TIMPKO, V.A.

Use of alpine plants in landscaping. Biul. Glav. bot. sada no.51:56-58 '63. (MIRA 17:2)

1. Glavnyy botanicheskiy sad AN SSSR.

TIMPKO, V. A.

25462 MECHAEVA, N. T. i TIMPKO, V. A. K biologii letnikh odnoletnikov semeystva Euphorbiaceae pustyni kara-kum. Botan. Zhurnal, 1948, No. 1, S 113-15.

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948

TIMPKO, V. A.

PA 36/49T39

USSR/Medicine - Rainfall
Medicine - Plants

Jan/Feb 48

"The Biology of the Summer Annuals of the Family Euphobriaceae in the Kara-Kum Desert," N. T. Nechayeva, V. A. Timpko, Ashkhabad, 3 pp

"Botan Zhur" Vol XXXIII, No 1

Describes distribution of subject plants according to relief characteristics and amount of humidity and precipitation. Table shows rainfall data for 1941 - 1944. Much depends on precipitation during the spring.

FDB

36/49T39

PAVLOVICH, N.V., kand. tekhn. nauk; TIMPOT, D.L., doktor tekhn. nauk.

Experimental investigation of p.v.t. values of gaseous and liquid methane. Teploenergetika 5 no.4:69-75 Ap '58. (MIRA 11:5)

1. Moskovskiy energeticheskiy institut.
(Thermodynamics) (Methane)

TIMPOT, D. L.

Subject : USSR/Engineering AID P - 1245

Card 1/1 Pub. 110-a - 6/17

Author : Timpot, D. L., Doc. of Tech. Sci.

Title : Concerning the problem of the dependence of viscosity of steam on pressure

Periodical : Teploenergetika, 1, 27-31, Ja 1955

Abstract : The experimental data obtained by American researchers concerning the viscosity of steam are critically appraised. Sources of error in processing the results of those tests are indicated and it is shown that conclusions reached about the great dependence of viscosity on pressure are not correct. Charts, table, 6 Russian references (1934-50).

Institution : All-Union Heat Technical Institute

Submitted : No date

PINK, Alois, MUDr.

Treatment of ocular herpes with aureomycin. Cesk. ofth. 13 no.2:114-116 Apr 57.

1. Ocni oddeleni KUNZ nem. v Ceskych Budejovicich, primar MUDr. J. Pitter.

(CHLORTETRACYCLINE, ther. use
herpetic keratitis (Cz))
(KERATITIS, ther.
chlortetracycline in herpetic keratitis (Cz))

TIMR, Alois, I MDr

Aniline pencils and the eye. Cesk. ofth. 10 no.3:178-181 Je '54.

1. Z ocniho oddeleni KUNZ v Ceskych Budejovicich, primar MUDr Jaroslav Pitter.

(EYE, wounds and injuries,
*aniline pencil inj.)
(WOUNDS AND INJURIES,
*eye, aniline pencil inj.)
(ANILINE DYES,
*aniline pencil causing eye inj.)

EXCERPTA MEDICA Sec.12 Vol.12/2 Ophthalmology Feb. 58

TIMR A.

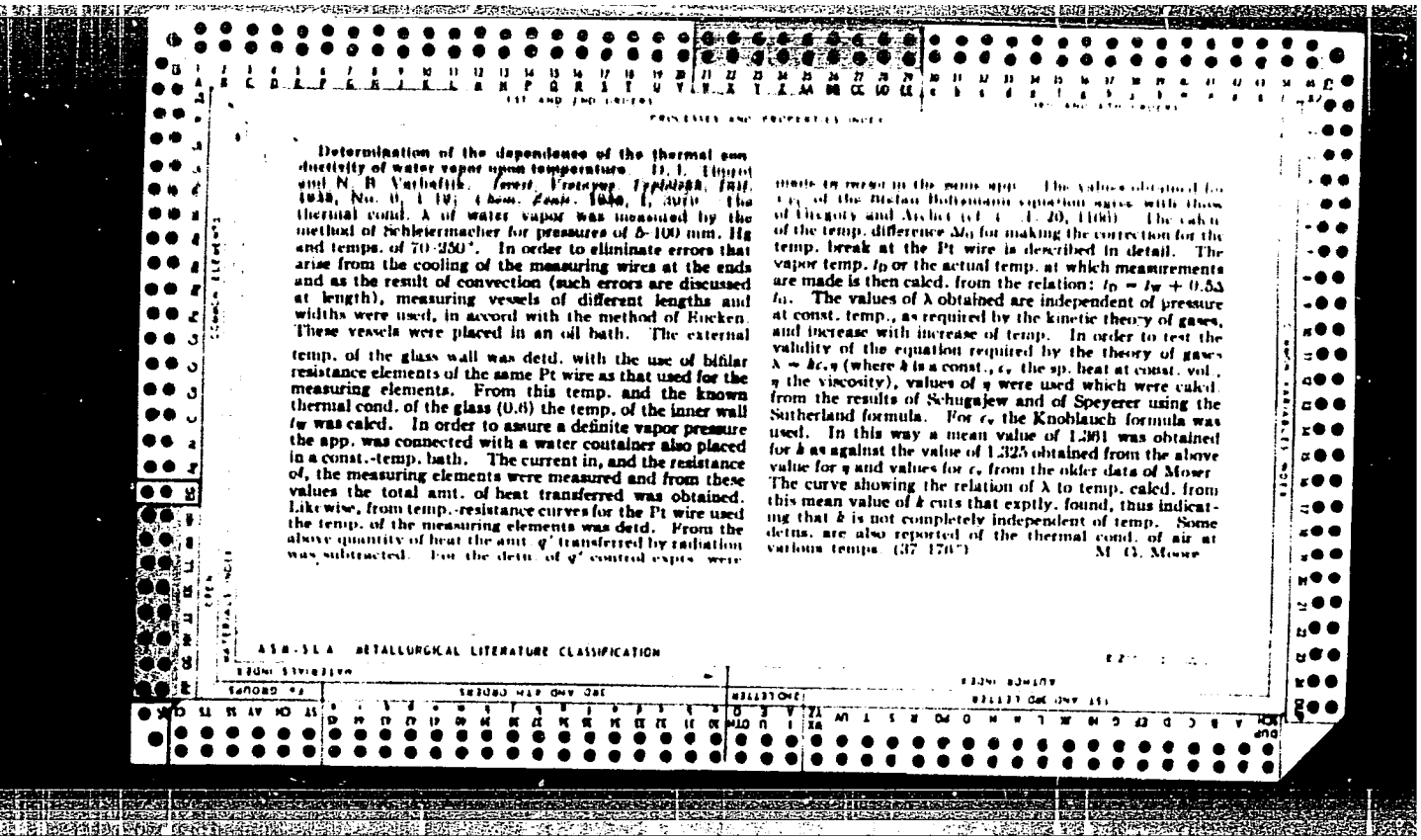
274. TREATMENT OF HERPETIC KERATITIS BY CHLORTETRACYCLINE. Léčení herpetického onemocnění oka aureomycinem. Timr A. ČSL. OFTHAL. 1957, 13/2 (114-116)

Twenty-six cases treated by local and oral application of chlortetracycline. 61.5% healed within 3-8 days, 30.8% up to 22 days while 7.7% were without result. Combination of chlortetracycline and cortisone yields better results.

Zahn - Prague (XII, 50)

TIMROT, Aleksandr Dmitriyevich; BALABANOVICH, Ye.Z.; DUDOROVA, L., red.; SHLYK, M., tekhn. red.

[Prishvin in Moscow region] Prishvin v Moskovskom krae. Moskva, Moskovskii rabochii, 1963. 135 p. (MIRA 16:6)
(Prishvin, Mikhail Mikhailovich, 1873-1954)



Determination of the dependence of the thermal conductivity of water vapor upon temperature. D. L. Hitzel and N. B. Vargaftik. *Trans. Transp. Turbines, Inst. Mech.*, 1938, No. 6, 1 19; (*Chem. Zentr.* 1939, I, 3070). The thermal cond. λ of water vapor was measured by the method of Schleiermacher for pressures of 5–100 mm. Hg and temps. of 70–250°. In order to eliminate errors that arise from the cooling of the measuring wires at the ends and as the result of convection (such errors are discussed at length), measuring vessels of different lengths and widths were used, in accord with the method of Eucken. These vessels were placed in an oil bath. The external temp. of the glass wall was detd. with the use of bifilar resistance elements of the same Pt wire as that used for the measuring elements. From this temp. and the known thermal cond. of the glass (0.6) the temp. of the inner wall t_w was calcd. In order to assure a definite vapor pressure the app. was connected with a water container also placed in a const.-temp. bath. The current in, and the resistance of, the measuring elements were measured and from these values the total amt. of heat transferred was obtained. Likewise, from temp.-resistance curves for the Pt wire used the temp. of the measuring elements was detd. From the above quantity of heat the amt. q' transferred by radiation was subtracted. For the detn. of q' control expts. were made in vacuo in the same app. The values obtained for q' of the Stefan-Boltzmann equation agree with those of Hagen and Archer (cf. C. 20, 1100). The calcn. of the temp. difference Δt_0 for making the correction for the temp. break at the Pt wire is described in detail. The vapor temp. t_D or the actual temp. at which measurements are made is then calcd. from the relation: $t_D = t_W + 0.5\Delta$ t_0. The values of λ obtained are independent of pressure at const. temp., as required by the kinetic theory of gases, and increase with increase of temp. In order to test the validity of the equation required by the theory of gases $\lambda = k c_v \eta$ (where k is a const., c_v the sp. heat at const. vol., η the viscosity), values of η were used which were calcd. from the results of Schugajew and of Speyerer using the Sutherland formula. For c_v the Knoblauch formula was used. In this way a mean value of 1.301 was obtained for k as against the value of 1.325 obtained from the above value for η and values for c_v from the older data of Mower. The curve showing the relation of λ to temp. calcd. from this mean value of k cuts that exptly. found, thus indicating that k is not completely independent of temp. Some detns. are also reported of the thermal cond. of air at various temps. (37–170°). M. G. Mowe

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

TIMR, ALOIS

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees:

Affiliation:

Source: Prague, Prakticky Lekar, Vol 41, No 14, 1961, pp 650-651.

Data: "A New Concept of the Tasks of the Clinical Medical Photography."

Authors: TIMR, Alois, MD, Eye Department, KUNZ /Krajsky ustav narodniho zdravi; Kraj Department of Public Health/ (Ocni oddeleni KUNZ), Ceske Budejovice; Director: J. PITTER, MD.

SEBEK, Alois, MD, Department of Pathological Anatomy, KUNZ (Patologicko-anatomicke oddeleni), Ceske Budejovice.

