M. D.) of Wroclaw University and of the IB Department and of the IC Department (Head--Prof. J. Kostrzewski, M. D.) of Saint Lazarus State Hospital in Krakow.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYLEWICZ, Leszek

SURNAME, Given Names

(2)

Country: Poland

Academic Degrees: [not given]

Affiliation: Medical Research Center of Clinic of Internal Diseases No II of the Medical Academy in Wroclaw (Osrodek Badawczo-Leczniczy, II Klinika Chorob Wewnetrznych AM [Akademia Medyczna] we Wroclawiu), Kudowa-Zdroj; Director (Kierownik): Prof Dr Med A Falkiewicz

Source: Krakow, Przeglad Lekarski, Vol XVII, Ser II, No 9, 1961, pp 340-342

Data: "The Mechanism of Action of Health Resort Treatment."

GPO 981643

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYLEWICZ, Leszek

Behavior of blood proteins in rheumatic disease under the influence resort therapy in Kudowa spa. Polskie arch. med. wewn. 31 no.10: 1375-1384 '61.

1. Z Osrodka Badawczo-Leczniczego II Klin. Chor. Wewn. AM we Wroclawiu Kierownik: prof. dr med. A.Falkiewicz i z Sanatorium Wojskowego w Kudowie-Zdroju Ordynator: dr med. L.Warszylewicz.
(RHEUMATIC FEVER blood) (BLOOD PROTEINS)
(BALNEOLOGY)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

FALKIEWICZ, A.; GRUSZKA,St.; KLECZYNSKI,A.; SWIATKOWSKI,J.; WARSZYLEWICZ,L.

The focus of infection and prevention of rheumatic fever.
Kardiol. pol.6 no.4:267-273 '63.

1. Z II Kliniki Chorob Wewnetrznych AM we Wroclawiu; kierownik: prof.dr.A. Falkiewicz.

*

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

MACHOWSKI, Boguslaw, mgr inz.; WARSZYNSKI, Marian, dr inz.

Structural, technological and utilization methods of increasing the durability of forging rollers. Hutnik P 30 no. 5: 147-152 My '63.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

P/035/60/000/012/002/004
A076/A026

AUTHOR: Warszyński, Marian, Master of Engineering

TITLE: Possibilities of Reducing Unequal Wear of Roller Bearings

PERIODICAL: Przegląd Mechaniczny, 1960, No. 12, pp. 359 - 361

TEXT: The author discusses possibilities of extending the service life of a machine by decreasing wear of bearings; he lists a number of technical requirements of a bushing, sliding and roller bearing and describes the necessity of lubricating a sliding bearing during stops, starts, idle running and slow running under heavy loads. The author briefly analyses operation characteristics of a sliding bearing pair, consisting of soft bushing and hard core, operating under semi-dry conditions and under constant load of P kg (Figs. 1 and 2). After the analysis the author arrives at the following conclusion: by reversing technical qualities of a sliding bearing pair, i.e., soft core and hard bushing instead of hard core and soft bushing, service life of a given machine is longer since the wear is even and replacement of these parts is necessary only periodically. There are 2 figures and 3 Soviet references.

ASSOCIATION: Akademia Górniczo-Hutnicza, Kraków (Academy of Mining and Metallurgy, Cracow)

Card 1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

P/043/60/000/012/003/006
A223/A126

AUTHORS: Warszyński, Marian, and Zajączkowski, Konrad, Masters of Engineering

TITLE: Comments on the roller-burnishing of metallurgical machine parts

PERIODICAL: Wiadomości hutnicze, no. 12, 1960, 381-384

TEXT: In addition to various well-known thermal and chemical surface hardening methods used in industry, the mechanical hardening methods such as shot peening and roller or ball burnishing are also lately gaining ground. The choice of the above 2 methods depends on the shape of the part to be burnished and on the working conditions. The roller-burnishing method is used predominantly for rotary steel and cast iron parts due to the simple design of burnishing equipment and the ready availability of such equipment in most plants. The roller-burnishing process makes for smoother surface and greater hardness of the surface layer, and for the formation of strain-resisting elements in the sub-surface layers. Several Soviet

