L 32000-66 EWT(1)/EWT(m)/T WW/JW/WE

ACC NR: AP6020555 SOURCE CODE: UR/0414/66/000/001/0079/0087

AUTHOR: Vulis, L. A. (Alma-Ata); Yershin, Sh. A. (Alma-Ata); Yarin, L. P. (Alma-Ata)

ORG: none

TITLE: Calculation of a homogeneous turbulent gas flame

SOURCE: Fizika goreniya i vzryva, no. 1, 1966, 79-87

TOPIC TAGS: combustion, gas combustion, turbulent combustion, ~~flame front~~ FLOW VELOCITY, STOICHIOMETRIC MIXTURE, TURBULENT FLAME, COMBUSTION TEMPERATURE

ABSTRACT: An analysis was made of the combustion of a premixed stoichiometric gas mixture which discharges into air or an inert gas. It was assumed that the reaction rate is finite and the maximum temperature is at the flame front. Equations were obtained for the combustion temperature and the location of the flame front as a function of the calorific value of the mixture and the initial flow velocity (1—54.2 m/sec). Plots of the combustion efficiency as a function of the initial gas flow velocity and the calorific value of the mixture showed that an increase in the flow velocity and a decrease in the calorific value result in a decrease in the combustion efficiency. As an example, the flame cone angle of a hydrocarbon-air mixture was calculated and verified by experiments in a Bunsen burner. A for-

Card 1/2 UDC: 536.46+532.507

L 32000-66
ACC NR: AP6020555

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mula was also obtained for calculating the turbulent burning velocity as a function of the gas dynamic as well as the kinetic parameters. Orig. art. has: 15 formulas and 6 figures. [PV]

SUB CODE: 21/ SUBM DATE: 27Jul65/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 5021

Card 2/2 LC

L 24116-66 EWT(1)/EWP(m)/EWA(d)/T-2/EWA(1) LJP(c)
ACC NR: AP6011515 SOURCE CODE: UR/0382/66/000/001/0074/0084

AUTHOR: Vulis, L. A.; Fomenko, B. A. 69 13

ORG: none

TITLE: Transient conditions of flow in magnetohydrodynamics

SOURCE: Magnitnaya gidrodinamika, no. 1, 1966, 74-84

TOPIC TAGS: magnetohydrodynamics, transient flow, conductive fluid, laminar flow, Reynolds number

ABSTRACT: A discussion is presented of the qualitative characteristics of a conducting liquid flow in a channel in the presence of a magnetic field in the transient region of the flow between the laminar and turbulent flows. Interpolation formulas for the friction coefficient as a function of Reynolds and Hartmann numbers are analyzed. Theoretical data are compared with the experimental results. Orig. art. has: 9 figures and 16 formulas. [Based on authors' abstract] [NT]

Card 1/1 UDC: 538.4

L 32179-66 EWT(1)/EWP(m) WW

ACC NR: AP6013921 SOURCE CODE: UR/0207/66/000/002/0036/0040

AUTHOR: Vulis, L. A. (Leningrad); Dzhaugashtin, K. Ye. (Leningrad) 71 B

ORG: none

TITLE: Electric discharge in a conducting jet of viscous fluid

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 2, 1966, 36-40

TOPIC TAGS: electric discharge, laminar flow, boundary layer theory, conductive fluid, viscous fluid, fluid flow, incompressible fluid, steady flow

ABSTRACT: Elementary problems dealing with the mode of discharge in free laminar flows that can be solved using second order magnetic boundary layer theory are discussed. Expressions are given for a two-dimensional steady flow of a viscous incompressible fluid. An example is discussed for the case of discharge in the boundary layer at the edge of a two-dimensional stream. Self-conjugate solutions for ordinary differential equations are given for the case where conductivity is constant, assuming given boundary conditions for the magnetic field and temperature. The effect of temperature on conductivity in the problem for an incompressible fluid is also considered. The problem of a plane jet source is solved by a similar method. The energy equation for this case is solved for temperature boundary conditions which are symmetric and asymmetric with respect to velocity. The distribution of the magnetic field and current is determined for an axisymmetric jet source. Orig. art. has: 4 figures, 26 formulas.

SUB CODE: 20/ SUBM DATE: 28Jul65/ ORIG REF: 005

Card 1/1 mc

L 46683-66 EWT(1)/EWP(m)

ACC NR: AP6020733 SOURCE CODE: UR/0421/66/000/003/0120/0128

AUTHOR: Vulis, L. A. (Leningrad, Alma-Ata); Karelin, V. Ye. (Leningrad, Alma-Ata); Ustimenko, B. P. (Leningrad, Alma-Ata)

ORG: none

54 13

TITLE: Propagation of a turbulent gas jet in a co-moving stream

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 3, 1966, 120-128

TOPIC TAGS: axisymmetric flow, gas jet, turbulent jet, flow profile

ABSTRACT: The authors report the results of a detailed experimental investigation carried out in 1962-1964 on the laws governing the propagation of an axisymmetic jet of gas, heated slightly above the temperature of a stationary homogeneous medium, at small Mach numbers $M \ll 1$, at dynamic head ratios $0 \leq m \leq 0.23$, velocity ratios $0 \leq m_u \leq 0.43$, and density (temperature) ratios $1.2 \leq \omega \leq 4.3$. The experiments were made at different characteristics of compressibility (gas density ratio in the jet and in the surrounding medium) and co-motion (ratio of dynamic heads in jet and surrounding medium). The tests consisted of measuring the dynamic pressure head and the temperature in the entire flow field produced by the jet. The experiments were made in an open wind tunnel of 0.6 m dia. The jet nozzle had a 50 mm dia. The experimental results are compared with calculations based on the method of the equivalent heat-conduction problem, and good agreement is observed. To reconcile some published contradictory opinions regarding the effect of compressibility on the structure of the gas jet, special experiments were set up in which the initial turbulence level

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L 46683-66

ACC NR: AP6020733

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was varied. These tests made it possible to show which of the dimensionless flow characteristics depend on the degree of gas turbulence and which are universal. The results show that in the case of well-developed turbulence ω has practically no effect on the jet development, but at the initial turbulence level the isothermal jet attenuates more slowly than the jet of heated gas. Orig. art. has: 7 figures, 5 formulas, and 4 tables.