149

GPO 981643

TIMR, Alois

SURNAME, Given Names

(4)

Country: Czechoslovakia

Academic Degrees:

Affiliation:

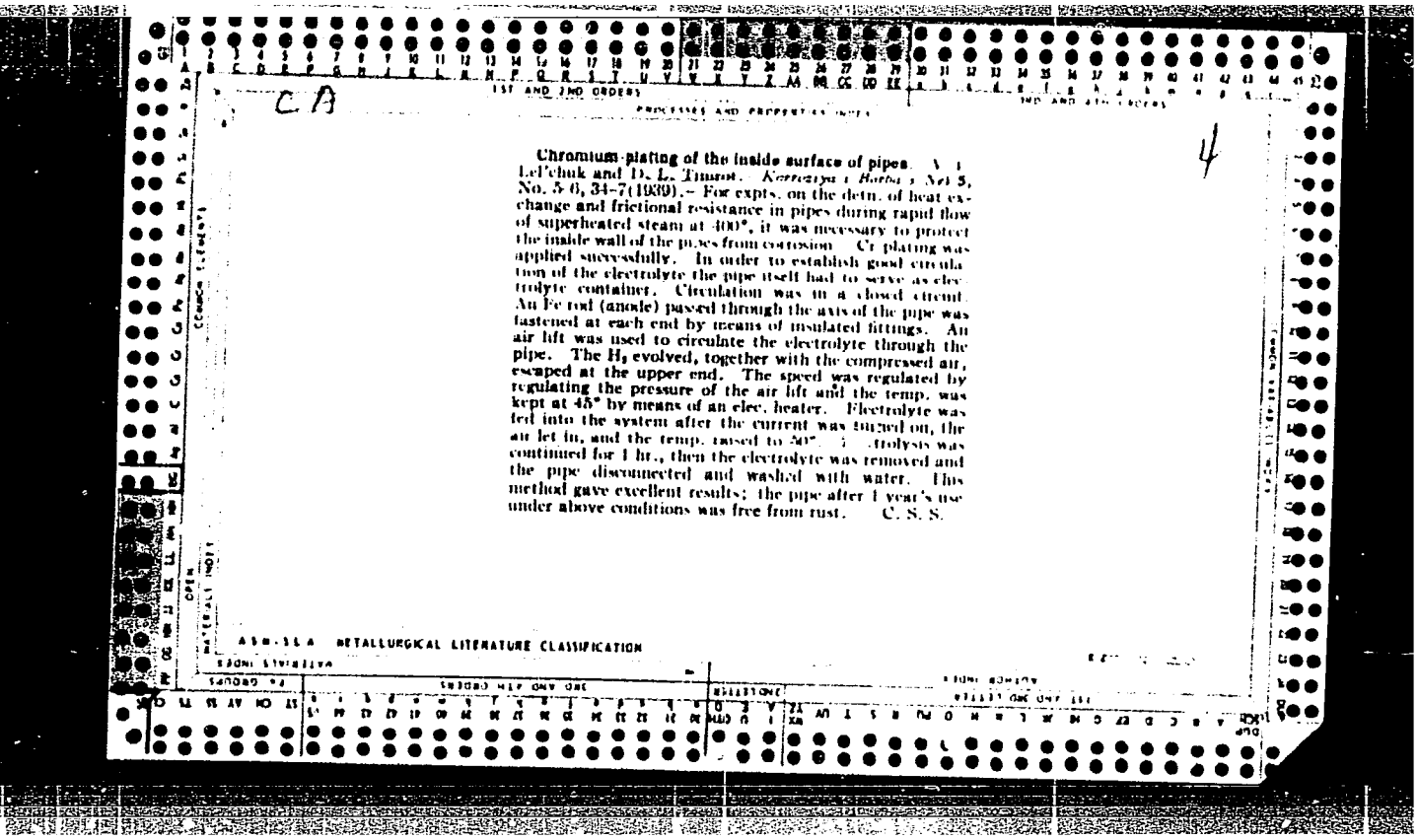
Source: Prague, Prakticky Lekar, Vol 41, No 14, 1961, pp 650-651.

Data: "A New Concept of the Tasks of the Clinical Medical Photography."

Authors: TIMR, Alois, MD, Eye Department, KUNZ /Krajsky ustav narodniho zdravi; Kraj Department of Public Health/ (Ocni oddeleni KUNZ), Ceske Budejovice; Director: J. PITTER, MD.

SEBEK, Alois, MD, Department of Pathological Anatomy, KUNZ (Patologicko-anatomicke oddeleni), Ceske Budejovice .

25

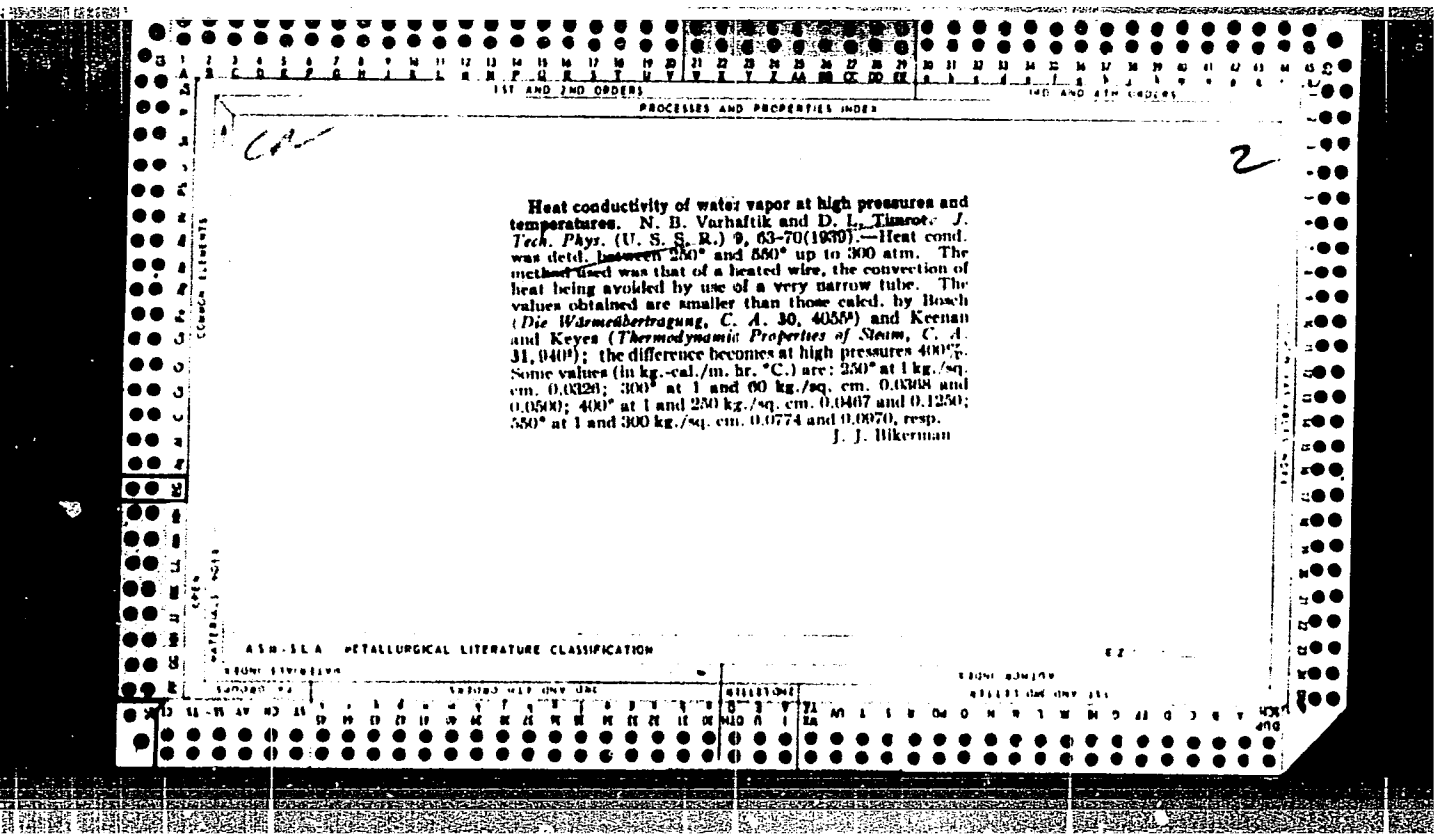


CA

4

Chromium-plating of the inside surface of pipes. V. I. Lel'chuk and D. L. Timrot. *Korroziya i Borba s Nei.* 5, No. 5-6, 34-7(1939).— For expts. on the detn. of heat exchange and frictional resistance in pipes during rapid flow of superheated steam at 400°, it was necessary to protect the inside wall of the pipes from corrosion. Cr plating was applied successfully. In order to establish good circulation of the electrolyte the pipe itself had to serve as electrolyte container. Circulation was in a closed circuit. An Fe rod (anode) passed through the axis of the pipe was fastened at each end by means of insulated fittings. An air lift was used to circulate the electrolyte through the pipe. The H_2 evolved, together with the compressed air, escaped at the upper end. The speed was regulated by regulating the pressure of the air lift and the temp. was kept at 45° by means of an elec. heater. Electrolyte was fed into the system after the current was turned on, the air let in, and the temp. raised to 50°. Electrolysis was continued for 1 hr., then the electrolyte was removed and the pipe disconnected and washed with water. This method gave excellent results; the pipe after 1 year's use under above conditions was free from rust. C. S. S.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

