

Begin

201

KALINING, O.F.

KALININ, D.I., inzh.

Give more attention to efficiency promoters. Gor.khos.Mosk.
36 no.7:19 J1 '62. (MIRA 16:1)

1. Krasnopresnenskoye rayonnoye zhilishchnoye upravleniye.
(Apartment houses—Maintenance and repair)

KALININ, D.I. (Moskva); EPSHTEYN, I.M. (Moskva)

Remarks on a game of an automaton with a partner using a
correlated mixed strategy. Avtom. i telem. 26 no.11:2060-
2061 N '65.
(MIRA 18:12)

KALININ, D.V.

Chemical processes in the formation of the Tayaty iron ore deposit.
(Eastern Sayans). Geokhimiia no.7:616-622 '61. (MIRA 4:6)

1. Chair of Mineralogy and Crystallography of the State University.
(Tayaty ~~Tayaty~~ Iron ores)

KALININ, D.V.

Formation of magnetite in contact-metasedimentary iron-ore
deposits. Geokhimiia no.7:624-628 '62. (MIRA 15:7)

1. Chair of Mineralogy of the Tomsk State University.
(Magnetite)

KALININ, E.K.

26(1,4) ACADEMY OF SCIENCES USSR. LABORATORIA SVISTATELEY

THEORY, KONSTRUKTSIYA, RASCHET I ISPYTYANIYA SVISTATELEY VMTRENNOGO SVISTATELEY (Theory, Design, Calculation, and Testing of Internal Combustion Motors) Moscow, Izd-vo AN SSSR, 1958, 170 p. (Series: Nauchnyy trudy, vyp. 4) Irrata slip inserted. 3,000 copies printed. Ed. of Publishing House: V.M. Klumikov; Tech. Ed.: T.A. Prusakova; Editorial Board: M.D. Apashov, Doctor of Technical Sciences, M.K. Zagryazkin, Candidate of Technical Sciences, Yu. B. Sviridov, Candidate of Technical Sciences, S.Z. Irvantsev, Engineer, and E.G. Yevgrafov, Engineer.

PURPOSE: This book is intended for workers of scientific research institutes, students of schools of higher education (vuzes), design bureaus, and to promote exchange of experiential information on the thermodynamics of internal combustion engines.

CONTENTS: This collection consists of 18 articles based mainly on research work done by the author in 1955-1956. Part I is devoted to working processes in gas turbine power plants and to theoretical and experimental work connected with investigation of the flow of gases in pipes. It contains articles on the investigation of flame cesses in pipes. Part II contains articles on the investigation of high temperature gas engines. Part III deals with the measurement of high temperatures of gases. The collection is number 1 of the Transactions of the Thermodynamics Laboratory of the Academy of Sciences, USSR. No personal titles are mentioned. There are no references.

1. Morkulov, I.A. and E.I. Shumov (deceased). Calculation of Gas Characteristics in a Combustion Process With Changing Heat Capacity Taken Into Consideration. 13
The equation obtained in the adiabatic process of a gas with changing heat capacity and its graphic representation make possible a rapid and very exact calculation of the gas characteristics of air and the combustion products of kerosene. Changes of temperature in the adiabatic process are from 200° to 2,500°K. There are 3 Soviet references.

2. Shumov, E.I. and I.I. Semenov. Problems of the Theory of Simultaneous in Flame Stabilization Behind a Poorly Streamlined Body. 14
The author states that the problem is very complicated, and may be defined by a complex system of hydrodynamic differential equations and by chemical kinetics and diffusion. This article considers only the primary processes in which the fields of components of velocity, pressure, density, etc., are independent of time. In these conditions coordinates and are necessary to formulate the initial conditions. It is no longer show that the flame stabilization is well done. Experiments streamlined bodies (stabilizers). In this case, the flow is characterized by a low velocity, the flame is stabilized by a flame stabilizer. There are 6 references: 1 Soviet, and 2 English.

3. Kalinin, E.K. Calculation of Hydraulic Losses in the Flow of Gases in Heat Exchangers Through Channels of Lengths Through Pipes. 23
The article consists of two parts. The first presents a method for calculating gas characteristics for any system of flows in the outlet from a heat exchanger based on test transfer data. Part two provides a method based on test characteristics for flows through circular or polygonal channels. It is possible to determine the second order heat characteristics in the outlet without making a heat calculation and without knowing the length of pipes, and in special cases without knowing the diameter of pipes. It is also possible to determine the number directly in the outlet and inlet, according to the given hydraulic assistance without making a heat calculation. There are 2 Soviet references.