SUB CODE: 20/ SUBM DATE: 26Aug65/ ORIG REF: 006/ OTH REF: 001

hs

Card 2/2

ACC NR: AP6036699 SOURCE CODE: UR/0170/66/011/005/0630/0633

AUTHOR: Vulis, L. A.; Yarin, L. P.

ORG: none

TITLE: Electric modeling of the combustion process by means of low-temperature plasma

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 5, 1966, 630-633

TOPIC TAGS: combustion, gas ~~combustion simulation, gas combustion~~ plasma temperature, simulation test facility

ABSTRACT: Direct experimental studies of analytical solutions to combustion processes are replete with difficulties. Therefore, the feasibility of electric simulation of gas combustion processes has been investigated (see Figs. 1 and 2). The heat release in the flame is simulated by the joule heat evolved by passage of current through as gas which serves as the modeling substance. The electric currents passing through the low-temperature plasma must be sufficiently small so that heat release is the only effect. Applied as well as induced magnetic fields must be absent. An an example, the ignition of a combustible mixture flowing along the plate, with and without allowance for combustion, is considered. By this method using the

Card 1/3 UDC: 536.46

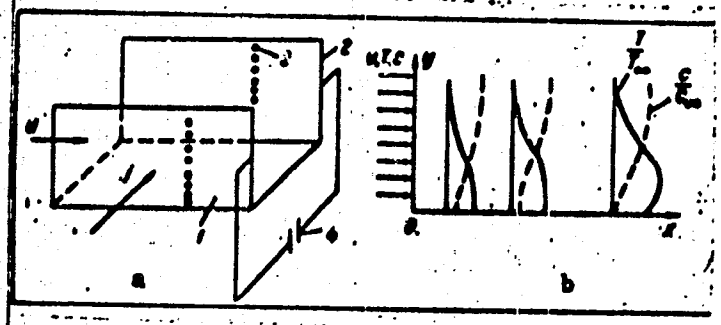

Fig. 1. Simulation of ignition during flow along a heated surface

a - Diagram of model: 1 - plate; 2 - electrodes; 3 - measuring electrodes; 4 - feed sources

b - Temperature distribution and concentration in the boundary layer during flow of a reacting gas along a heated surface.

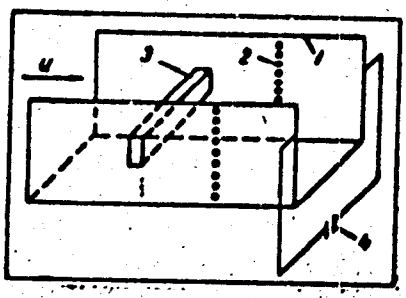

Fig. 2. Diagram of simulation of flame stabilization with a bluff body

1 - Electrodes; 2 - measuring electrodes; 3 - bluff body; 4 - feed source.

ACC NR: AP6036699

plasma as a resistance thermometer it is also possible to simulate mixing processes in compressible gases. Preliminary experiments showed that the difficulties associated with distortions due to the voltage drop near the electrodes can be eliminated. Orig. art. has: 3 figures and 1 table.

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 004/ ATD PRESS: 5106

Card 3/3

ACC NR: AP6034907 SOURCE CODE: UR/0382/66/000/002/0061/0072

AUTHOR: Vulis, L. A.; Gusika, P. L.; Kusainov, M. K.; Shmelev, Yu. K.; Yaglenko, V. T.

ORG: none

TITLE: Mercury flow in a trough in a transverse magnetic field

SOURCE: Magnitnaya gidrodinamika, no. 2, 1966, 61-72

TOPIC TAGS: transverse magnetic field, mercury, magnetogasdynamics, magnetohydrodynamics, mercury flow, free surface flow

ABSTRACT: The article presents some results of systematic observations of a stationary flow of mercury in a horizontal trough, with insulated walls and electrodes in the presence of a transverse magnetic field. This method was found to be valuable in the study of magnetohydrodynamics and magnetogasdynamic phenomena. Qualitative characteristics were obtained on the structure of the hydraulic jump in the magnetic field and the influence of the latter on the intensity and location of the hydraulic jump in the range of values studied for the determin-

 UDC: 538.4

ACC NR: AP6034907

ing parameters. Experimental data for continuous subcritical and theoretical flows obtained in a one-dimensional approximation were compared, and qualitative characteristics obtained. Results of tests confirmed the qualitative deductions from the analysis of equations of reversal effects and the possibility of using an approximate computation based on a one-dimensional diagram. With a certain correlation of parameters, a practically smooth virtually jumpless transition from the supercritical to the subcritical flow was observed. Orig. art. has: 13 figures, 13 formulas. [GC]

SUB CODE: 11, 20, 09/ SUBM DATE: 31Jan66/ ORIG REF: 006/OTH REF: 003/

Card 2/2

L 8130-66 EWT(d)

ACC NR: AP5024980 SOURCE CODE: UR/0286/65/000/016/0043/0044

21
B

AUTHORS: Vinogradov, Yu. M.; Vulis, M. L.

ORG: none

TITLE: A device for the demodulation of binary single-cycle phase-manipulated signals. Class 21, No. 173803 [announced by the State All-Union Central Scientific Research Institute of Comphrehensive Automation (Gosudarstvennyy vsesoyoznyy tsentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 43-44

TOPIC TAGS: demodulator, binary control signal, automatic control equipment

ABSTRACT: This Author Certificate presents a device for the demodulation of binary single-cycle phase-manipulated signals (see Fig. 1). The device operates on a non-synchronous reception method using the phase demodulation according to the difference of the interchange sequence of the sinusoidal signal half-cycles. The device is designed for the reception of signals with amplitude-phase distortions without a pause between the shifted half-cycles. A polarity discriminator and an amplitude discriminator are included in the input of the device. These discriminators are

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L 8130-66
ACC NR: AP5024980

connected with the duration discriminators of the two channels and with the input of the common duration discriminator which triggers only with the merging of the half-periods.