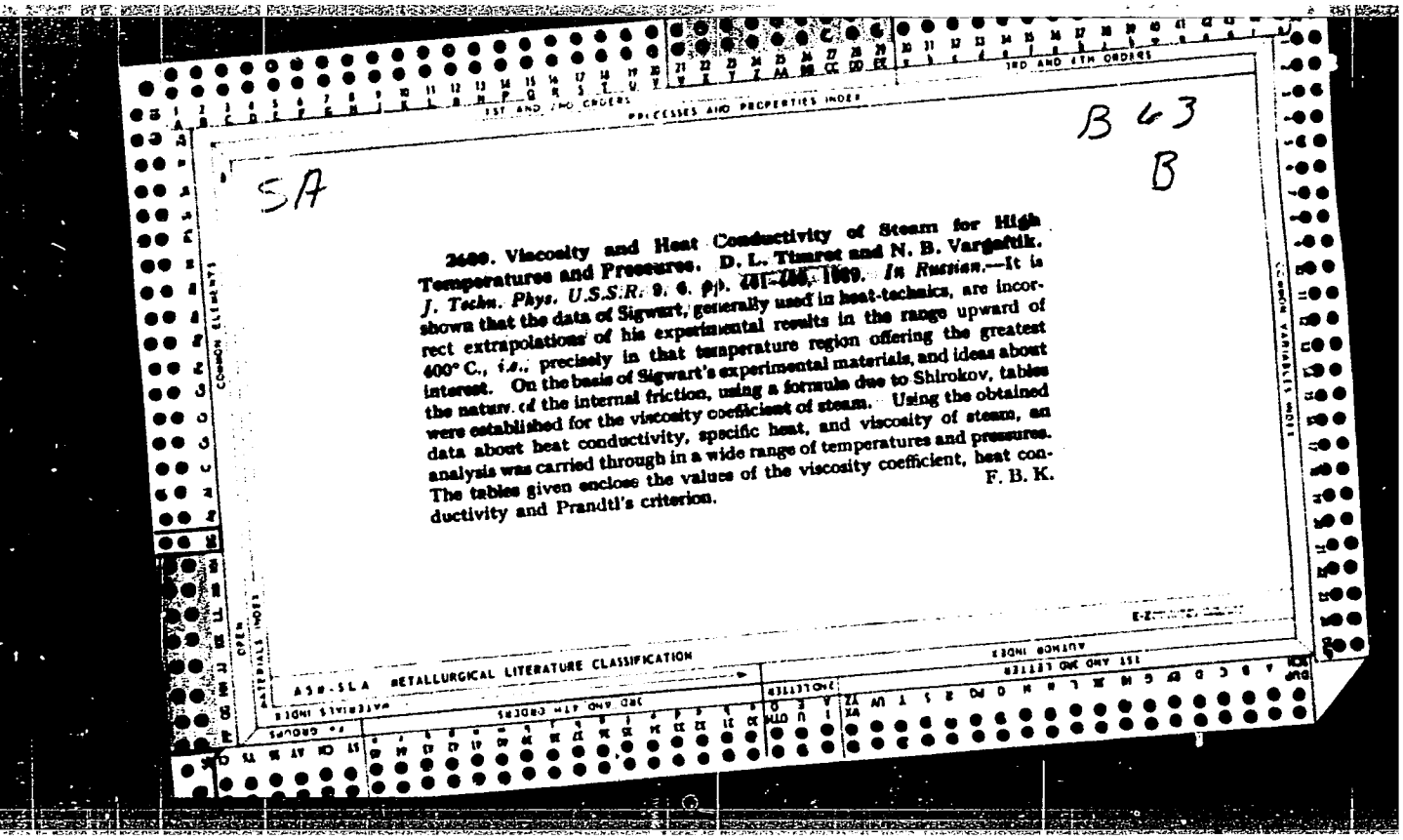
C4-

2

Heat conductivity of water vapor at high pressures and temperatures. N. B. Varhaftik and D. L. Timrot. *J. Tech. Phys.* (U. S. S. R.) 9, 63-70(1939).—Heat cond. was detd. between 250° and 550° up to 300 atm. The method used was that of a heated wire, the convection of heat being avoided by use of a very narrow tube. The values obtained are smaller than those calcd. by Bosch (*Die Wärmeübertragung*, *C. A.* 30, 4055[9]) and Keenan and Keyes (*Thermodynamic Properties of Steam*, *C. A.* 31, 940[9]); the difference becomes at high pressures 400%. Some values (in kg.-cal./m. hr. °C.) are: 250° at 1 kg./sq. cm. 0.0320; 300° at 1 and 60 kg./sq. cm. 0.0308 and 0.0500; 400° at 1 and 250 kg./sq. cm. 0.0407 and 0.1250; 550° at 1 and 300 kg./sq. cm. 0.0774 and 0.0970, resp.

J. J. Bikerman

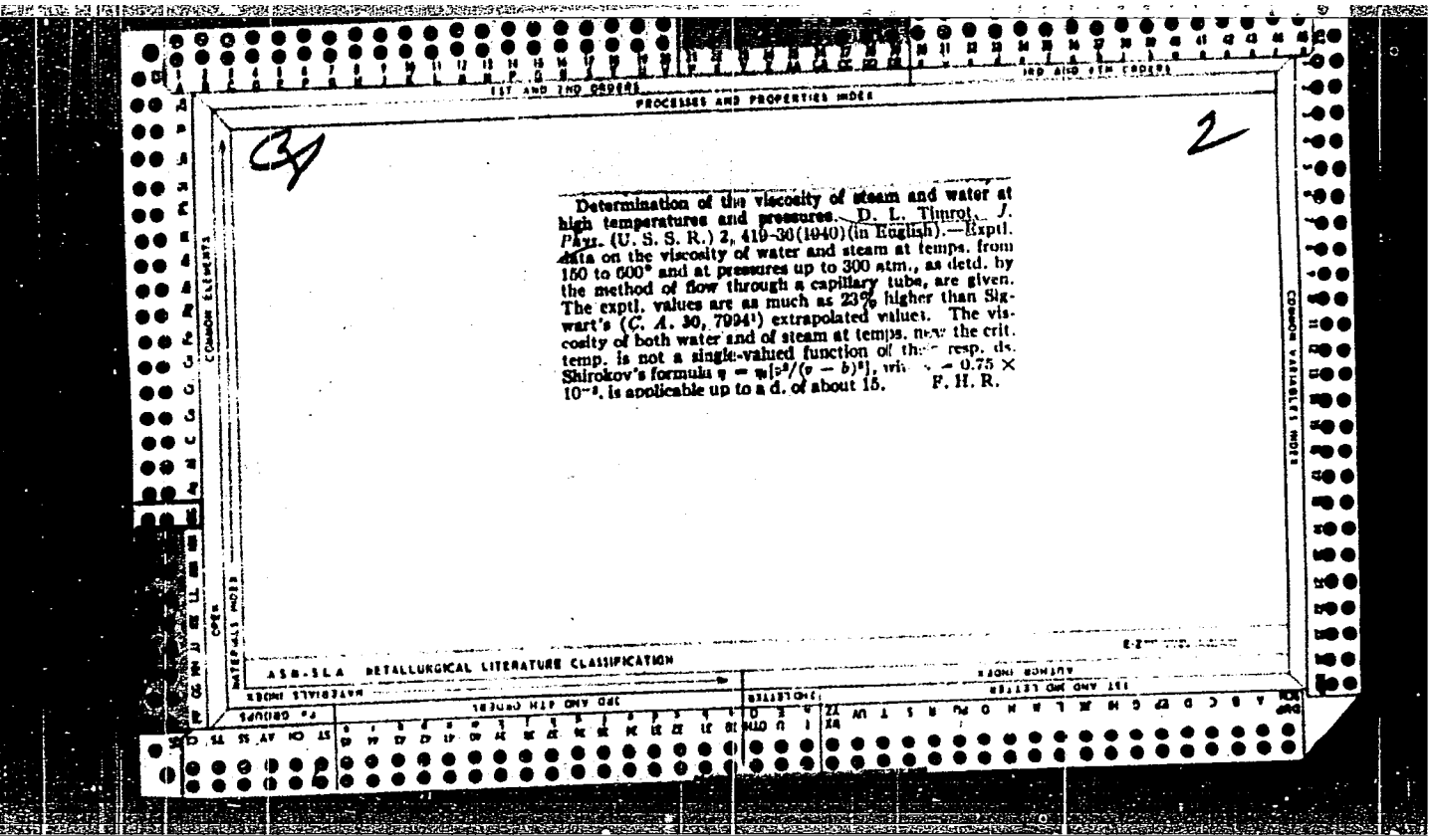
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



SA

B 63
B

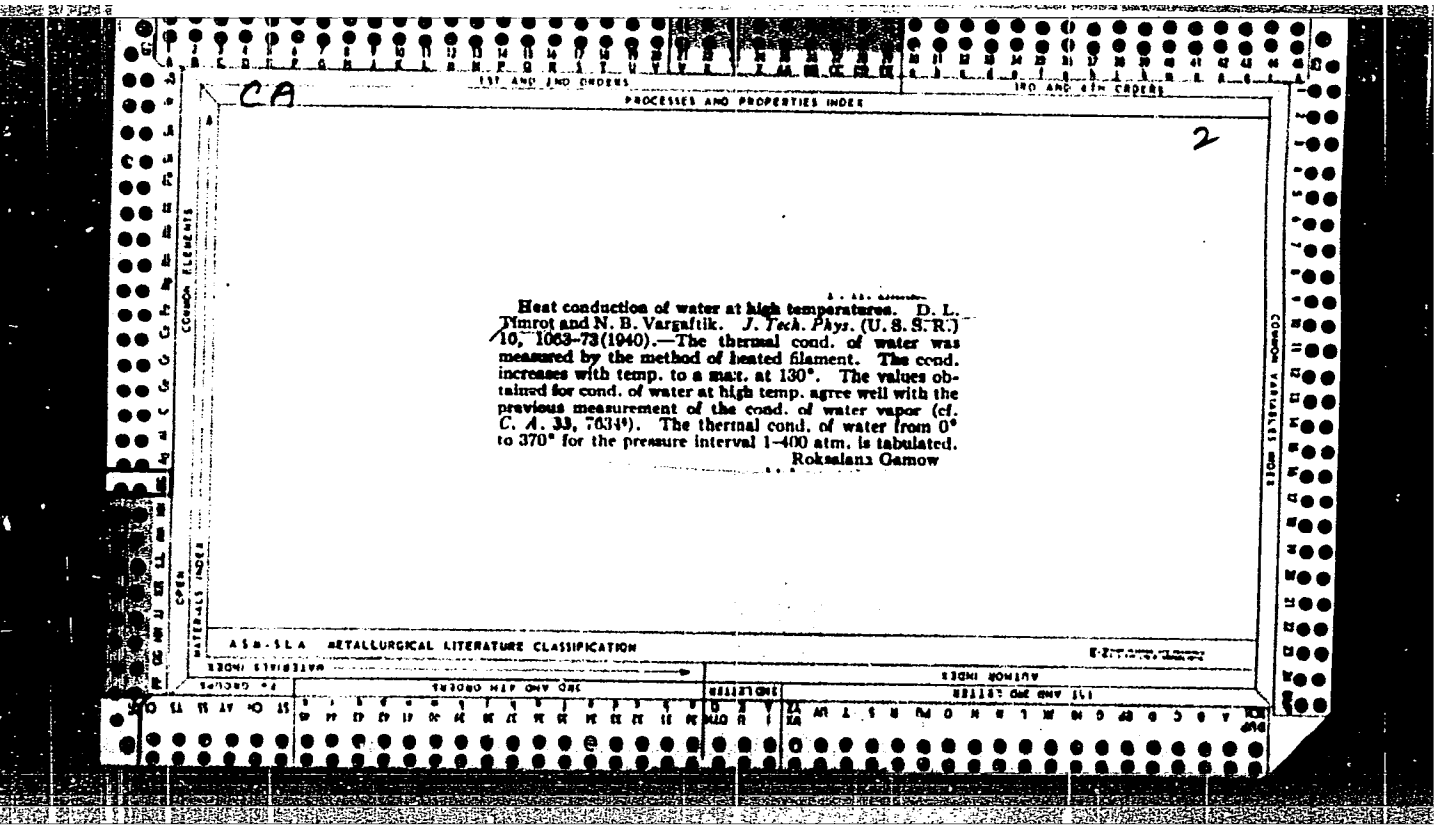
2499. Viscosity and Heat Conductivity of Steam for High Temperatures and Pressures. D. L. Timrot and N. B. Vargaftik. *J. Techn. Phys. U.S.S.R.* 9, 6. pp. 481–486. 1939. *In Russian.*—It is shown that the data of Sigwart, generally used in heat-technics, are incorrect extrapolations of his experimental results in the range upward of 400° C., *i.e.*, precisely in that temperature region offering the greatest interest. On the basis of Sigwart's experimental materials, and ideas about the nature of the internal friction, using a formula due to Shirokov, tables were established for the viscosity coefficient of steam. Using the obtained data about heat conductivity, specific heat, and viscosity of steam, an analysis was carried through in a wide range of temperatures and pressures. The tables given enclose the values of the viscosity coefficient, heat conductivity and Prandtl's criterion. F. B. K.