KALININ, E.K.

Calculating hydraulic losses in heat exchangers in case of a gas flow
in channels or along pipes. Trudy Lab.dvig. no.4:52-67 '58.

(Heat exchangers)

(Fluid dynamics)

(MIRA 12:11)

PHASE I BOOK EXPLOITATION

SOV/6072

Mikhaylov, A. I., V. V. Borisov, and E. K. Kalinin

Gazoturbinnyye ustanovki zamknutogo tsikla; teoriya i raschet (Closed-Cycle Gas Turbine Plants; Theory and Design). Moscow, Izd-vo AN SSSR, 1962. 145 p. Errata printed on the inside of back cover. 4000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut dvigateley.

Ed. of Publishing House: V. M. Klennikov; Tech. Ed.: G. A. Astaf'yeva.

PURPOSE: This book is intended for designers and for scientific and engineering personnel.

COVERAGE: The book reviews works on the method of calculation of closed-cycle gas turbine engines, with particular attention paid to the design of a stage of turbomachines working on various gases. Methods of calculating heat exchangers are given and means of reducing their weight and dimensions are indicated. Information on atomic gas turbine engines, based on non-

Card 1/8₂

KALININ, E. K.

"The analytical determination of the flow temperature and the friction coefficient (velocity or pressure loss) in channels with unsteady, non-isothermal flow of a heat-transfer agent."

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

Moscow Aviation Inst.

L 17925-55 EWT(i)/EWP(m)/EPP(o)/EPT(n)-2/EWA(d)/EPR/t/EPA(bb)-2/OC(r)/EMA(L)
EX-1/IT-1/Ps-4/Pu-4 AFML/AEDC(a)/BSD/ASD(f)-2/SSD WPA S/C1170/64/DOO/01/0042/0046
ACCESSION NR: AP4048850

AUTHORS: Mikhaylov, A. I.; Kalinin, E. K.; Dreytser, G. A.

TITLE: Investigation of hydraulic resistance for longitudinal air flow from a staggered tube bundle

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 11, 1964, 42-46

TOPIC TAGS: gas discharge, gas flow, hydraulic resistance, tube bundle, isothermal flow, Reynolds number

ABSTRACT: The results of experimentation on hydraulic resistance of a staggered tube bundle are presented. A 19-tube bundle with $s/d = 1.2$ was used. Experiments were carried out for both isothermal flow and flow with heating and cooling. Heating was produced electrically and cooling by means of a hydraulic system. The tubes were specially calibrated with an internal diameter of 11 mm. Flow, temperature, and pressure were subjected to careful instrumentation in heating and cooling devices and along the tube surfaces and tube cells. Formulas are given for computing resistance coefficient and Reynolds number. Results of the isothermal tests are given in a plot showing comparisons with earlier work and with theory. Special attention was given to transition from laminar to turbulent flow. Empirical

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ACCESSION NR: AP4048850

formulas are presented for calculating resistance over the range $10^3 < Re < 4.5 \cdot 10^3$ and $4.5 \cdot 10^3 < Re < 10^5$. The nonisothermal tests were carried out for a temperature factor ranging from 0.88 to 1.25 and under the condition of coincident directions of forced and free convection. For $Re < 5000$, the resistance coefficient proved to be about 15% higher than that for isothermal flow. Correction factors account for the nonisothermal effect on flow friction. This effect was found to be negligible with cooling. The friction resistance was found empirically to vary as $\lambda = (0.316sd - 0.176)Re^{-0.2}$, with the s/d ratio and Reynolds number. Orig. anal. has: 5 equations and 2 figures.

ASSOCIATION: Aviatsionnyy institut im. Sergo Ordzhonikidze, Moscow (Moscow Aviation Institute)

SUBMITTED: 26Jul63

ENCL: 00

SUB CODE: ME

NO REF SOV: 005

OTHER: 014

Card 2/2

L 12877-66 EWT(1)/EWP(m)/EWT(m)/EWP(w)/ETC(F)/EPF(n)-2/ENG(m)/EWA(d)/T/ENP(t)/EWP(b)

ACC NR: AT6001372 ETC(m)/EWA(t) SOURCE CODE: UR/0000/65/000/000/0288/0297

AUTHOR: ^{44.55} Kalinin, E. K. ⁹⁰ ^{B-1}

ORG: ^{44.55} Moscow Aviation Institute im. Ordzhonikidze (Moskovskoy Avlatsionnyy Institut)