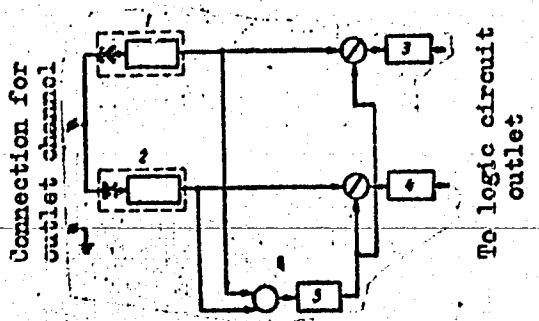

Fig. 1. 1 and 2- amplitude discriminator and polarity discriminator; 3 and 4- duration discriminators; 5- common duration discriminator

Orig. art. has: 1 figure.

SUB CODE: EC/ SUBM DATE: 06Feb64

Card 2/2

GRANOVSKIY, B.S., kand. tekhn. nauk; FURMAN, V.B., inzh.; VULIS, N.L., inzh.

Built-in power cable for supplying power and regulating the operation of borer mechanisms in core drilling equipment for shafts. Shakht. stroi. 8 no.10:16-19 O '64. (MIRA 17:12)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut podzemnogo i shakhtnogo stroitel'stva.

VULIS, Ye., master proizvodstvennogo obucheniya

By common effort. Prof.-tekh. obr. 20 no.6[illegible]8 Je '63. (MIRA 16:7)

1. Tekhnicheskoye uchilishche No.1, Obertyn. (Home and school)

VULITSKIY, Z.; BRAZHENKO, V.

From auditing work practice. Den. i kred. 19 no.11:69-72 N '61.
(MIRA 14:12)

1. Starshiy kreditnyy inspektor Krymskoy kontory Gosbanka (for Vulitskiy). 2. Revizor L'vovskoy kontory Gosbanka (for Brazhenko).

(Banks and banking)
(Auditing)

VULITSKIY, Z.; TYAPTIN, A.

More about interdepartmental control. Fin.SSSR 21 no.6: 73-75 Je '60. (MIRA 13:6)

1. Revizor Krymskoy kontory Gosbanka (for Vulitskiy). 2. Glavnyy kontroler-revizor Kontrol'no-revizionnogo upravleniya Ministerstva finansov USSR po Krymskoy oblasti (for Tyaptin).
(Crimea--Auditing)

VULITSKIY, Z., revizor

On auditing work. Den.i kred. 18 no.8:45-46 Ag '60.
(MIRA 13:7)

1. Krymskaya kontora Gosbanka.
(Crimea--Banks and banking--Auditing and Inspection)

VULITSKIY, Z.

Auditing work. Den.i kred. 17 no.9:46-49 S '59.
(MIRA 12:12)

(Crimea--Banks and banking)

RUMANIA/Human and Animal Morphology - Normal and Pathological. S
Skin

Abs Jour : Ref Zhur Biol., No 23, 1958, 105994

Author : Teodoresku, St., Vulkan, P.
Inst : -
Title : Deep Lupus Erythematosus

Orig Pub : Rumunsk. med. obozreniye, 1957, I, No 1, 79-87

Abstract : A rare case of deep lupus erythematosus (LE) in a 23-year-old female who had on the skin of the face, side by side with the typical rashes, deep scars, and in the closest proximity to them three nodules of the clinically sarcoid type is reported. On histological examination of the deep nodule located in the skin of the face, there were noted: hyperkeratosis, in some areas follicular edema of the papillae, perifollicular nodular lymphoid infiltrations and areas of fibrinoid necrosis in the dermis, nodular cellular infiltration

Card 1/2

VULKANOV, A.

SCIENCE

Periodical: GODISHNIK Vol. 50, no. 1, 1955/56 (published 1957)

VULKANOV, A. First attempt at investigation of the Gastrotricha in the Black Sea. p. 383

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 2 February 1959, Unclass.

VULKANOV, A.

SCIENCE

Periodical: GODISHNIK Vol. 50, no. 1, 1955/56 (published 1957)

VULKANOV, A. Contribution to the study of dry-land reptiles (Tricladida-Terricola) in Bulgaria. p. 401.

Monthly List of East European Accissions (EEAI), LC. Vol. 8, No. 2 February 1959, Unclass.

VULKANOV, Aleksandur; MARINOV, Teniu

An addition to the catalog of the Black Sea fauna. Izv Zool inst BAN 17:51-59 '64.

VULKANOV, A.
SURNAME (in caps); Given Names

Country: Bulgaria

Academic Degrees: Professor

Affiliation: not indicated

Source: Sofia, Priroda, No 1, Jan/Feb 61, pp 71-72

Data: "A New Fish Species in the Black Sea."

VULKANOV, Vl.

Tests with urea as fertilizer of wheat. Izv Inst "Nikola Pushkarov" no.3:139-179 '62.

SOV/120-59-2-41/50

AUTHOR: Vulkonskiy, B.M.