PROCESSES AND PROPERTIES INDEX

Determination of the viscosity of steam and water at high temperatures and pressures. D. L. Timrot. *J. Phys.* (U. S. S. R.) 2, 419-30(1940)(in English).—Exptl. data on the viscosity of water and steam at temps. from 150 to 600° and at pressures up to 300 atm., as detd. by the method of flow through a capillary tube, are given. The exptl. values are as much as 23% higher than Sigwart's (*C. A.* 30, 7994¹) extrapolated values. The viscosity of both water and of steam at temps. near the crit. temp. is not a single-valued function of the resp. ds. Shirokov's formula $\eta = \eta_0[v^2/(v - b)^2]$, wh[ere] $b = 0.75 \times 10^{-3}$, is applicable up to a d. of about 15. F. H. R.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

PROCESSES AND PROPERTIES INDEX

2

Heat conduction of water at high temperatures. D. L. Timrot and N. B. Vargaftik. *J. Tech. Phys.* (U. S. S. R.) 10, 1063–73(1940).—The thermal cond. of water was measured by the method of heated filament. The cond. increases with temp. to a max. at 130°. The values obtained for cond. of water at high temp. agree well with the previous measurement of the cond. of water vapor (cf. *C. A.* 33, 7634⁹). The thermal cond. of water from 0° to 370° for the pressure interval 1–400 atm. is tabulated.
Roksalana Gamow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

TIMROT, D.L., doktor tekhnicheskikh nauk

Relationship of the viscosity of steam to pressure. Teploenergetika 2 no.1:27-31 Ja '55. (MLRA 8:9)

1. Vsesoyuznyy teplotekhnicheskiy institut
(Viscosity) (Steam)

TIMROT, D.L., doktor tekhnicheskikh nauk, professor.

Distribution of densities of substances at near-critical temperatures. Trudy MEI no.25:8-12 '55. (MLRA 9:7)
(Specific gravity)

TIMROT, D. L.; TSEDERBERG, N. V.;

"Experimental Determination of the Coefficient of Thermal Conductivity for 94% Ethyl Alcohol in the Temperature Range of -75 to 200 C," Zhurnal Tekhnicheskoy Fiziki, Vol XXV, No 14. p. 2458-62, 1955

In the past convection currents prevented the accurate determination of the coefficient of thermal conductivity; the authors therefore developed a special apparatus equipped with baffles which tend to minimize the convection in the test sample.

The results of the experiment are presented in the form of tables, graphs, and formulas. The conculsion made by the authors is that the thermal conductivity of ethyl alcohol, 94% by volume, in solution with water, increases by 5.3% at -70°C and by 6.6% at 70°C with a pressure increase of 100 atmospheres.

Category : USSR/Atomic and Molecular Physics - Statistical Physics Thermodynamics D-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3477

Author : Sirota, A.M., Timrot, D.L.
Inst : All-Union Heat Engineering Institute
Title : Experimental Investigation of the Specific Heat of Water Vapor in the Precritical Region

Orig Pub : Teploenergetika, 1956, No 7, 16-23

Abstract : Description of a new experimental setup for the determination of C_p of water vapor at precritical pressures. Measurement results are given for pressures from 20 to 120 kg/cm^2 and for temperatures from the saturation curve to 380°. An analysis of the measurement accuracy is given.

Card : 1/1

"Experimental Determination of the Heat Conductivity of Liquid Oxygen," Zhurnal Tekhnicheskoy Fiziki, No 8, Aug 56, pp 1849-1856.

26

In this article the authors describe an experimental setup for determining the heat conductivity of liquid and gaseous oxygen. They list the results of their work and compare them with other published data.

The authors report that their data generally conform with those of BOROVIK (Ye. BOROVIK, Zhurnal Eksperimental'noy i teoreticheskoy Fiziki, No 17, 1947, p 328) WHEREAS Hamman's figures are in error by as much as 30% (G. Hamman, Annal. d. Phys., 32, 7, 1938, p 593)

The article presents a detailed description of the experimental methodology and includes several drawings and tables.

TIMROT, D.L., doktor tekhn.nauk; RIVKIN, S.L., kand.tekhn.nauk; SIROTA, A.M., kand.tekhn.nauk; VARGAFTIK, N.B., doktor tekhn.nauk; NIKOLAYEV, V.V., red. MEDVEDEV, L.Ya., tekhn.red.

[Tables of thermodynamic properties of water and steam] Tablitsy termodinamicheskikh svoistv vody i vodianogo para. Izd. 2-oe, dop. Moskva, Gos. energ. izd-vo, 1958. 106 p. (MIRA 11:4)

1. Moscow. Vsesoyuznyy teplotekhnicheskiy institut.
(Steam--Tables, calculations, etc.)

BURGESS, Eric; KUZNETSOV, S.I. [translator]; ZAKS, N.A. [translator]; TIMROT, D.L., red.

[Frontier to space] K granitsam prostranstva. [Translated from the English] Perevod s angliiskogo S.I.Kuznetsova i N.A.Zaksa. Pod red. D.L.Timrota. Moskva, Izd-vo inostrannoi lit-ry, 1957. 221 p. (MIRA 12:3)
(Atmosphere, Upper--Rocket observation)

TIMROT, D L

AUTHORS: Pavlovich, N. V., Cand.Tech.Sc. and Timrot, D.L., Dr.Tech.Sc. 96-4-13/24

TITLE: An experimental investigation of the p-v-t relationships for gaseous and liquid methane. (Eksperimental'noye issledovaniye zavisimosti p-v-t gazoobraznogo i zhidkogo metana).

PERIODICAL: Teploenergetika, 1958, No.4, pp.69-75 (USSR).

ABSTRACT: Methane is a hydrocarbon that has received a great deal of study. A number of works have been devoted to the p-v-t relationships for methane but only two of these have been made at temperatures below zero centigrade. Meanwhile extensive use is being made of natural gas, which consists largely of methane, and reliable experimental tables and diagrams of the thermal-physical properties of methane and natural gas are required at low temperatures of the order of -170°C and of pressures up to 200 atms. It was, therefore, decided to study these matters. Investigation of p-v-t relationships consists in measuring the specific gravity of the substance at known temperatures and pressures. This method is accurate for liquids at moderate temperatures and pressures. Determinations on gases are usually made

Card 1/4

An experimental investigation of the p-v-t relationships for gaseous and liquid methane. 96-4-13/24

with piezometers, measurements being taken of the volume of the piezometer and the quantity of substance required to fill it at a given temperature and pressure. Existing methods have been evaluated elsewhere. In the present work the method of hydrostatic weighing was used to determine the specific weight of both gaseous and liquid methane. Weighing at high pressures presents considerable experimental difficulties, particularly at low temperatures. A strain-gauge technique was used to overcome these difficulties. The hydrostatic weighing method then becomes a very promising one. An important part of the apparatus is the strain-gauge balance, which is illustrated in Fig.1 and described at length. It consists of a symmetrical electric bridge, each arm of which consists of a resistance wire; when the weight changes, tension increases on one pair of arms and decreases on the other pair, so that the bridge becomes electrically unbalanced. The complete experimental equipment is illustrated in Fig.2. Gas from a cylinder is passed into the working tube which contains the strain-gauge balance. This is enclosed by a Dewar flask

Card 2/4

An experimental investigation of the p-v-t relationships for gaseous and liquid methane.

in which the requisite temperature is maintained by a flow of liquid nitrogen. The method of operating the equipment is described. The experimental results are plotted in Fig.4 in the form of p-v diagrams for methane at different temperatures. With a comparative method of measurement the error of determination of the specific volume of methane includes any errors in the data on the density of the calibrating substance, which in the present case is nitrogen. The errors for nitrogen reach 0.1 - 0.15% and at sub-critical temperatures (-147°C) they may be 0.2%. The method of preparing pure dry methane and of measuring temperature and pressure are described. The errors in the measurement of specific weight were not greater than 0.3%, and are quite acceptable in calculations on industrial processes and apparatus. The data obtained are in good agreement with those of Kvalnes and Gaddy, which are the only figures known with respect to temperatures of -70 to 0°C; at temperatures above 0°C the results obtained are consistent with other published data. A p-v-p diagram for methane is given in Fig.5 and p-v values for methane at different temperatures and

An experimental investigation of the p-v-t relationships for gaseous and liquid methane. 96-4-13/24

pressures are tabulated.
There are 5 figures, 1 table and 10 references -
6 Russian, 3 English and 1 German.

ASSOCIATION: Moscow Power Institute.
(Moskovskiy Energeticheskiy Institut).

AVAILABLE: Library of Congress.

Card 4/4

SOV/96-58-8-13/22

AUTHORS: Pavlovich, N.V. (Candidate of Technical Science) and Timrot, D.L. (Doctor of Technical Science)

TITLE: An Experimental Investigation of the Viscosity of Methane (Eksperimental'noye issledovaniye vyazkosti metana)

PERIODICAL: Teploenergetika, 1958, Nr 8, pp 61-65 (USSR)

ABSTRACT: In designing equipment for the treatment and handling of natural gas, which consists largely of methane, a knowledge of the viscosity of methane over a wide range of temperature is required. Many determinations have been made at atmospheric pressure but the data at high pressures and low temperatures is inadequate. Moreover, available methods of viscosity measurement are not suitable for establishing such data. The procedure that was developed for this purpose is based on that used for determinations of the viscosity of water and steam. A diagram of the apparatus is given in Fig 1 and a photograph in Fig 2. It consists of three main parts: an annular balance one-third filled with mercury, a capillary tube and a cryostat. The annular balance is used to maintain a pressure-drop across the ends of the capillary and to

Card 1/3

An Experimental Investigation of the Viscosity of Methane

measure the flow of substance. The capillary is made of stainless steel EYa-1T. A detailed description of the equipment is given. The capillary was 0.4726 mm diameter and 500 mm long. Most of the tests were made with Reynolds numbers below 1,000, so that flow in the capillary was laminar. It was therefore necessary to work with low loads ranging from 150 to 10 grams, but as the installation was well-balanced and sensitive this did not interfere with the accuracy. The experimental procedure is then described, particularly the adjustment and balancing of the equipment. With change in the gas pressure, even at constant temperature, the balance was disturbed and required a special corrector. The magnitude of the pressure drop on the capillary depends only on the geometry of the balance and on the torque applied by the load. The rate of flow of liquid was determined from the rate of displacement of a uniformly divided scale fixed to the tube of the annular balance. As it was difficult to ensure a perfect balance, each test was made at three different loads. The formula used to calculate the viscosity from the test results is given; typical test

results and calculated values appear in Table 1. The dynamic viscosities of gaseous and liquid methane that were obtained are recorded in Table 2 and Figs 3 and 4. In Fig 3 the viscosity is given as a function of density and in Fig 4 as a function of pressure and temperature. These graphs include test results of a number of other authors. The maximum error of viscosity determination did not exceed 3%. Recommended values for the viscosity of methane as a function of density are given in Table 3. This table covers the temperature range - 161.4 to + 100°C at pressures of 1 - 200 atms and includes results on the saturation line.

There are 4 figures, 3 tables, 17 literature references (Soviet)

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute)

 1. Methane--Viscosity 2. Methane--Temperature factors 3. Natural gas--Properties

TIMROT, D.L.; PAVLOVICH, N.V.

Thermodynamic properties of methane at low temperatures and low pressures. Nauch.dokl.vys.shkoly; energ. no.1:137-148 '59. (MIRA 12:5)

1. Rekomendovana kafedroy inzhenernoy teplofiziki Moskovskogo energeticheskogo instituta.
(Methane--Thermal properties)

S/096/60/000/010/015/022
E194/E135

AUTHORS: Timrot, D.L., and Babushkina M.V.