TITLE: Determination of the temperature and friction coefficient in ducts with non-steady-state nonisothermal flow of the heat transfer medium

SOURCE: Teplo- i massoperenos. t. 1: Konvektivnyy teploobmen v odnorodnoy srede (Heat and mass transfer. v. 1: Convective heat exchange in a homogeneous medium.) Minsk, Nauka i tekhnika, 1965, 288-297

TOPIC TAGS: heat transfer, fluid flow, heat exchanger, nonsteady state heat transfer

ABSTRACT: An analysis was made of nonsteady^{1, 5, 5}-state fluid flow with friction^{11, 11} and heat transfer^{2, 11} under the following assumptions: c_p is constant and $\bar{u}/u = 1$, where u is the instantaneous flow velocity, and \bar{u} is the average flow velocity. A solution was obtained for a case where the flow rate, the heat flux, the velocity, and the inlet temperature change with time by exponential relationships. A simplified solution for incompressible fluids was also obtained. Orig. art. has: 21 formulas. [rv]

SUB CODE: ^{20/} ^{13/} SUBM DATE: 31Aug65/ OTH REF: 004/ ATD PRESS: 4/83

Card 1/1 ^{HW}

L 14639-66 EWT(1)/EWP(m)/EWT(m)/ETC(f)/EPE(n)-2/EVG(m)/EWA(d)/ECS(k)/EWA(1)
ACC NR: A 6003582 JD/WW SOURCE CODE: UR/0170/66/010/001/0022/0025

AUTHOR: Mikhaylov, A. I.; Kalinin, K. K.; Dreytser, G. A. 61
B

ORG: Aviation Institute im. Sergo Ordzhonikidze, Moscow (Aviatsionnyy institut)

TITLE: Investigation of heat transfer in a longitudinal flow of air around a staggered tube bank
2, 4, 5 1, 5

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 10, no. 1, 1966, 22-25

TOPIC TAGS: convective heat transfer, gas flow, boundary layer theory, heat transfer coefficient, heat transfer

ABSTRACT: The article gives the results of an investigation of heat transfer in a longitudinal flow of air around a staggered tube bank with a relative tube spacing of s/d equal to 1.2, with heating and cooling of the air. Experimental Section No. 1 (heating) consisted of 19 tubes 11 ± 0.01 mm in diameter and with a wall thickness of 0.65 ± 0.01 mm. Heat transfer coefficients were measured in a previously determined section with a stabilized flow of air; length of the section was 800 mm. The temperature of the tube walls was measured at the beginning, in the middle, and at the end of the experimental section. The amount of heat

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UDC: 536.244

L 14639-66

ACC NR: AP6003582

evolved in the experimental section was determined from the change in the heat content of the air. Construction of the cooling section (No.2) was analogous to that of the heating section. The experimental sections were placed vertically. In Section 1, the air flowed upwards, and in Section 2, downwards, so that in both cases the direction of free and forced convection coincided. It was found that in the turbulent region the experimental data are, on the average, 12% higher than according to the formula of Mikheyev for tubes:

$$Nu_n = 0,018Re_n^{0,8} \quad (3)$$

Treatment of the experimental data with respect to the mean temperature of the boundary layer shows that the data are, on the average, 11% higher than according to the Weisman formula:

$$Nu_l = (0,026s/d - 0,006) Re_l^{0,8} Pr_l^{1/3} \quad (4)$$

taking into account the dependence of heat transfer in staggered tube banks on the spacing. The experimental data for cooling, with $Re_n > 3 \times 10^4$, can be correlated by the formula:

$$Nu_n = 0,0206Re_n^{0,8} \quad (5)$$

and are, on the average, 2% higher than the data for heating. Orig. art. has: 5 formulas and 2 figures. [06]

SUB CODE: 20/ SUBM DATE: 29Mar65/ ORIG REF: 004/ OTH REF: 005
 ATD PRESS: 419
 Card 2/2

L 25650-66 EWT(1)/EWP(m)/EWT(z)/ETC(f)/EPF(n)-2/EWG(m)/EWA(d)/T/ETC(m)-6/EWA(1)

ACC NR: AP6007181

WW/DJ

SOURCE CODE: UR/0110/66/010/002/0158/0163

AUTHORS: Mikhaylov, A. I.; Kalinin, E. K.; Yarkho, S. A.