TITLE: Determination of the Luminous Characteristics of Photoresistors (Opredeleniye svetovykh kharakteristik fotosoprotivleniy)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 2, pp 136-138 (USSR)

ABSTRACT: The relative change in layer resistance of a PbS photocell over a range of intensities from 2.5×10^{-5} to 8×10^{-3} watts per sq centimetre has been measured at three temperatures: room temperature; cooled by solid CO_2; cooled by liquid air. The accuracy of measurement, which is mainly that of the output indicator, is ± 5% when the relative resistance change is greater than 10% and ± 10% when it is less. The principle of the method is to measure the change in output voltage across the load resistance as the light intensity varies. The circuit used is shown in Fig 1. As indicated in that figure, a constant polarizing potential was applied to the photoresistor (on the right hand side of Fig 1) together with a small alternating voltage. With a suitable choice of the shunting capacity C and the inductance of the secondary of the transformer L , the

Card 1/3

Determination of the Luminous Characteristics of Photoresistors

equivalent circuit is as shown in Fig 2 (a.c. component only). The signal from the load R_H is applied to an amplifier with an amplification factor k so that the signal at the output of the amplifier is given by:

$$U_{m\ out} = k(\omega)\ U_{m\ in} = k(\omega)\ E_{OTp}/(1+p) \qquad (1)$$

where p is the ratio of the load resistance to the resistance of the specimen. The relative change in the resistance of the specimen is then given by:

$$\Delta R/R_{\Phi T} = (1 + p_T)\ (1 - U_{m\ out\ T}/U_{m\ out}) \qquad (4)$$

where the suffix T denotes quantities obtained in the absence of illumination. Since the quantity p_T is known, the relative change in the resistance of the specimen can be calculated from Eq (4) by measuring the amplitude of the signal at the output of the amplifier corresponding to a known level of illumination. Using this method the characteristics of PbS photoresistors have been measured by means of a circuit, the block diagram of which is shown in Fig 3; the results are shown in Figs 4 and 5. Fig 4 shows the relative change

Card 2/3

Determination of the Luminous Characteristics of Photoresistors

in the resistance as a function of the intensity (mW/cm^2). The open circles refer to uncooled specimens, the triangles refer to solid carbon dioxide temperatures and the crosses refer to liquid air temperatures. The characteristic for the uncooled specimen is roughly linear while in the other two cases it is linear for small illuminations and then flattens off. To determine the sensitivity of the photoresistors they were illuminated with modulated light. The corresponding curves are shown in Fig 5. The points are marked as in Fig 4.

Card 3/3 There are 5 figures.

ASSOCIATION: Voyenno-morskaya akademiya korablestroyeniya i vooruzheniya
(Naval Academy for Shipbuilding and Armaments)

SUBMITTED: April 1, 1958

VULKOV, D. S.

Correctness of the experessions for determining the course, speed and acceleration of the piston in a symmetrical (axial) crankshaft mechanism. Godishnik mash elekt 12 no. 3: 11-22 '62 [publ. '63].

VULKOV, G.; DUMUKOV, Kr.; RAICHEV, R.

Primary tubal carcinoma (10 year observations in the NIOI Ginecological Clinic). Akush. ginek. (Sofiia) 3 no.2: 36-43 '64

VULKOV,G.; TSANEV,K.

On complications in radioactive gold (Au-198) therapy of ovarian cancer (massive, diffuse peritoneal fibrosis). Akush. ginek. (Sofia) 3 no.1:59-63 '64.

*

RAICHEV,R.; VULKOV,O.; VELIZAROVA, K.

Apropos of female genital changes in leukemia. Akush. ginek. (Sofiia) 3 no.2 64-70 '64

SIVCHEV, S.; VELIZAROV, A.; PELOVA, N.; PETRINSKA, S.; UZUNOV, P.; TAKOV, R. VULKOV, Iv.

Pathomorphology in the influenza epidemic of 1959. Suvrem med., Sofia no.7:61-67 '61.

1. Katedra po patologichna anatomiia pri Visshiia meditsinski institut, Sofia. Rukov. na katedrata prof. B. Kurdzhiev.

(INFLUENZA pathol)

VULKOV, I.

On the value of PAS reaction for determining the type of acute leucosis. Doklady BAN 16 no.3:325-328 '63.

1. Submitted by Academician A.I. Hadjiolov [Khadzhiolo., A.I.].

VULKOV, I.

On the value of PAS reaction for determining the type of acute leucosis. Dokl. Bolg. akad. nauk 16 no.3:325-328 '63.

1. Submitted by Academician A.I. Hadjiolov.
(LEUKEMIA, MYELOCYTIC)
(LEUKEMIA, LYMPHOCYTIC)

VULKOV, Ilia

Trends in the application of various forms and systems of labor wages. Trud tseni 4 no.2:37-46 '62.

VASILEV, D.; VULKOV, Iv.

Introduction of tobacco in popular medicine of the country, in treatment of pellagra in the preceding century. Suvrem. med., Sofia 9 no.3:88-90 1958.

1. Iz Okoliiskata bolnitsa--gr. Botevgrad (Gl. lekar: D. Vasilev).
(TOBACCO, ther. use
pellagra in popular med. in 19th century (Bul))
(PELLAGRA, ther.
tobacco in popular med. in 19th centyry (Bul))
(HISTORY, MEDICAL
tobacco in ther. of pellagra in 19th century (Bul))

VULKOV, Iv.

Histological studies on extramedullary hematopoiesis and its relation to blood vessels in leukemia. Nauch tr. vissh. med. inst. Sofiia 42 no.1:35-48 '63.

1. Predstavena ot prof. d-r B. Kurdzhiev, rukovoditel na Katedrata po patologichna anatomiia pri VMI [Vissh meditsinski institut] - Sofiia.
(LEUKEMIA) (HEMATOPOIESIS) (BLOOD VESSELS) (HISTOLOGY)

Vulkov, Iv.

VULKOV, Iv., kruzhochnik.

A type of function test in hypertension. Suvrem.med., Sofia 6 no.7: 76-81 1955.

1. Iz Klinikata po propedevtika na vutreshnite bolesti pri Visshiia meditsinski institut V.Chervenkov, Sofiia (direktor: prof. Iv.Ionkov, rukovoditel na kruzhoka: Al.Stanchev).
(HYPERTENSION, physiology,
water test)

VULKOV, L.N.

Four cases of lightning injury. Suvrem. med., Sofia 9 no.5:109-112 1958.

1. Iz Terapevtichnogo otdelenie na Okolliskata bolnitsa v.g. Botevgrad (G. lekar: D. Vasilev)

(LIGHTNING, inj. eff.
case reports (Bul))

VULKOV, K.

Preparation for autumn sowing. p. 1.