TITLE: The Design of an Equipment for Determination of the Thermal Conductivity of Materials

PERIODICAL: Teploenergetika, 1960, No 10, p 95

TEXT: The equipment uses the method of Eger and Disselhorst to determine the thermal conductivity of electrical conductors over the temperature range 100 to 1100 °C. The equipment can also be used to determine electrical conductivity in the same temperature range. The procedure for measuring thermal conductivity is described.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute)

Card 1/1

83332

11.1105 17.1150

S/096/60/000/010/017/022
E194/E135

AUTHORS: Timrot, D.L., and Borisoglebskiy, V.P.

TITLE: Determination of the Density of Liquid Oxygen over a Wide Range of Temperatures and Pressures

PERIODICAL: Teploenergetika, 1960, No 10, p 95

TEXT: An experimental study of the thermal properties of liquid oxygen was carried out by the method of an unloaded piezometer. The quantity of oxygen evolved from the piezometer during the course of the experiment was measured (in gaseous form) by a volumetric method. A precision experimental equipment was constructed to suit the procedure selected. The rig was used to make investigations of the density of liquid oxygen in the temperature range of -190 to +120 °C at pressures up to 200 kg/cm^2 and also the density of liquid oxygen on the saturation curve over the same temperature range. The experimental data were worked out by analytical and graphical-analytical methods so that the thermal properties of liquid oxygen could be represented in the form of detailed tables over the entire range of parameters of state investigated.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute)

Card 1/1

81668
S/056/60/038/06/03/012
B006/B056

5.1330

AUTHORS: Timrot, D. L., Borisoglebskiy, V. P.

TITLE: Density of Liquid Oxygen on the Saturation Curve

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 6, pp. 1729-1732

TEXT: In the introduction it is criticized that the density of liquid oxygen on the saturation curve has been insufficiently well investigated and that the results obtained by the various authors differ by up to 5%. Therefore, the temperature and pressure dependence of this density was once again measured by the authors by means of a constant-volume piezometer and a gasometer which were located in a cryostat and/or a thermostat. The arrangement of the devices and their construction is shown in detail in Fig. 1. The oxygen pressure in the piezometer was measured by means of a piston manometer; its temperature by means of a resistance thermometer of spectrally pure platinum. Liquid nitrogen and Freon-12 served as thermostat liquids; the temperature field in the cryostat was controlled by means of copper-constantan thermocouples.

Card 1/3

curves. The oxygen gas in the gasometer at room temperature and a pressure of not more than 3.5 kg/cm^2 behaves nearly like a perfect gas and has been experimentally sufficiently well investigated, so that the errors in measurements may be described as negligible (for the saturation curve ±0.15%). The data of measurement of the saturation curve are shown in a table within the range from -194.03 to -119.70°C. Within this range the pressures are between 0.27 and 49.14 kg/cm^2, and the densities between 1.1879 and 0.5795 g/cm^3. In Fig. 2 the results of measurement of the two experimental series are compared with the results obtained by other authors; the best agreement is obtained by means of data from Ref. 6, where the deviation is not more than 0.25%. There are 2 figures, 1 table, and 9 references: 2 Soviet, 2 German, 3 British, and 1 Dutch.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering)

Card 2/3

4

88263

S/170/61/004/001/001/020
B019/B056

11.1105

AUTHORS: Timrot, D. L., Borisoglebskiy, V. P.

TITLE: Experimental Investigation of the Density of Liquid [illegible]

[illegible] described. This work was carried out at the [illegible] fiziki MEI (Department of Heat Engineering of MEI). Two series of experiments were made. The first series was carried out in a range of state parameters, where pressure does not produce any essential effect upon density. The pressure measurements were carried out by a spring

~~Card 1/4~~

1/3

manometer. The second series was carried out within a wider range of state parameters, which also comprised the saturation curve. Within the range of lower densities, pressure measurements were done with a pision manometer. A semi-empirical formula for the oxygen density as a temperature function along the saturation curve is obtained:

$\varrho_s = 0.4300 + 0.1\sqrt{(0.77r+1)^2 - 1} - \delta$, g/cm³, where

$\delta \cdot 10^3 = 5.5 + 1.637(r-5.5)\dfrac{9.41 - (r-5.5)^2}{9.41 + (r-5.5)^2}$ and $r = t_{cr} - t_s$. The isochores and isothermal lines shown in Figs. 3 and 4 may, in the authors' opinion, be considered to be improved Mathias and Onnes curves (Ref.4). N. V. Tsederberg, I. Ishkin, and P. Buro are mentioned. There are 5 figures, 1 table, and 15 references: 5 Soviet, 4 US, 3 British, 2 German, and 1 Dutch.

APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R001755810004-0"

Experimental Investigation of the Density of Liquid Oxygen at Temperatures From -190 to -120°C and Pressures up to 200 kg/cm², Including the Saturation Curve

S/170/61/004/001/001/020
B019/B056

ASSOCIATION: Energeticheskiy institut, g. Moskva (Institute of Power Engineering, Moscow)

SUBMITTED: July 7, 1960

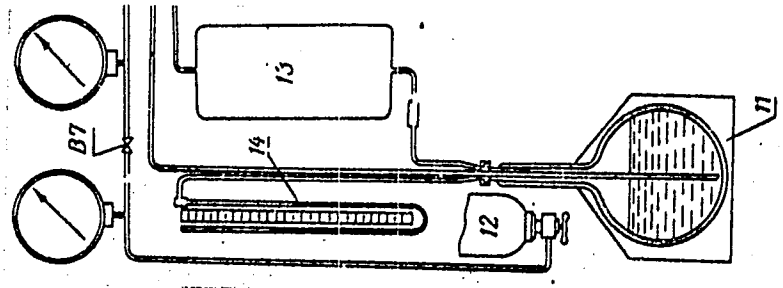


Fig.1

L 21985-66 EWT(1)/EWT(m)/EPF(n)-2/EWP(t)/EWA(h)/EWA(1) IJP(c)

ACCESSION NR: AP5025989 JD/WW/JG/WB UR/0294/65/003/005/0740/0746
536.23.083:546.31

AUTHOR: Timrot, D. L.; Totskiy, Ye. Ye.

TITLE: Experimental method for steady-state determination of the thermal con-

SOURCE:

[illegible] are that the material under investigation comes into contact only with materials which are resistant to it and there is no need for electric insulating materials. The method has two main features: measurement of the temperature difference in the gas layer by thermal expansion of the walls enclosing the layer; and experimental elimination of end effects by varying the depth of insertion of the heater. In the experimental apparatus, two coaxial cylinders form an annular space filled with the material under investigation. The upper ends of the cylin-

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L 21985-66

ACCESSION NR: AP5025989

ders are welded together, while the lower ends are joined by a thin walled bellows and can be displaced one relative to the other by thermal expansion. The unit is placed inside a furnace in which the experimental temperature is maintained. A long heater, whose depth of insertion can be adjusted, is located inside the experimental tubes. The difference in the expansion of the tubes is measured by a length meter at the bottom of the tubes; from this difference the thermal conductivity of the gas between the cylinders is computed. The article gives a sample calculation, based on experimental data on the thermal conductivity of helium in the temperature interval from 442 to 1015 C, at atmospheric pressure. The temperature difference in the experiments was of the order of 10-30C. The portion of the heat flux transferred by radiation reached 16% at high temperatures. The authors' data are compared with data from the literature, with good agreement. It is claimed that in the investigation of gases with a thermal conductivity of from 0.01 to 0.05 kcal/m-hour-degree, the error of the method reaches 15-20%, the largest part of which is due to error in the introduction of a correction for radiation. The temperature difference itself can be measured with an error of [illegible] [illegible] formulas and 1 figure.

L 2664?-65 EWT(m)/EWP(t) IJP(c) JD
ACC NR: [illegible] [illegible]

TOPIC TAGS: carbon dioxide, critical point, gas density

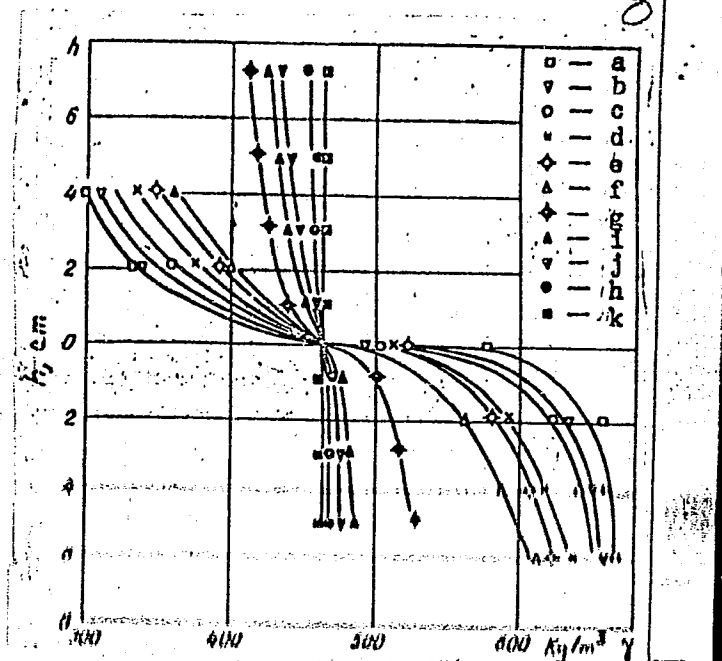
ABSTRACT: The effect of adding air to carbon dioxide on the critical properties of carbon dioxide was studied. The density distribution of carbon dioxide at the critical point was investigated as a function of the concentration of additives and of the distance along the height of the experimental vessel. The work supplements the results of I. V. Zavalin and Yu. I. Shimanskiy (Ukrainskiy fizicheskiy zhurnal, IX, No. 10, 1964). A schemat... of the experimental installation is presented, and the experimental results are shown graphically (see Fig. 1). It was found that the density distribution depends primarily on the concentration of admixtures.

Card 1/2 UDC: 532.5

L 26649-66

ACC NR: AP6007183

Fig. 1. Graph for the change in density (γ) of carbon dioxide along the height (h) of the experimental vessel. a,b,c,d,e,f - at temperatures of 30.11, 30.88, 31.58, 32.16, 32.84, and 33.30C respectively, and at 3.46% of air; g,i,j,h,k - at temperatures of 31.57, 32.61, 33.01, 35.19, and 38.10C respectively, and at 0.12% of air.



Orig. art. has: 4 graphs.