23
12

ORG: Moscow Aviation Institute im. Sergo Ordzhonikidze (Aviatsionny institut)

TITLE: A study of heat exchange and hydraulic resistance of the viscous-gravitational flow of water in horizontal tubes with $q_w = \text{const}$

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 10, no. 2, 1966, 158-163

TOPIC TAGS: viscous flow, Reynolds number, laminar flow, metal tubes, heat transfer, Prandtl number, Nusselt number, hydraulic resistance, heat transfer rate

ABSTRACT: The effect of free convection on the viscous flow of water is investigated experimentally in horizontal steel tubes under the condition $q_w = \text{const}$. The experiments are carried out for three Reynolds numbers: 840, 1170, and 1600. The results are plotted as Nusselt number and hydraulic resistance $\bar{R} = (Re/\nu)^{0.14}$ versus the product of Grashoff and Prandtl numbers. Empirical equations are obtained to describe the data within 10%. These equations are: for the heat transfer

$$\bar{Nu} = 1.64 (\bar{Pe} d/L)^{0.4} [C_1 (\bar{Gr} \cdot \bar{Pr})^{0.1}]$$

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$$\begin{array}{l}
 C_1 = 1; n = 0 \quad \text{at} \quad \overline{Gr} \cdot \overline{Pr} < 2 \cdot 10^6, \\
 C_1 = 0,293; n = 0,1 \quad \text{at} \quad 2 \cdot 10^6 < \overline{Gr} \cdot \overline{Pr} < 10^7, \\
 C_1 = 0,000464; n = 0,5 \quad \text{at} \quad 10^7 < \overline{Gr} \cdot \overline{Pr} < 3 \cdot 10^7,
 \end{array}$$

and for the hydraulic resistance

$$\xi = (64/\overline{Re}) (\mu_{cr}/\mu_m)^{0,14} [C_2 (\overline{Gr} \cdot \overline{Pr})^n],$$

$$\begin{array}{l}
 C_2 = 1; n = 0 \quad \text{at} \quad \overline{Gr} \cdot \overline{Pr} < 2 \cdot 10^6, \\
 C_2 = 0,415; n = 0,07 \quad \text{at} \quad 2 \cdot 10^6 < \overline{Gr} \cdot \overline{Pr} < 10^7, \\
 C_2 = 0,002; n = 0,4 \quad \text{at} \quad 10^7 < \overline{Gr} \cdot \overline{Pr} < 3 \cdot 10^7.
 \end{array}$$

It is shown that, other conditions being equal, the average heat transfer rate for the case $q_w = \text{const}$ is higher than for the case $T_w = \text{const}$ if the product of the Grashoff number and the Prandtl numbers is less than 3×10^6 . Orig. art. has: 4 equations and 4 figures.

SUB CODE: 20, 13/ SUBM DATE: 10May65/ ORIG REF: 005/ CWH REF: 002

Card 2/2 *KV*

L 29733-56 EWP(m)/EWT(1)/EWT(m) WW/JD

ACC NR: AP6010201

SOURCE CODE: UR/0201/66/000/001/0043/0047

AUTHOR: Kalinin, E. K.; Yarkho, S. A.

ORG: Moscow Aviation Institute (Movskovskiy aviatsionnyy institut)

TITLE: Alternating nature of the flow and heat transfer in the transition region from laminar to turbulent conditions in a tube

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 1, 1966, 43-47

TOPIC TAGS: heat transfer, turbulent flow, laminar flow, hydraulic resistance, Reynolds number

ABSTRACT: The experiments were carried out in an apparatus which made it possible to investigate the hydraulic resistance and heat transfer in tubes with heating of water under the conditions $q = \text{const}$, and cooling of water at $T = \text{const}$. Diameter of the tube was 9.6 mm and the wall thickness 0.5 mm. A curve, based on the experimental results, shows the fluctuations in the temperature of the tube wall at different values of the Reynolds number. A second curve exhibits the dependence of the dimensionless amplitudes and frequencies of the fluctuations of the wall temperature on the Reynolds number at different cross sections

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ACC NR: AP6010201

of the tube. It was found that at critical values of the Reynolds number, the duration of the transition in a given cross section is comparable, the nature of the temperature fluctuations becomes symmetrical, and the amplitudes are the greatest. At higher than critical values of the Reynolds number, the amplitudes of the fluctuations of the wall temperature decrease. The fact that the maximum amplitudes of the fluctuations decrease in cross sections of the tube near the inlet is a result of higher Reynolds numbers. With a decrease of four times in the heat load, the maximum values of the amplitudes of the fluctuations at $x/d = 73$ decreased from $\Delta T_{\max}/\Delta T_{\min} = 1.83$ to 1.35. Orig. art. has: 5 formulas and 2 figures.