Vol. 6, no. 8, Aug. 1955
MASHINIZIRANO ZEMEDELIE
Sofiya, Bulgaria

So: Eastern European Accession Vol. 5 No. 1 Jan. 1956

VULKOV, K.

Successes of cooperative farms in plant breeding. p. 22.

Vol. 10, no. 9, Sept. 1955
KOOPERATIVNO ZEMEDELIE
Sofiya, Bulgaria

So: Eastern European Accession Vol. 5 No. 1 Jan. 1956

VULKOV, K.

Let us gather the crop without losses. p. 3.
(Kooperatvino Zemedelie, Vol. (12) no. 5, May 1957. Sofiia, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

VULKOV, K.

Countering the dullness which exists in putting science into practice. p.1.
KOOPERATIVNO ZEMEDELIE, Sofiya, Vol. 11, no. 2, Feb. 1956

SO: Monthly List of East European Accessions, (EEAK), LC, Vol. 5, No. 6 June 1956, Uncl.

VULKOV, K.

Some basic problems of spring sowing. p.1.
KOOPERATIVNO ZEMEDELIE, Sofyia, Vol. 11, no. 3, Mar. 1956.

SO: Monthly List of East European Accessions, (EEAK), LC, Vol. 5, No. 6 June 1956, Uncl.

VULKOV, Khr., inzh.

The small radio receivers. Mashinostroene 11 no.7/8:49 Jl-Ag '62.

GEORGIEVA, Dafinka, inzh.-khim.; VULKOV, Petko, inzh.

Some problems of the corrosion resistance of industrial smokestacks. Stroitelstvo 10 no.4:21-23 Jl-Ag '63.

DONCHEV, St.; BALTOV, Iv.; VULKOV, P.

Slow thermal decomposition of the Pernik Mine coal in the temperature range of 200 to 800°C. Godishnik khim tekh 9 no. 1:121-132 '62 [publ. '63].

VULKOV, Petko, inzh.

Faster method of determining the volumetric content and probable mark of cement according to Brinnel. Stroitelstvo 10 no. 6: 8-9 N-D '63.

VULKOV, St., inzh.

Ultrasound. Nauka i tekh mladezh 15 no.12:11-13 D '63.

VULKOV, St. inzh.

Printed radio circuits. Nauka i tekh mladezh 14 no.6:27 Je '62.

VULKOV, T., dots.; LALOVA, M.; KHADZHIPETROVA, Ek.

Therapeutic value of complex balneological therapy of tubal obstruction due to nonspecific inflammation in the Bania - Karlovsko resort. Akush. ginek.(Sofiia) 2 no.6:13-22 '63.

VULKOV, T.; PIPERKOV, T.; ANDREEV, D.; KIS'OVA, R.

Effect of the carpet weaving occupation on the menstrual function. Akush. ginek. (Sofiia) 3 no.6:37-47 '64.

VULKOV, T.; LALOVA, M.

On the necessity of roentgenologic examination of the sella turcica in amenorrhea. Akush. ginek. (Sofiia) 4 no.1:35-40 '65.

1. VMI, Plovdiv, Katedra po akusherstvo i ginekologiia (Rukovoditel: prof. L. Lambrev).

VULKOV,T.; SLAVOV, Iv.

Apropos of the treatment of hyperemesis gravidarum. Akush. ginek. (Sofia) 3 no.1:26-28 '64

*

VULKOV, T.

Meckel's diverticulum in obstetric and gynecological practice.
Khirurgiia, Sofia 9 no.6:524-529 1956.

1. Vissh meditsinski institut I. P. Pavlov--Plovdiv, Katedra po akusherstvo i ginekologiia, zav. katedrata: prof. L. Lambrev.
(MECKEL'S DIVERTICULUM, complications,
gyn. & obst. (Bul))
(GYNECOLOGICAL DISEASES, complications,
Meckel's diverticulum (Bul))

DONEV, M.; VULKOV, T.

Effect of tissue preparations on certain ovarian dysfunctions and dysmenorrhea. Khirurgiia, Sofia 9 no.2:144-148 1956.

1. Vissh meditsinski institut I. P. Pavlov, Plovdiv. Institut po farmakologiia Vr. direktor: dots. P. Mironov. Klinika po akusherstva i ginekologii. Direktor: dots. L. Lambrev.

(DYSMENORRHEA, therapy,
tissue ther. (Bul))
(TISSUE THERAPY, in various diseases,
dysmenorrhea. (Bul))

VULKOV, T. BULGARIA

[Academic Degrees] Docent

[Affiliation] Chair of Obstetrics and Gynecology with the Higher Medical Institute (Katedra po akusherstvo i ginekologiya pri VMI), Plovdiv; Director: Professor L. LAMBREV.

[Source] Sofia, Akusherstvo i Ginekologiya, No 3, 1962, pp 33-36.

[Data] "Ectopic Pregnancy in an Atretic and an Accessory Tube."

Co-author:

TSVETKOV, T., Docent

VULKOV, T.; IAKUBOV, Ius.; SLAVOV, Iv.

Prevention of rupture of the uterus in labor. Khirurgiia, Sofia 8 no.3:266-272 1955.

1. Vissh meditsinski institut I.P.Pavlov-Plovdiv akushero-ginekologichna klinika Direktor: dots. L. Lambrev.
(LABOR, complications,
uterus rupt., prev.)
(UTERUS, rupture,
in labor, prev.)

VULKOV, Todor V., inzh.

Modern methods for the gasification of liquid fuels. Tekhnika Bulg 11 no.1:33-35 '62.

VULKOV, Todor V., inzh.

Gasification of the lignite of the Chukurovo Mine. Tekhnika Bulg 11 no.2:73-75 '62.

1. ZOM, gara Elin-Pelin.

VULKOV, T., dotsent; TSVETKOV, T.

Ectopic pregnancy in an atresic and accessory tube. Suvr. med. 13 no.3:33-36 '62.

(PREGNANCY, TUBAL)

VULKOV, T.; PIPERKOV, T.