SUB CODE: 20,07/ SUBM DATE: 14May65/ ORIG REF: 003/ OTH REF: 003

Card 2/2

L 34112-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JG

ACC NR: AP6008835 SOURCE CODE: UR/0294/66/004/001/0141/0142

AUTHOR: Stefanov, B. I.; Timrot, D. L.; Totskiy, Ye. Ye.; Chu Wen-hao

ORG: Scientific-Research Institute of High Temperatures (Nauchno-issledovatel'skiy institut vysokikh temperatur)

TITLE: Experimental investigation of the viscosity and thermal conductivity of sodium and potassium vapors

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 1, 1966, 141-142

TOPIC TAGS: sodium, potassium, vapor, heat conductivity, viscosity

ABSTRACT: The NII of High Temperatures (NII vysokikh temperatur) during the period of 1960—1964 performed experimental investigations of the viscosity and heat conductivity of sodium and potassium vapors. The results of the measurements and extrapolation of viscosity were discussed in detail earlier (D. L. Timrot, B. I. Stefanov. Nauchnyy otchet NII vysokikh temperatur, 1962). An experimental investigation of heat conductivity was performed by the dilatometric method, developed by the present authors, and described elsewhere. In accordance with this method, the temperature difference between two coaxial cylindrical surfaces is measured according to the difference of the thermal expansion of the cylinders. Measurements of the degree of blackness are performed on the same apparatus in the intervals between the series of heat conductivity measurements. The error for radiation reaches 35—70% of the total heat flux in tests with sodium and 50—80% with potassium. The maximum relative error

UDC 546.32+546.33:533.16+536.2.022

Card 1/2

L 41112-66
ACC NR: AP6000036

amounts to 20% on the average. The experiments showed a substantial dependence of heat conductivity of the vapors of sodium and potassium on pressure. The results of the investigation are tabulated. A detailed description of the design of the experimental apparatus, data processing methods, results, and a comparison of the results with available data in the literature will be published. Orig. art. has: 3 tables.

SUB CODE: 11,20 / SUBM DATE: 01Jul65 / ORIG REF: 004

Card 2/2 pla

L 32839-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/WW

ACC NR: AP6008827 SOURCE CODE: UR/0294/66/004/001/0046/0049

AUTHOR: Voskresenskiy, V. Yu.; Peletskiy, V. E.; Timrot, D. L.

ORG: Scientific Research Institute of High Temperatures (Nauchno-issledovatel'skiy institut vysokikh temperatur)

TITLE: Thermal conductivity and degree of blackness of niobium at temperatures above 1000C

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 1, 1966, 46-49

TOPIC TAGS: [redacted], niobium, optic black body, thermal conductivity

ABSTRACT: An experimental study of the temperature dependence of the thermal conductivity coefficient and integral degree of blackness of niobium was carried out. The specimens were first fired for 4 hr at 2000—2200K. The temperatures were measured in the 1400—2500K range with an OMP-043M optical pyrometer. The integral degree of blackness was calculated from the formula

$$\epsilon = q_{rad} / \delta T_{av}^4,$$

Card 1/3 UDC: 536.2.212+536.3.006.5

where $q_{rad} = VI/F$; V, I are respectively the potential difference between the anode and cathode and the anode current; F is the total surface area of specimen; T_{av} is the average temperature to which the specific radiation q_{rad} and degree of blackness ϵ pertain. The thermal conductivity coefficient was calculated from the formula

$$\lambda = \left[4 \int_{x}^{L_{eff}} q_{rad}(x)\, dx\right] \Big/ \left[D \left|dT/dx\right|_x\right]$$

where $\int_{x}^{L_{eff}} q_{rad}(x)\, dx$ corresponds to the flux scattered by the radiation on the $x-L_{eff}$ portion of the specimen, and hence, to the heat transfer brought to this portion via section x; $(dT/dx)_x$ is the gradient in section x; L_{eff} is the effective length of the specimen, allowing for the contribution of losses from end surfaces, $L_{eff} = L + \frac{D}{2}$, and D is the

L 32839-66

ACC NR: AP6008827

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diameter of the specimen. The data obtained are extensively compared with those of other authors. The discrepancies found show the need for further studies of the thermal conductivity of niobium and its alloys. Members of the laboratory staff I. M. Mindova, G. D. Kiselev, and L. A. Olimpiyeva participated in this work. Orig. art. has: 1 figure, 2 tables, and 2 formulas.

SUB CODE: 11 / SUBM DATE: 10Mar65 / ORIG REF: 007 / OTH REF: 004

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Card 3/3

L 33670-66 EWI(1)/EWI(m)/I/EWP(t)/ETI IJP(c) JD/WW/JW/WE

ACC NR: AP6014079 SOURCE CODE: UR/0294/66/004/002/0289/0292

76

AUTHOR: Timrot, D. L.; Umanskiy, A. S. 73 B

ORG: High Temperature Scientific Research Institute (Nauchno-issledovatel'skiy institut vysokikh temperatur) 27 27

TITLE: Investigation of the heat conductivity of hydrogen and argon

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 2, 1966, 289-292

TOPIC TAGS: heat conductivity, hydrogen, argon

ABSTRACT: The article gives the results of an experimental determination of the heat conductivity coefficients of hydrogen and argon up to a temperature of 2000°K. In the experiments the method used was a heated filament with a cold cylinder wall. The heat conductivity coefficient, referred to the temperature of the filament, was calculated by the formula

$$\lambda = \frac{\ln R_{st}/r_n}{2\pi} \frac{dW_{pr}}{dT_n},$$

where R_{st} and r_n are the diameters of the cylinder and the filament, respectively; T_n is the temperature of the filament; W_{pr} is the power

Card 1/2 UDC: 536.23

L 33670-66

ACC NR: AP6014079

evolved by the filament due to heat conductivity, with a correction for the temperature jump. A comparison of the data of other authors with those of the present authors shows good agreement in the region from 800-1200°K. The limiting possible error of the data evaluated by the authors was 5% for hydrogen and 7% for argon. "In conclusion, we thank G. F. Sokol, V. V. Korolev, and I. L. Kostrovskov for their aid in carrying out the experiments." Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 13Sep65/ ORIG REF: 005/ OTH REF: 009

Card 2/2 mc

ACC NR: AP7003170 (A) SOURCE CODE: UR/0294/66/004/006/0874/0875

AUTHOR: Timrot, D.L.; Peletskiy, V.E.; Voskresenskiy, V.Yu.

ORG: Scientific Research Institute of High Temperatures (Nanchno-issledovatel'skiy institut vysokikh temperatur)

TITLE: Thermal conductivity and emissivity of iodide hafnium

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 6, 1966, 874-875

TOPIC TAGS: iodide, hafnium, ~~hafnium thermophysical property, hafnium, thermal conduction~~, black body radiation, ~~hafnium thermal conductivity~~ temperature dependence, emissivity

ABSTRACT: The total hemispherical emissivity of a high-purity cylinder, 12 mm in diameter and 65 mm long, was found to increase linearly with increasing temperature (solid line in Fig. 1). The coefficient of thermal conductivity of hafnium was found to increase linearly from 23.2 $w \cdot m^{-1} \cdot degree^{-1}$ at 1300K to 28.8 $w \cdot m^{-1} \cdot degree^{-1}$ at 2000K. Orig. art. has: 2 figures. [TD]

UDC: 536.21+536.3:535.34

Card 1/2

ACC NR: AP7003170

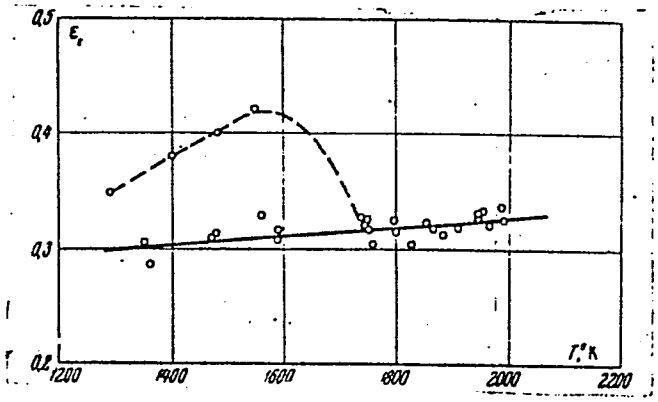

Fig. 1. Temperature dependence of total hemispherical emissivity (E) of iodide hafnium

SUB CODE: 07 , 20/ SUBM DATE: 31Jan66/ ORIG REF: 001/
OTH REF: 002/ ATD PRESS: 5114

Card 2/2

L 0993-66 EWT(l)/EWT(m)/EPF(n)-2/EWP(t)/EWP(b)/EWA(l) IJP(c) JD/WW/JW

ACC NR: AP5016693 SOURCE CODE: UR/0294/65/003/003/0381/0388

AUTHOR: Timrot, D. L.; Umanskiy, A. S.

ORG: Scientific Research Institute of High Temperatures (Nauchno-issledovatel'skiy institut vysokikh temperatur)

TITLE: Investigation of the heat conductivity of helium in the 400°-2400°K temperature range

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 3, 1965, 381-388

TOPIC TAGS: helium, temperature measurement, temperature transducer, heat conductivity

ABSTRACT: The heat conductivity of He in a range 400 to 2400°K is studied using the method of phase change in hot wires. Very small diameter wires are used to minimize the effect of surface radiation. The experimental tube, described in detail, has a specially designed geometry for minimizing the convection effects and eliminating the cooling effects at the ends of the wire. The measurement errors from various sources are discussed in detail. The wire temperature errors are estimated to be less than 4.6%. The errors in heat conductivity are more complex, requiring a comparison of results both with measurements of other authors and with theoretical values for all temperatures. At temperatures below 1200°K, published data is within the experimental errors, but at higher temperatures deviations of 12% occur. Orig. art. has: 4 figures, 10 formulas.

SUB CODE: 20/ SUBM DATE: 26Jun64/ ORIG REF: 003/ OTH REF: 007

UDC: 536.23 : 546.291

Card 1/1

L 62179-65 EWT(1)/EWT(m)/EWP(v)/EPF(n)-2/EWA(d)/T/EWP(t)/EEC(b)-2/EWP(b) Pg-4/Pk-4/
ACCESSION NR: AP5010461 UR/0294/65/003/002/0223/0227
Pu-4 IJP(c) JD/WW/JG 546.831:536.21.022 + 535.346.1

AUTHORS: Timrot, D. L.; Peletskiy, V. E.

TITLE: Investigation of the integral degree of blackness and of the coefficient of thermal conductivity of zirconium

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 2, 1965, 223-227

TOPIC TAGS: zirconium, black body radiation, integral blackness, thermal conductivity coefficient, temperature variation

ABSTRACT: The article describes an investigation of the thermal conductivity and the integral degree of blackness of zirconium iodide, carried out at temperatures above 1,000K at the Nauchno-issledovatel'skiy institut vysokikh temperatur (Scientific Research Institute of High Temperatures). The experiments were carried out with an improved variant of the electronic heating method used by the authors earlier (Teplofizika vysokikh temperatur v. 1, No. 2, 168, 1963). The modi-

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L 62179-65

ACCESSION NR: AP5010461

2

fication of the apparatus was such that only one sample had to be used for both stages of the experiment. The measurements were made in the temperature interval 1200 -- 1900K. The results are presented in Fig. 1 of the Enclosure. The data obtained for the integral degree of blackness deviate noticeably from the results of I. H. Boer and J. D. Fast (Ind. chim. v. 19, 1256, 1927) at low temperatures, probably because of insufficient purification of the material surface. There are no published data on the coefficient of thermal conductivity of zirconium above 1,000K. Original article has: 5 figures, 4 formulas, and 1 table

ASSOCIATION: Nauchno-issledovatel'skiy institut vysokikh temperatur (Scientific Research Institute of High Temperatures)

SUBMITTED: 20Jun64 ENCL: 01 SUB CODE: EM, MM

NR REF SOV: 001 OTHER: 003

Card 2/3

L 62179-65

ACCESSION NR: AP5010461 ENCLOSURE: 01

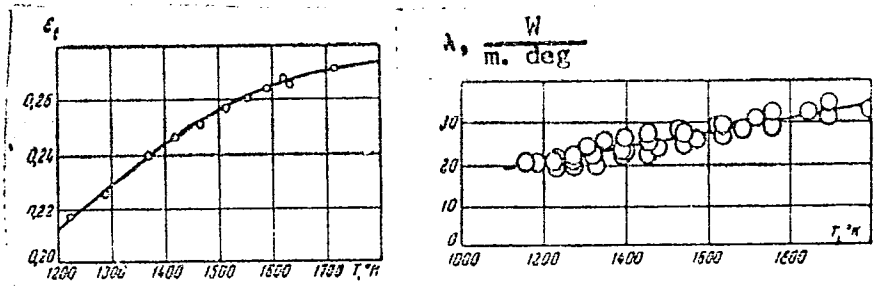

Fig. 1. Integral degree of blackness (left) and coefficient of thermal conductivity of zirconium iodide.