SUB CODE: 20/ SUBM DATE: 03Jan66/ OTH REF: 003

Card 2/2 CC

L 04647-67 EWP(m)/EWT(1)/EWT(m) FDN/WW/JD

ACC NR: AP6024005

SOURCE CODE: UR/0201/66/000/002/0062/0064

AUTHOR: Kalinin, E. K.; Yarkho, S. A.

ORG: Moscow Aviation Institute (Moskovskiy aviatsionnyy institut)

TITLE: Alternation of flow and heat exchange under the conditions of artificial turbulization of flow in tubes

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 2, 1966, 62-64 ²/₃

TOPIC TAGS: heat exchange, turbulent flow, Reynolds number, turbulent heat transfer

ABSTRACT: This is a continuation of earlier work by the authors (Vestsi AN BSSR, ser. fiz.-mat. navuk, No. 1, 1966), where it was established that the alternation of flow in a smooth tube in the region of critical Reynolds numbers, and also in the entrance sections when $Re > Re_{cr}$, causes alternation of the heat-transfer conditions on the wall of the tube. Since the results of the earlier investigation have shown that most efficient heat transfer is obtained under slight turbulization conditions, the authors have studied the stability of local heat transfer in the near-critical region in tubes with turbulizers. The artificial turbulizers used were annular diaphragms of small height on the internal wall of the tube, produced by externally indenting the tube with a roller. The degree of reduction of the inside diameter of the tube by the diaphragms was 98.3 - 87.5%. The tube was heated with ac. The tests are briefly described. Comparison of the results with the data obtained for a smooth tube indicates that in the tube with turbulizer the temperature pulsations are pro-

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L 04647-67

ACC NR: AF6024005

duced at lower Reynolds numbers than in a smooth tube. The amplitudes of the oscillations of the wall temperature in such tubes is larger than in smooth tubes. The range of Reynolds numbers in which pulsation takes place is much smaller than in a smooth tube. The shift and decrease of the maxima of the pulsations of the characteristics on approaching the inlet to the tube is due to the character of the variation of the alternation coefficient, as analyzed in detail in the earlier paper. Orig. art. has: 2 figures and 2 formulas.

SUB CODE: 20, 13/ SUBM DATE: 03Mar66/ ORIG REF: 001/ OTH REF: 002

kh

Card 2/2

L 04648-67 EWP(m)/EWT(1)/EWT(m)/T WW/DJ/JD

ACC NR: AP6024006

SOURCE CODE: UR/0201/66/000/002/0065/0070

AUTHOR: Kalinin, E. K.; Dreytser, G. A.; Kozlov, A. K. 58ORG: Moscow Aviation Institute (Moskovskiy aviatsionnyy institut) B

TITLE: Intensification of heat exchange in a bundle of tubes with transverse ribs placed in a longitudinally flowing stream

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 2, 1966, 65-70

TOPIC TAGS: turbulent flow, turbulent heat transfer, heat exchange, hydraulic resistance 2/

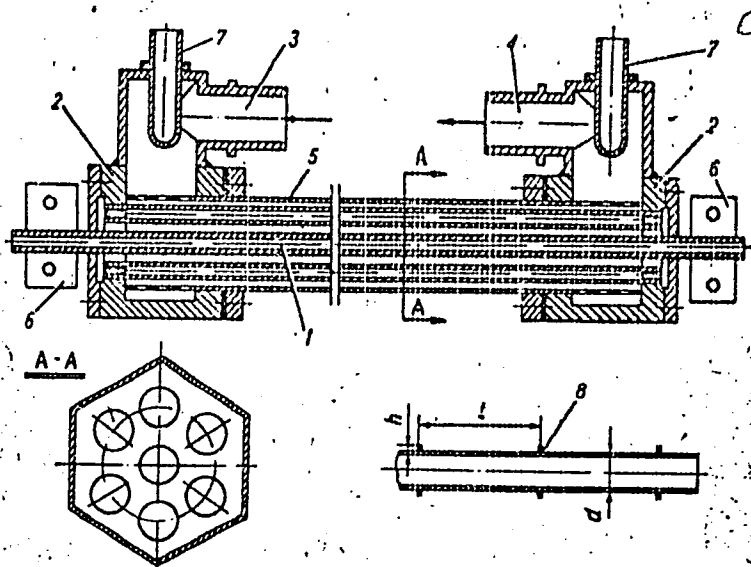
ABSTRACT: After explaining the reason why earlier investigations of longitudinal flow around bundles of tubes were not adequate, the authors report an investigation of the possibility of intensifying heat exchange in a typical array of tubes frequently used in heat-exchange apparatus. The tubes investigated were provided with fins. The outside diameter of the tubes was 12.09 mm, and the fins were made of 1 mm wire spaced approximately 36 mm apart. The bundle consisted of 7 tubes (Fig. 1), of which the central one was heated with ac, and the heat was transferred to the other tubes through longitudinally flowing water. The distance between tubes was equal to 1.5 the tube diameter. Plots of the experimentally obtained heat-transfer coefficients and hydraulic-resistance coefficients are presented and it is concluded that turbulization results in an increase of about 40 - 50% in heat transfer. The effect of different factors on the results are briefly discussed. The estimated reduction in the weight and volume of the tube bundle through the use of turbulence is about 25%.