Card 1/6

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

plants applied roller-burnishing to some of their machine parts with great success. The rolling mill of the Zhdanov Metallurgical Plant "imeni Il'ich" observed that the lower rolls of the 830 blooming mill, made of 50 HN alloy steel, often showed fatigue cracks in the I-I section (Fig.1). The damage statistics showed the following - during the 5 years of operation 28 rolls broke, of which about 10% broke after 100-300 operating hours, 40% after 400-600 operating hours and 50% after 700-1000 operating hours. The rolls, i.e. the area of the fatigue cracks, were subjected to burnishing by equipment fitted to the tool holder of the roll-machining lathe. After 354 working hours these rolls showed fatigue cracks in the II-II section (Fig. 1). The next pair of rolls of the blooming mill were then subjected to burnishing in the I-I and II-II sections, which resulted in a service life of 1555 hours. It was established that the average service life of 4 pairs of rolls of the 830 blooming mill which were subjected to burnishing on the whole section together with the fillets was 1400 hours while the service life of non-burnished rolls was only 850 hours. The Chelyabinsk Tube Mill subjected to roller-burnishing plunger rods 200 mm in diameter and the roll arbors 300 and 400 mm in diameter. Considerable increase in surface smoothness

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

and in the hardness of the sub-surface layer as well as a 50% increase in the service life of the parts was noted. In the "imeni Liebknecht" Rolling Mill 3 hydraulic rams made of St5 steel with a diameter of 130 mm were also successfully subjected to roller burnishing. According to Soviet experience in the field of surface hardening by burnishing, various parts of machines and metallurgical equipment can be subjected to roller burnishing, such as reduction-gear shafts, rolling mill transmission shafts (such as the "Rockright" transmission shaft), hammer rams, plungers, reciprocating rolls of hydraulic cylinders, necks of roller-table rolls, axles for pig iron and slag transportation vehicles, etc. The "imeni Kuybyshev" Plant carried out roller burnishing of necks of 2 shafts, i.e. of the reduction-gear shaft of the 330 rolling mill (made of St6 steel) and the edging roll shaft of the 620 rolling mill (made of St5 steel). Before burnishing the left neck of the shaft had a diameter of 129.99 mm in the A-A section and a diameter of 129.93 mm in the B-B section (Fig.2). After burnishing the diameters were: in the A-A section, 129.93 mm and in the B-B section, 129.92 mm. The decrease in the diameters ranged from 0.01 to 0.06 mm. Similar results were also obtained with the burnishing of the right neck in the

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

C-C and D-D sections (Fig.2). In both cases the smoothness of the surface after burnishing corresponded to the 7th PN smoothness grade, while before burnishing the rolls had the 4th smoothness grade. The diameter of the neck of the edging roll shaft of the 620 rolling mill decreased after burnishing by 0.04-0.05 mm, while the surface smoothness was improved from the original 4th grade to the 7th and 8th grade. On the basis of considerable Soviet and limited Polish experience with the roller burnishing process the following points should be borne in mind: 1) choice of parameters and particularly the force of each roller on the piece to be burnished; 2) empirical calculation of the duration of the burnishing process in connection with the preliminary processing and the existing working conditions; 3) the formation of harmful tensions in the sub-surface layers of the non-hardened sections of the 830 blooming mill rolls, caused by burnishing both fillet areas in the opposite directions. The results of this observation was verified by laboratory tests carried out at the Katedra Części Maszyn AGH (AGH Department of Machine Parts) in Kraków on test pieces 12 mm in diameter. When applying the burnishing process not only the resistance to fatigue, but also the resistance to wear should be a deciding factor. This means that bur-

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

nishing should not be applied for the purpose of repairing damaged parts only, but also as a preventive measure. There are 3 figures and 9 references: 5 Soviet-bloc and 4 non-Soviet-bloc. The reference to the English-language publication reads as follows: O. Horger, Journal of Applied Mechanics, No. 2, 1935.