Card 3/3

TIMROT, D.L.; PELETSKIY, V.E.

Use of electronic heating in determining the heat conductivity coefficient of high-melting alloys and compounds. Teplofiz. vys. temp. 1 no.2:168-172 S-O'63. (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut vysokikh temperatur.

TIMROT, D. L., PELETSKIY, V. E., and VOSKRESENSKIY, V. Yu.

"The application of electron beam heating in the investigation of integral blackness of heat-resistant alloys and compounds"

Seminar on production methods, physical properties, and electron structure of refractory metals, compounds, and alloys, organized by the Institute of Powder Metallurgy and Special Alloys AS Ukr SSR, Kiev, 25-29 April 1963.
(Teplofizika vysokikh temperatur, No. 1, 1963, p. 156)

KAZAVCHINSKIY, Ya.Z., prof.; KESSEL'MAN, P.M., kand. tekhn. nauk; KIRILLIN, V.A., akademik; RIVKIN, S.L., kand. tekhn. nauk; SYCHEV, V.V., kand. tekhn. nauk; TIMROT, D.L., prof.; SHEYNDLIN, A.Ye., prof.; SHPIL'RAYN, E.E., dots.; BUL'DYAYEV, N.A., tekhn. red.

[Heavy water; its thermophysical properties] Tiazhelaia voda; Teplofizicheskie svoistva. Moskva, Gosenergoizdat, 1963. 255 p. (MIRA 17:2)

1. Nauchno-issledovatel'skiy institut vysokikh temperatur pri Moskovskom energeticheskom institute (for Kirillin, Sychev, Timrot, Sheyndlin, Shpil'rayn). 2. Vsesoyuznyy nauchno-issledovatel'skiy teplotekhnicheskiy institut imeni F.E. Dzerzhinskogo (for Rivkin). 3. Odesskiy institut inzhenerov morskogo flota (for Kazavchinskiy). 4. Odesskiy tekhnologicheskiy institut (for Kessel'man).

ACCESSION NR: AP4004135 S/0294/63/001/002/0168/0172

AUTHORS: Timrot, D. L.; Peletskiy, V. E.

TITLE: Use of electron beam heating in determination of thermal conductivity of refractory alloys and compounds

SOURCE: Teplofizika vy*sokikh temperatur, v. 1, no. 2, 1963, 168-172

TOPIC TAGS: refractory alloy, thermal conductivity, refractory alloy thermal conductivity, tungsten thermal conductivity, electron beam heating, refractory material, refractory compound, thermal conductivity measurement, thermal conductivity determination, electron beam

ABSTRACT: A method is described for electronic heating of refractory metal alloys and compounds to extremely high temperatures so as to permit measurements of the coefficient of thermal conductivity.

Card 1/3

ACCESSION NR: AP4004135

This quantity cannot be calculated theoretically for most materials employed in technology, and even most modern experimental methods are frequently inapplicable. The theory of electronic beam heating is first developed and it is shown that the calculation of the thermal conductivity coefficient calls for the experimental determination of the specific radiation and for a plotting of temperature fields in a cylindrical specimen heated on one end under different heat conditions. It is then shown that such an experiment is made feasible by electronic heating, which yields high temperature limited only by the properties of the tested material itself. The experimental setup is described and the various experimental errors discussed. The method was tested with pure tungsten containing not more than 0.1% impurities. In the temperature range 1500--2500°K the data agree with those of Forsythe and Worthyng (Astrophysics Journal, v. 61, 152, 1925). It is concluded that the method is quite effective and the simple geometry of the working samples makes it particularly suitable for materials obtained by power metallurgy. The smoothed

Card 2/3

ACCESSION NR: AP4004135

values of the thermal conductivity coefficients are:

T, °K	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000*
λ, W/cm·σ	1,12	1,10	1,08	1,06	1,03$_5$	1,01$_5$	0,99	0,97	0,96	0,93$_5$

Orig. art. has: 3 figures and 8 formulas.

ASSOCIATION: Nauchno-issledovatel'skiy institut vy*sokikh temperatur (Scientific Research Institut of High Temperatures).

SUBMITTED: 28Jun63 DATE ACQ: 26Dec63 ENCL: 00

SUB CODE: PH, MA NO REF SOV: 001 OTHER: 005

Card 3/3

TIMROT, D.L., doktor tekhn. nauk, prof.; KHLOPKINA, A.V., kand. tekhn. nauk

Experimental determination of viscosity of water and steam at high parameters. Teploenergetika 10 no.7:64-67 Jl '63. (MIRA 16:7)

1. Moskovskiy energeticheskiy institut i Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Boilers)

SHLENOVA, M.F.; NIKIFOROVA, A.V.; TIMROT, S.D.

Protecting workers in the peat industry from insects. Med.paraz. i paraz.bol. 27 no.1:57-62 Ja-F '58. (MIRA 11:4)

1. Iz entomologicheskogo otdela Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR i parazitologicheskogo otdela Orekhovo-Zuyevskoy sanitarno-epidemiologicheskoy stantsii.
(MOSQUITOES,
control measures in peat industry, protection of workers (Rus))

TIMROT, Yelena Sergeyevna, kand. tekhn. nauk; FEDOTOV, G.N., red.; GAVALOV, O.V., red. izd-va; KASIMOV, D.Ya., tekhn.red.

[Descriptive geometry]Nachertatel'naia geometriia. Moskva, Gosstroiizdat, 1962. 278 p. (MIRA 15:11)
(Geometry, Descriptive)

CEKULINA, A.; LASIS, A.; SKARDS, V.; TILAKS, S.; INTAITIS, E.; KELPIS, E.; SALMANIS, A.; REINIKOVS, I.; KAPKLINS, J.; ABOLINS, J.; KULA, P.; TIMSANS, S.; JESPERINS, L.; PRUSIS, R.; KLAVINS, E., red.

[Overall mechanization of dairy farms] Piena lopu farmu kompleksa mehanizacija. Riga, Latvijas Valsts izdevniecība, 1964. 309 p. [In Latvian] (MIRA 18:7)

TIMSHANS S. YA.

USSR/Chemical Technology. Chemical Products and Their Application. J-11
Electrochemical Manufactures. Electrical Precipitation.
Chemical Sources of Current.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27557

Author : V.M. Yanson, E.A. Tseske, S.Ya. Timshans.
Inst : Latvian Academy of Agriculture.
Title : Preparation of Deposits with Increased Toughness at Electrolytical Steeling.

Orig Pub: Latv. lauksaimniecibas akad. raksti, Tr. Latv. s.-kh. akad., 1956, vyp. 5, 97-106.

Abstract: Iron plating was carried out with hot chloride electrolytes with the addition of $MnCl_2 \cdot 7H_2O$ (10 g per lit) and phenol (C_6H_5OH) (30 g per lit). The composition of the electrolyte was (in g per lit): $FeCl_2 \cdot 4H_2O$ - 230, NaCl - 200, HCl - 0.6 to 2, temperature - 85 to 95°, D was determined by the equation $D = 0.04 K$, where K was the concentration of Fe^{++} in g

Card : 1/3 -5-

USSR/Chemical Technology. Chemical Products and Their Application. J-11
Electrochemical Manufactures. Electrical Precipitation.
Chemical Sources of Current.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27557

per lit. The anodes were of low-carbon sheet steel, the anodes were enclosed in caprone cases in order to protect the electrolyte from anode mud. The electrolyte is filtered periodically through glass wool. Before the iron plating details are pickled with HCl (1 to 20 min) and dipped anodically in a steeling bath (D = 5 to 30 a/dm) for 0.5 to 2 min. The microhardness of deposits was measured with a PMT-3 instrument. Deposits from the electrolyte, which did not contain additions of MnCl and phenol, were the microscopically hardest (up to 446 kg per sq. mm). The introduction of MnCl and phenol results in a decrease of the microhardness of deposits. The deposits are fine grained; if there was some phenol in the electrolyte, the produced deposits are strained and with many microscopic cracks. The analysis of deposits showed that the C content was 0.05 to 0.08%,

Card : 2/3

-6-

USSR/Chemical Technology. Chemical Products and Their Application. J-11
Electrochemical Manufactures. Electrical Precipitation.
Chemical Sources of Current.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27557

which corresponded to steels of the 0.8; 10 brands. Addition of phenol does not result in an increase of C content in deposits. The most plastic deposits were produced from $MnCl_2$ containing electrolyte, and the most brittle ones were produced from the electrolyte without any additions.

Card : 3/3

L 41077-65

ACCESSION NR: AP5005836 S/0114/65/000/002/0023/0026

AUTHOR: Serikov, S. S. (Engineer); Timshin, A. I. (Engineer)

TITLE: New impellers of feed pumps having a continuously falling shape of pressure characteristic

SOURCE: Energomashinostroyeniye, no. 2, 1965, 23-26

TOPIC TAGS: feed pump, centrifugal pump

ABSTRACT: The parameters and geometrical data of newly-designed feed-pump impellers are given, and a qualitative analysis of some factors affecting the shape of the pressure characteristic of low-speed centrifugal pumps is presented. The "Feed-Pump SKB" (town of Sumy) has developed a line of 3000 and 6000 rpm pump impellers for 240- and 315-atm steam power stations, respectively; the line has a specific speed of 75—105, a continuously falling (at 18—20%) pressure characteristic, and an efficiency of 78—80%. External characteristics of a pump

Card 1/2

L 41077-65

ACCESSION NR: AP5005836

model with special-profile blades were determined in a closed-circulation experimental outfit. It was found that: (1) The shape of the front seal (packing) has an essential effect on the pressure characteristic under partial-load conditions; (2) Sweptback stationary blades that reach the impeller entrance funnel stabilize the flow at partial loads without essentially affecting the efficiency; (3) The size of the impeller entrance funnel has an effect on the pressure-characteristic shape, the inlet coefficient should be under 4. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: none

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

NO REF SOV: 002 OTHER: 000

Card 2/2

ZHURAVLEVA, V.P.; TIMUK, O.Ye.

Sherry yeast in Turkmenia. Izv. AN Turk.SSR.Ser.biol.nauk no.1:36-40 '65. (MIRA 18:5)

1. Institut botaniki AN Turkmenskoy SSR.

TIMUKS, A.