Apropos of preventive examination with special reference to oncological diseases. Result of preventive examinations. Akush. ginek. (Sofiia) 3 no.2: 12-23 '64

VULKOV, T.; SLAVOV, Iv.

Our observations on complications in pregnancy, labor and postpartum in a case of uterine myoma. Akush. ginek. (Sofiia) 3 no.2:70-79 '64

DIMITROV, M.; VULKOV, V.

Radiotherapy of cancer of urinary bladder. Khirurgiia, Sofia 10 no.4: 320-328 1957.

1. Okruzhen onkologichen dispanzzer O Sofiia.
(BLADDER, neoplasms
radiother. (Bul))
(RADIOTHERAPY, in var. dis.
cancer of bladder (Bul))

VULKOV, V.

The leading store managers from the Sofia District exchange experiences. p. 19
(NARODNA KOOPERATSIIA, No. 10, Oct. 1952, Sofyia.

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSORIES, Vol. 2, #8 Library of Congress, August 1954, Uncl.

VULKOV, V.

Treatment of superficial injuries of the skin and mucous membranes caused by ionizing radiations. Khirurgiia, Sofia 10 no.10:925-930 1957.

1. Sofiiski Okruzhen Onkologichen Dispanzer. Gl. lekar: M. Dimitrov.
(RADIATIONS, eff.
inj. of skin & mucous membranes, ther.)
(SKIN, eff. of radiations on
inj. of ionizing radiations, ther.)
(MUCOUS MEMBRANES, eff. of radiations on
same)

ANDREYEV, Vl.; VULKOV, V.S. (Bolgariya, Sofiya, ul. Graf Ivantsev, 49); PENCHEV, P.; KUTINCHEV; MUSTAKOV; DOGRAMADZHIYEV; TOLEV; PORFIROV

Distribution and results of treatment of skin cancer in the Bulgarian People's Republik. Vop.onk. 7 no.5:35-41 '61. (MIRA 15:1)

1. Iz nauchno-issledovatel'skogo onkologicheskogo instituta (dir. - prof. Ves. Mikhaylov), Nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (dir. - prof. P. Popkhristov) kafedry kozhno-venericheskikh zabolevaniy Vysshego meditsinskogo instituta v Sofii (zav. - prof. L. Popov) i kafedry kozhno-venericheskikh zabolevanii Vysshego meditsinskogo instituta v Plovdive (zav. - prof. Buchvarov).

(BULGARIA--SKIN--CANCER)

KIRKOV, K., khim.; RUSCHEV, T., khim.; VULKOVA, N., inzh.

Transparent coloring of nitrocellulose varnishes in furniture industry. Durvomebel prom 6 no. 2:10-13 Mr-Ap '63.

KIRKOV, Kiril, khim.; VULKOVA, Nora, inzh.; DEIANOV, Deian, el. inzh.

Electrostatic application of varnish in the furniture industry.
Durvomebel prom 7 no.4:14-18 Jl-Ag '64.

IONKOV, Iv.; ANDREEV, Ig.; STEFANOVA, Ant.; VULKOVA-GANEVA, N.; NIKOLOV, N.

Dietotherapy in rheumatism. Nauch. tr. vissh. med. inst. Sofia 40 no.3: 37-49 '61.

1. Predstavena ot prof. Iv. Ionkov, Ruk. na Katedrata po propedevtika na vutreshnite bolesti.

(RHEUMATISM nutrition & diets)

BABUSHKINA, M.I., kand.tekhn.nauk; PISHCHURNIKOV, A.F., inzh.; ZITSER, Z.I., inzh.; VULKOVICH, Z.M., inzh.; BORISOVA, Ye.S., inzh.

Roof tiles from glass and sand. Stroi.mat. 9 no.9:30 S '63. (MIRA 16:10)

VULLO, I.I. (Penza)

Surgeon-innovator. Vest. khir. 94 no.1:131-134 Ja '65. (MIRA 18:7)

VULLO, I.I.

Improvement of health conditions on dairy farms. Zdrav. Ros. Feder. 4 no.7:34-37 Je '60. (MIRA 13:9)

1. Iz Penzenskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
(PENZA PROVINCE--DAIRYING--HYGIENIC ASPECTS)

ZINGER, N.M., kand.tekhn.nauk; ANDREYEVA, K.S., inzh.; VUL'MAN, F.A., inzh.

Use of the "Ural computer in calculating multiring hydraulic networks. Teploenergetika 7 no. 12:44-52 D '60. (MIRA 14:1)

1. Vsesoyuznyy teplotekhnicheskiy institut i TSentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii.
(Heating from central stations)
(Steam power plants)

VUL'FAN, F.A., inzh.

Use of the "Ural-1" electronic digital computer for calculating the thermal network of a steam turbine system. Teploenergetika 8 no.8:37-40 Ag '61. (MIRA 14:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii.

(Steam turbines)
(Electronic digital computers)

VUL'MAN, F.A., inzh.

Calculation of parameters and indices of a thermal network using a high-speed digital computer. Teploenergetika 10 no.9:2-5 S '63. (MIRA 16:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii.

(Steam turbines)

VUL'MAN, F.A., inzh.; VORONINA, V.P., inzh.