ASSOCIATION: Katedra Części Maszyn AGH (AGH Department of Machine Parts).

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYNSKI, Marian, mgr. inz.

Influence of strain hardening by surface blooming on the operative quality of the subtersurface layer. Przegl mech 21 no.13:409-411 10 Jl '62.

1. Akademia Gorniczo-Hutnicza, Krakow.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYNSKI, Marian, mgr inz.

Research on the influence of surface cold work upon fatigue resistance. Przegl mech 21 no.24:766-767 25 D '62.

1. Katedra Czesci Maszyn, Akademia Gorniczo-Hutnicza, Krakow.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYNSKI, Marian, ~~dr~~ inz.

Strength testing of glued metal joints. Przegl mech 23 no.12: 333-335 25 Je '64.

1. Department of Machine Parts, Academy of Mining and Metallurgy, Krakow.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYNSKI, Marian, dr inz., adiunkt; ONYSZKO, Boguslaw, mgr inz., asystent

Possibilities of replacing press-fit joints by glued joints. Przegl mech 23 no.13:361-363 10 Jl '64.

1. Department of Machine Parts, Academy of Mining and Metallurgy, Krakow.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARSZYNSKI, Marian, dr. inz., adiunkt; KULINSKI, Stanislaw, mgr. inz., st. asystent

Interpretation of the Sachs method of determining internal stresses. Przegl mech 24 no.1:16-19 10 Ja '65.

1. Department of Machine Parts of the School of Mining and Metallurgy, Krakow.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARTAK, Bronislaw

Working results of combined cutter-loaders in mines. Wiadom gorn 11 no. 11:390-394 N '60.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARTAK, Jozef; PANASEWICZ, Jozef

Prospects for the application of computers in differential diagnosis. Pol. arch. med. wewnet. 35 no.4:559-564 '65.

1. Z Zakladu Fizjopatologii Instytutu Hematologii w Warszawie (Kierownik: doc. dr. med. J. Panasewicz).

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARTAK, J. (Warsaw)

Application of mathematical logic (propositional calculus) to medical diagnosis. Zastos mat 7 no.4:335-344 '64.

1. Submitted July 18, 1963.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARTOK, Jozef

Mechanisms regulating the metabolism of bacteria. Postepy Mikrobiol 3 no.3:371-380 '64.

1. Institute of Physiological Chemistry of the School of Medicine, Warsaw.

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

WARTAK, Jozef

The mechanism of transfer of the genetic information. Postepy biochem. 9 no.3:367-381 '63.

(DNA) (RNA) (PROTEINS) (GENETICS)

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

POLAND

WARTAK, Jozef, Computation Center of the Polish Academy of Sciences (Centrum Obliczeniowego PAN) Director (Dyrektor) Prof. Dr. M. WARMUS, Warsaw

"Cybernetic Diagram of the Process of Identifying Diseases"

Warsaw, Postepy Higieny i Medycyny Doswiadczalnej, Vol 20, No 6, Nov-Dec 1966; pp 927-930

Abstract: Primarily mathematical expostulation of the logic behind the process of diagnosis as carried by physician or potentially by machine: probability of appearance of individual symptoms and of several of the symptoms together in various diseases; relationship of the symptom profile to probability of specific diseases being present, precautions necessary in interpretation and generalization. 5 self-citations including 1 in press. Many mathematical formulae, 1 table. Manuscript received Mar 65.

1/1

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

L 15797-66 FSS-2/EWT(1)/EEC(k)-2/ETC(f)/EPF(n)-2/EWG(m)/T/EWP(t)/EWA(b) IJP(c)

ACC NR: AP6002234 DS/JD/WT/WW/AT SOURCE CODE: PO/0095/65/013/010/0547/0552

63
62
B

AUTHOR: Wartanowicz, T. — Vartanovich, T.