Development of the production of heat-insulating materials in the Latvian S.S.R. Vestis Latv ak no.8:3-12 '61.

1. Latvijas PSR Zinatnu akademija, Ekonomikas instituts.

TURKIS, L. I.

"The Effect of Variegated Feeding on the Course of Certain Functional Processes in Young Cattle." Cand Biol Sci, Inst of Biology Inst of Animal Husbandry and Veterinary Medicine Acad Sci Lithuanian SSR, Vil'nyus, 1954. (KL, N 7, Feb 55)

SO: Sum. No. 631, 24 Aug 55- Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

USSR / Farm Animals. Cattle. Q-2

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64437

Author : Timukas, L. I.; Stabinskene, U. I.
Inst : Lithuanian Scientific Research Institute of Animal Husbandry and Veterinary Medicine
Title : Effect of the Frequency of Milking on Milk Production in Cows

Orig Pub : Byul. nauchno-tekhn. inform. Lit. n.-i. in-t zhivotnovodstva i veterinarii, 1957, No 1, 45-48

Abstract : When shifted to two-fold milking and feeding, the cows of the Lithuanian Black-Spotted breed, with a daily milk yield of 10-17 kg., decreased the production of milk by 4.5% as compared with four-fold milking and three-fold feeding, but the amount of work decreased by 22%. In the high-producing cows (milk yield from 20 to 26 kg.), which were shifted from four-fold to two-fold milking, the milk yield decreased, on.

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USSR / Farm Animals. Cattle.

Q-2

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64437

on the average, by 11.6% (with variations from 3.2 to 16%). In cows in which the intra-udder pressure increased to a greater extent, in connection with such change a more considerable decrease of milk yield was also observed.

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Country : USSR
Category : Farm Animals. Cattle. Q-2
Abs. Jour : Ref Zhur-Biol., No 16, 1958, 74027

Author : Kunskas, Yu. I.; Tirukas, L. I.
Institut. : Lithuanian Scientific Research Institute of*
Title : The Effects of Various Rations upon the Growth and Development of Young Cattle Stock of the Lithuanian Black-Motley Breed and upon the**
Orig Pub. : Byul. nauchno-tekhn. inform. Lit. n.-i. in-t zhivotnovodstva i veterinarii, 1957, No 2, 11-14
Abstract : The first group of calves of the Lithuanian black-motley breed was placed on concentrated rations, the second on rations in which juicy fodder predominated. At the age of 12 months, the yearlings of the second group surpassed the indicators of the 1st group in the relative weight of the heart by 16.6 percent, kidneys by 16.8, pancreas by 9.5, rumen by 20.8

Card: 1/2

*Animal Husbandry and Veterinary Sciences.
**Future Productivity of Adult Cows.

Country : USSR
Category : Farm Animals.
Cattle. Q-2
Abs. Jour : Ref Zhur-Biol., No 14, 1955, 74027

Author :
Institut. :
Title :

Orig Pub. :

Abstract : percent, and the reticulum by 16.2 percent; amasum by 28.3 percent and the pulmonary metabolism by 4.4 percent. Sperm examination of young bulls of the 2nd group at the age of 14 months showed that ejaculated volume in a 2.6 sperm concentration was 2.3 times smaller than in young bulls of the 1st group. Live weight of yearling heifers, milk yield and the milk's content of fat in cows of the 2nd group were larger than of the 1st.

Card: 2/2

TIMUKENE, G. I.

Cand Biol Sci - (diss) "Effect of cobalt auxiliary nutrition on the physiological and biochemical indices of the swine organism of the white variety group." Vil'nyus, 1961. 15 pp; (Ministry of Higher and Secondary Specialist Education USSR, Vil'nyus State Univ imeni V. Kapsukas); 250 copies; price not given; (KL, 6-61 sup, 209)

CHUNTYZHEV, Kh.O.; PRONIN, S.V.; LISOVSKIY, Yu.P.; MARTYNOV, V.D.; MARKARYAN, S.B.; FARIZOV, I.O.; ALEKSANDROVSKAYA, L.I.; USOV, G.A.; TIMUR, M.; YURLOV, P.F.; AFANAS'YEV, L.A., otv. red.; [redacted], red.; DARONYAN, M., mladshiy red.; NOGINA, N., tekhn. red.

[Agricultural cooperation under the conditions of capitalism] Sel'skokhoziaistvennaia kooperatsiia v usloviiakh kapitalizma. Moskva, Sotsekgiz, 1963. 350 p. (MIRA 16:9)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy.
(Agriculture, Cooperative) (Capitalism)

TIMURDZHI, V.G.; LOBANOVA, L.S.; MUSATOV, I.Kh.; GORDEYEV, R.I.

Dynamic voltampere characteristics of silicon power rectifiers.
Sbor. nauch. trud. ElNII 3:142-150 '63. (MIRA 17:4)

TIMURDZHI, V.G.

Determination of the overload capacity of silicon rectifiers.
Sbor. nauch. trud. ElNII 3:151-155 '63. (MIRA 17:4)

TINGERDAHT, [illegible], aspirant

Selection of a protection system and method for its setting against short-circuits in a silicon rectifier. Izv.vys.ucheb.zav.; elektromekh. 8 no.3:316-323 '65. (MIRA 18:5)

1. Kafedra promyshlennoy tekhniki Novocherkasskogo politekhnicheskogo instituta.

TIMUS, A.; GRAM, I.; COJOCARU, I.

Technique of ginning and removing flax dodder seeds. I. p. 370. INDUSTRIA TEXTILA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Rominia si Ministerului Industriei Usoare) Bucuresti. Vol. 6, no. 11, Nov. 1955.

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TIMUS, A.

Technique of ginning and removing flax dodder seeds. II p. 430

INDUSTRIA TEXTILE, Bucuresti, Vol 6, No. 12, Dec., 1955

SO: East European Accessions List (EEAL) Library of Congress, Vol 5, No. 7, July, 1956

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TIMUSH, A.I.

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(Donets Basin—Coal mines and mining)

TIMUSHEV, A., (Komi ASSR, Ust'-Kulomskiy rayon, s. Kerchem'ya); Sonin, I., (Irkutsk); LAPICHEV, G. (Pos. Yanovo, Smolenskaya obl.); BYKOV, F. (Rogachevskiy rayon, Gomel'skaya obl.); DANILOV, M., (Moskva); CHUMAKOV, V. (S. Orlovka, Frunzenskaya obl.); NOVIKOV, V. (Semipalatinsk); TRIFONOV, A. (Yegor'yevskiy rayon, Moskovskaya obl.); NOVOSEL'TSEV, V. (Debal'tsevo, Stalinskaya obl.); MUNASYNOV, N. (Krasnoye, L'vovskaya obl.)

Letters to the editor. Sov.foto 18 no.11:83-85 N '58.
(MIRA 11:12)

(Photography)

ZAVALISHIN, A.: HANEYEV, S.: VOINOV, Yu.; FEDOROV, S.; KLYKOV, N.; TIMUSHEV, A. ANISIMOV, V.; KOL'CHUGIN, M.P., redaktor; PULIN, L.I., tekhnicheskiy redaktor.

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VASIL'YEV, S.S.; ROMANOVSKIY, Ye.A.; TIMUSHEV, G.F.

Absorption cross-section of 6.6 Mev. protons by F^{19} nuclei. Vest. Mosk.un.Ser.3:Fiz,astron. 17 no.4:93 Jl-Ag '62. (MIRA 15:9)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.
(Fluorine) (Protons)

VASIL'YEV, S.S.; ROMANOVSKIY, Ye.A.; TIMUSHEV, G.F.

Inelastic scattering of 6.6 Mev. protons on nickel and copper nuclei. Izv. AN SSSR. Ser. fiz. 26 no.9:1143-1149 S '62. (MIRA 15:9)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonsova.
(Protons--Scattering) (Nickel--Isotopes)
(Copper--Isotopes)

KOLESNIKOVSKIY, E. A., and PIMUSHKIN, G. F.

"Study of Inelastic Scattering of Deuterons by Li^7 andF^{19}, Na^{23}, Mg^{24}, Al^{27}, Nuclei,"

Moscow State Univ.

papers submitted at the A-U Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-27 Nov 1957.

ACCESSION NR: AP4043803 S/0188/64/000/004/0087/0087

AUTHOR: Grancha, I., Romanovskiy, Ye. A., Timushev, G. F., Khasani, M. M.

TITLE: Polarization of protons during scattering on carbon

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1964,87

TOPIC TAGS: proton polarization, proton, carbon target, cyclotron, proton scattering, polystyrene film target

ABSTRACT: The polarization of elastically scattered protons with an energy $E_p = 6.6$ Mev was measured at the NIIYaF MGU during scattering on carbon. A beam of protons was accelerated to an energy of 6.6 Mev in the institute's 120-cm cyclotron. After exit from the acceleration chamber the beam was focused by a deflecting magnet and quadrupole lenses onto a target in the room adjacent to the cyclotron. Individual groups of particles, emanating from the target, were separated by a magnetic analyzer with a uniform field and terminals in the form of a circular ring. The central angle of the ring was 90°. The ring was 200 mm thick and had a mean radius of 70 cm. The carbon target consisted of a polystyrene film with a thickness of 7-10 mg/cm^2. The analyzer was a polarimeter, also with a polystyrene film. After double scattering the protons were recorded by MK

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ACCESSION NR: AP4043803

nuclear photoplates with an emulsion thickness of 15-20 microns. The polarimeter used has been described earlier (I. Grancha et al., Vestn. Mosk. un-ta, ser. fiziki, astronomii, No. 4, 62, 1963). The results of the measurements are given in a table. Orig. art. has: 1 table.

ASSOCIATION: NIIYaF MGU

SUBMITTED: 10Jan64 ENCL: 00

SUB CODE: NP NO REF SOV: 001 OTHER: 001

Card 2/2

ACCESSION NR: AP4041443 S/0188/64/000/003/0100/0100

AUTHOR: Grancha, I.; Romanovskiy, Ye. A.; Timushev, G. F.

TITLE: Measurement of the polarization of protons with an energy of 6.6 Mev during elastic scattering on Li seven

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 3, 1964, 100

TOPIC TAGS: proton polarization, proton scattering, lithium, elastic scattering

ABSTRACT: By use of a magnetic analyzer and polarimeters described earlier, the authors measured the polarization of protons elastically scattered on Li^7, with an energy of 6.6 Mev. Protons were accelerated to an energy of 6.6 Mev in the 120-cm cyclotron of the NIIYaF MGU. The targets were made of metallic lithium of natural isotopic composition by spraying in a vacuum on a backing of gold leaf. The thickness of lithium on the backing was about 1.5 mg/cm^2. The targets measured 35 x 70 mm. The magnetic analyzer made it possible to detect protons scattered on Li^7 and focus them onto targets. The results of the measurements are given in a table in the original. The angular distribution of elastic scattering of protons on Li^7 also was measured, making it possible to compare the character of the curve of angular distribution of polarization and the Rodberg theory (Nuclear

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Physics, 15, 72, 1960). The agreement was very good. Orig. art. has: 1 table.

ASSOCIATION: NIIYaF MGU

SUBMITTED: 01Jan64 ENCL: 00

SUB CODE: NP NO REF SOV: 001 OTHER: 001

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