Calculation of thermodynamic properties of water and water vapor by means of a high-speed computer using the Zagoruchenko-Kazavchinskii equation. Teploenergetika 11 no.6:64-65 Je '64. (MIRA 18:7)

1. Gosudarstvennyy vsesoyuznyy tsentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii.

SOV/96-59-9-6/22

AUTHORS: Simoyu, M.P., Vul'man, F.A. and Otavtseva, S.A. (Engineers)

TITLE: The Thermal Design of a Boiler on a 'Ural' Computer

PERIODICAL: Teploenergetika, 1959, Nr 9, pp 32-39 (USSR)

ABSTRACT: In designing an automatic control system for a boiler it is necessary to know its static characteristics, which is equivalent to making a thermal design at each of several different loads; this involves so many calculations that a great number of variants cannot be worked out. It was accordingly decided to programme a boiler design on a 'Ural' type computer. The 'Ural' is a small universal electronic digital computer which can carry out 100 operations a second. The main characteristics of the computer are briefly explained. The basic material in drawing up the best sequence of operations was derived from the standard design method of the All-Union Thermo-Technical Institute and the Central Boiler Turbine Institute. From the mathematical standpoint this method consists in solving a complicated system of non-linear algebraic equations by a method of successive approximations. The form of the system of equations used for calculating the convective heating surface is given as an

Card 1/4

example. Because of the nature of the 'Ural' computer it is inconvenient to feed it much data in the form of tables, and the methods by which the usual tables were replaced by equations are explained. The use of enthalpy diagrams is avoided by making direct calculations of heat content every time that it is required. The heat transfer coefficients and temperature heads were not taken from nomograms but from the equations from which the nomograms are constructed. The boiler design programme was then coded on perforated tape. Once the programme is drawn up a modern boiler of any construction can be designed, provided only that certain tables of initial data are filled. The initial data required for the design are of three kinds: numerical data for the boiler as a whole; numerical data for individual heating surfaces; and numerical data governing the sequence of design and the type of heating surface. Thus to make a thermal design it is necessary to complete the data called for in Table 1 for design of the boiler as a whole, in order to provide the data called for in Table 2 to determine the order of calculations and the type of heating surface. The method

The Thermal Design of a Boiler on a 'Ural' Computer

of filling up these tables is explained. Approximate temperatures of gas and working substance at different parts of the boiler are entered in Table 1. The accuracy of the initially selected values greatly influences the computing time. Then Tables 3 and 4 must be completed with the initial data for each heating surface, characterising its geometry, excess-air factors, working-medium pressures and so on. The particular course of the design on the 'Ural' computer is then explained, and a block diagram of the programme is shown in Fig. 2. The results of the calculations are provided in the form shown in Table 6. If the design is not in balance the calculations recommence automatically, using the intermediate temperatures determined at the first attempt. If the initial estimate of temperatures was a good one the operating time of the computer is about 30 minutes. A repeat calculation requires about 50 minutes, and a further approximation another 30-50 minutes. Hydraulic aerodynamic and other calculations can easily be included in the design. If the computer is used for boiler design in this way the designers are freed to consider

The Thermal Design of a Boiler on a 'Ural' Computer

constructional features of the boiler and to evaluate the different variants. It will also be possible to design a great many variants, and so to design boilers more economically.

Card 4/4 There are 2 figures, 6 tables and 4 references, 3 of which are Soviet and 1 English.

ASSOCIATION: TsNIIKA

S/096/60/000/012/006/008
E041/E421

AUTHORS: Zinger, N.M., Candidate of Technical Sciences, Andreyeva, K.S., Engineer and Vul'man, F.A., Engineer

TITLE: The Design of Multiple-Ring Hydraulic Networks on the "Ural" Electronic Computor

PERIODICAL: Teploenergetika, 1960, No.12, pp.44-52

TEXT: The All-Union Thermal Engineering Institute (ВТИ) has developed a general purpose programme suitable for calculations on any kind of hydraulic network. Similar uses of the "Ural" computor have been published before (Ref.3). The basic equations are Kirchhoff's for nodes

$$\Sigma V = 0 \qquad (1)$$

and meshes

$$\Sigma_s V^2 = 0 \qquad (2)$$

where the latter takes account of the quadratic variation of pipe loss with flow. An arbitrary distribution of water flow is assumed which satisfied Eq.(1). The left-hand side of Eq.(2) will

Card 1/ 3

The Design of Multiple-Ring Hydraulic Networks on the "Ural" Electronic Computor

not then equal zero but will represent the non-viscous loss of pressure. This supplementary loss is redistributed and a further calculation made. The process is repeated until the value of the non-viscous loss does not change. Two common situations which give rise to distinctive sub-routines are shown in Fig.1a (an isolated ring) and Fig.1b (two adjacent rings). The method has been applied to a distinct heating system in Moscow consisting of 9 rings (Fig.2). The maximum allowable non-viscous pressure loss is 500 kg/m^2. In Fig.2a results are shown for a manual calculation by a skilled computer over a period of 15 hours. The upper figure quoted against each pipe is the initial assumption, the lower figure is the result after seven successive approximations. In Fig.2b the respective figures apply to a machine calculation. Fig.3 is a diagram illustrating the steps in the successive approximation. There are ten such steps and these are described in the text. The corresponding programme schematic is in Fig.4 and refers, of course, specifically to the "Ural" machine. It is

S/096/60/000/012/006/008
E041/E421

The Design of Multiple-Ring Hydraulic Networks on the "Ural" Electronic Computor

necessary to store within the machine the contents of Tables 1a and 1b giving flows and resistances in each length of pipe. The machine produced the 72 values in Table 2 in 12 minutes. Two sets of answers are given, corresponding to widely different initial assumptions. The effect on the final answer is slight. There are 4 figures, 2 tables and 6 references: 4 Soviet and 2 non-Soviet.

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy institut - TsNIIKA
(All-Union Thermal Engineering Institute - TsNIIKA)

Card 3/3

VUL'MAN, G.L.

SOSNO SKIY, Andrey Anan'yevich; POLONIK, Pavel Arten'yevich, inzhener. KHOKHLOV, Viktor Dmit'riyevich, inzhener; SHTEYNBOK, G.Yu., inzhener, nauchchiy redaktor; BEYANTSEVA, V.P., inzhener, vedushchiy redaktor; VUL'MAN, G.L., inzhener, redaktor; POROMOREV, V.A., tekhnicheskiy redaktor.

[Instrument for recording positions of transmitting synchros and potentiometric transmitters] Pribor dlia zapisi polozheniia sel'sinnykh i potentsiometricheskikh datchikov. Pribory dlia obnaruzheniia i izmereriia elektro-staticheskikh zariadov na tekstil'nykh materialakh. Moskva, 1956. 19 p. (Pribory i stendy. Tsne 5m no.P-56-526) (MLRA 10:10)

1. Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii. Filial.
(Recording instruments) (Textile fabrics--Electric properties)

VUL'MAN, G.L.; KULAKOVSKIY, V.B.