ORG: Institute of Heat Engineering, Technical University, Warsaw (Instytut Techniki Cieplnej, Politechnika)

TITLE: Analysis of performance and experimental investigations on a molten salt thermocell as a thermoelectrochemical energy converter

SOURCE: Polska akademia nauk. Bulletin. Serie des sciences techniques, v. 13, no. 10, 1965, 547-552

TOPIC TAGS: heat energy conversion, thermal battery, fuel cell

ABSTRACT: This paper makes a theoretical analysis of a thermocell as a thermoelectrochemical energy converter from the viewpoint of its energy properties. Experimental investigations performed attempted to verify the basic conclusions derived from the theoretical analysis of work of a molten salt thermocell. A model of the thermocell with molten $AgNO_3$ as the thermoelectric material was constructed. Two main conclusions obtained were: 1) the difference in the temperatures and the figure of merit of molten salt are of major importance for the energy properties of a thermocell, and 2) the experimental investigations verified the basic assumptions and the results of theoretical analysis of the performance of a molten salt thermocell. It is suggested that further investigation be

Card 1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

L 15797-66

ACC NR: AP6002234

conducted in the following directions: a) the classical applications of a thermocell as a converter of heat into electric energy; b) the practical use of the electrode reaction in a thermocell to the electrolytic purification of metals; and c) the application of the electrochemical phenomena of a thermocell to the evaluation of the thermoelectrolytic corrosion in chemical reactors (nonuniformly heated) of various types. This paper was presented by B. Stefanowski 6 July 65. Orig. art. has: 5 figures and 14 formulas. [08]

SUB CODE: 10/ SUBM DATE: none/ OTH REF: 005/ ATD PRESS: 4201

Card 2/2 WQS

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

L 64193-65 EPA(s)-2/EPF(c)/EEC(k)-2/EPF(n)-2/EWG(m)/EPA(w)-2/T/EWP(t)/EWP(b)/EWA(d) IJP(c) PO/0032/65/012/002/0179/0200
ACCESSION NR: AP5021058 JHB/WW/JD/JG/AT/TT

AUTHOR: Wartanowicz, T. (Warsaw)

TITLE: Investigation of the performance of a molten salt thermogenerator

SOURCE: Archiwum budowy maszyn, v. 12, no. 2, 1965, 179-200

TOPIC TAGS: heat energy conversion, direct energy conversion

ABSTRACT: An investigation was made of a molten salt thermocell used for direct conversion of heat into electrical energy. Calculations were made of the maximum efficiency corresponding to the optimum values of the M and m parameters ($M = R/r$ and $m = R_g/r$, where R, R_g, and r are the electrical resistances, respectively, of the thermocell load, the hot electrode load, and the molten salt) corresponding to the optimum current density (i) and the optimum distance (ℓ) between the electrodes of the thermocell. The efficiency η_{max} was calculated for various values of the Seebeck coefficient α (from 0.5 to 2.0 mv), the hot electrode temperature T_g (from 700 to 2000K), and the Ioffe coefficient Z (from 0.5×10^{-3} to 5.0×10^{-3}). High values of α, Z, and T_g were shown to be essential for the thermal efficiency and power of a thermocell. Owing to poor electrical conductivity, the Z of the known salts is relatively low in comparison with that of semiconductors. The Seebeck coefficient

Card 1/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"

"APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4

L 64193-65

ACCESSION NR: AP5021058

α, however, is better in molten salts than in semiconductors. With the introduction of some impurities, Z can be improved. Further, molten salt thermocells can operate over a wide temperature range, a property which is important in work with nuclear heat sources. It is suggested that heat losses in thermocells can be reduced considerably by employing a cascade arrangement. Orig. art. has: 10 figures and 69 tables. [JA]

ASSOCIATION: none

SUBMITTED: 00Oct64 ENCL: 00 SUB CODE: TD, EM

NO REF SOV: 002 OTHER: 012 ATD PRESS: 4070

Card 2/2

APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001961510004-4"