Conference on problems of insulating high-voltage electric machines. (MIRA 10:11)
Elek.sta. 28 no.10:92-94 '57.
(Leningrad--Electric machines--Congresses)

VUL'MAN, G.L.

105-6-25/26

AUTHOR 1) Eng. G.L. VUL'MAN (Moscow)
2) Eng. E.M. MAGIDSON.

TITLE Chronicle (Khronika.- Russian)
1) In the department for electrical machines of the TsNTOEP. (V sektsii elektricheskikh mashin TsENTOEP.- Russian)
2) In the technical management of the MES. (V tekhnicheskom upravlenii MES.- Russian)

PERIODICAL 1) Elektrichestvo 1957, Nr 6, pp 94-94 (U.S.S.R.)
2) Elektrichestvo 1957, Nr 6, pp 94-94 (U.S.S.R.)

ABSTRACT 1) In December 1956 the plenary meeting of the department was held. Lectures were delivered on problems connected with the projecting of large turbo- and hydro generators of 200 and 300 MW and concerning the prospects of the development of energetic systems.

2) In connection with the fact that in the Moscow transformer plant the production of three-phase transformers 220/38,5/11 kV with an efficiency of 10 and 2L MVA

CARD 1/2

VUL'MAN, G. L.

32493. Nekotoryye voprosy eksploatatsii turbogeneratorov s vodorodnym okhlazhdeniyem. Elektr. stantsii, 1949, No. 10 s. 33-36.

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

VUL'MAN, Georgiy L'vovich; DEMKOV, Ye.D., redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[Operational testing of generators at electric stations] Ekspluatatsionnye ispytaniia generatorov na elektrostantsiiakh. Moskva, Gos. energ. izd-vo, 1957. 79 p. (MIRA 10:3)
(Electric generators--Testing)

VUL'MAN, G.L.

Oiling the bearings of electric motors. Energetik 4 no.2:39 F '56. (MLRA 9:5)

(Bearings (Machinery))

VUL'MAN G. L.

AZBUKIN, Yu.I.; VUL'MAN, G.L.

Automatic uncoupling connection for starting synchronous compensators with the aid of a starting motor. Prom. energ. 12 no.5: 21-22 My '57. (MLRA 10:6)

(Electric transformers)

VULMAN, G. L.

AZBUKIN, Yu.I., inzh.; VUL'MAN, G.L., inzh.

Using self-disengaging gears for synchronous compensators having an electric starting motor of the console type. Energetik 5 no.10: 34-37 O '57. (MIRA 10:12)

(Electric generators)

ASHKINAZI, A.Ye., KOVAL'SKIY, K.V.; VUL'MAN, O.L., red.; KODKIND, I.I., red.; LARIONOV, G.Ye., tekhn. red.

[Liquid-cooled turbogenerators] Turbogeneratory s zhidkostnym okhlazhdeniem. Moskva, Gos. energ. izd-vo, 1958. 10 p. (MIRA 11:11)

1. Gosudarstvennyy trest po organizatsii i ratsionalizatsii elektrostantsiy, Moskva.
(Turbogenerators--Cooling)

PA 150T40

VUL'MAN, G. L.

USSR/Engineering - Turbogenerators Oct 49
Hydrogen Cooling

"Certain Problems in Operating Turbogenerators With Hydrogen Cooling," G. L. Vul'man, Engr, 4 pl

"Elek Stants" No 10

Compares characteristics of two turbogenerators manufactured by the "Elektrosila" plant in 1946-48 for both hydrogen and air cooling. The TV-100-2 (100,000 kw, 15.75 kv, 3,000 rpm) was tested by the All-Union Elec Eng Inst while the TV-25-2 (25,000 kw, 10.5 kv, 3,000 rpm) was tested by Mosenergo. Urges serial manufacture

150T40

USSR/Engineering - Turbogenerators Oct 49
(Contd)

of hydrogen-cooled units rated for 25,000 kw and above. Recommends further research on hydrogen cooling by the State Trust for Orgn of Regional Elec Power Stations in conjunction with the Inst of Chem Phys, Acad Sci USSR, State Inst of Nitrogen Ind, All-Union Sci [illegible] Inst of Gas and Synthetic Liquid Fuel, etc.

150T40

Experience in operating turbogenerators with hydrogen cooling. Elek.sta. 25 no.11:31-35 N '54. (MLRA 7:11)
(Dynamos)

VUL'MAN, G.L., inzhener (Moskva).

In the section on electric machines of the Central Office of the Scientific and Technical Society of the Electric Power Industry.
Elektrichestvo no.6:94 Je '57. (MLRA 10:8)
(Electric machines)

VUL'MAN, G.L., inzhener.

Aiding the student of the new "Rules concerning the technical operation of electric power stations and networks. Chapter 25. Generators and synchronous compensators." Energetik 3 no.5:21-23 O '53. (MLRA 6:10)
(Dynamos)

VUL'MAN, G. L.

AID P - 2539

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 23/32

Authors : Azbukin, Yu. I., Eng. and Vul'man, G. L., Eng.

Title : Self-releasing clutch for starting motors of synchronous condensers

Periodical : Elek sta, 6, 52-53, Je 1955

Abstract : The article gives a detailed description of the design and operation of an automatic self-releasing clutch installed on starting motors for the operation of synchronous condensers on substations. Standard safety rules applied during the start of operation are listed. One diagram.

Institution : None

Submitted : No date

VUL'MAN, Georgiy Lvovich; IVANOV-SMOLENSKIY, A.V., red.; BORUNOV, N.I., tekhn. red.

[Current trends in the manufacture of turbogenerators] Sovremennye tendentsii v turbogeneratorostroenii. Moskva, Gos. energ. izd-vo, 1961. 55 p. (MIRA 14:7)
(Turbogenerators)