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L 04648-67

ACC NR: AP6024006

Fig. 1. Experimental assembly. 1 - Heated tube, 2 - tube flange plate, 3, 4 - inlet and outlet tubes, 5 - housing, 6 - current busses, 7 - thermometer well, 8 - ribs.



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Orig. art. has: 3 figures and 7 formulas.

SUB CODE: 20, 13/ SUBM DATE: 03Mar66/ ORIG REF: 006/ OTH REF: 003

L 08136-67 EWT(1)/EWP(m) WW

ACC NR: AP6033531 SOURCE CODE: UR/0170/66/011/004/0426/0431

AUTHOR: Kalinin, E. K. ; Yarkho, S. A.

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B

ORG: Aviation Institute, Moscow (Aviatsionnyy institut)

TITLE: Effect of the Reynolds and Prandtl numbers on the effectiveness of heat transfer intensification in tubes

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 4, 1966, 426-431

TOPIC TAGS: heat transfer, gas flow, Reynolds number, Prandtl number

ABSTRACT: The results are given of an experimental investigation of the effectiveness of heat transfer in tubes in the number ranges $Re = 1.5 \times 10^3 - 10^5$ and $Pr = 0.7 - 50$ by an artificial flow of gases, water, and a water-glycerin mixture. Analysis is given of the heat-transfer mechanism under artificial agitation. Orig. art. has: 4 figures and 1 formula. [Based on authors' abstract]

SUB CODE: 20/ SUBM DATE: 21Jun66/ ORIG REF: 001/ OTH REF: 005/

Card 1/1 nst

UDC: 536.25

ACC NR: AP7002879

(A,N)

SOURCE CODE: UR/0201/66/000/004/0032/0043

AUTHOR: Galitseyskiy, B. M.; Danilov, Yu. I.; Dreytser, G. A.; Kalinin, E. K.; Koshkin, V. K.

ORG: Moscow Aviation Institute (Moskovskiy aviatsionnyy institut)

TITLE: Convective heat exchange in a tube under pulsations of a gaseous heat-carrying medium with frequency corresponding to the second resonant harmonic

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 4, 1966, 32-43

TOPIC TAGS: heat exchanger, heat transfer, heat carrier, thermodynamic calculation, gas flow

ABSTRACT: In view of the limited number of published theoretical and experimental papers devoted to heat exchange under a pulsating flow, such as would be produced when the heat-carrying medium is pumped with a compressor, the authors investigated the influence of velocity (or pressure) pulsations on heat transfer at high frequencies, when the influence of the pulsations of the local heat transfer coefficient is expected to be due essentially to changes in the distribution of the turbulent conductivity along the radius in a given section of the channel. The tests were made in an acoustically closed tube at a frequency corresponding to the second resonant harmonic, when a complete standing wave subtended the length of the tube. A criterial relation is derived for the relative heat transfer in such a case in terms of the Nusselt, Reynolds, and Prandtl numbers and the flow parameters. The tests were made

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ACC NR: A.P7002879

with air in a specially calibrated stainless-steel tube heated with low-voltage alternating current. Plots are presented of the distribution of the outside wall temperature and of the gas temperature along the tube, the distribution of the relative heat transfer along the tube for various pressure ratios and various Reynolds numbers, the dependence of the relative heat transfer at the nodes and anti-nodes and of the speed of the standing wave on the relative harmonic, and the distribution of the heat transfer along the standing wave. The results show that the resonant vibrations of the heat-carrying medium lead to an appreciable increase in the heat transfer, by a factor 2 - 2.5 over the stationary value. Orig. art. has: 6 figures and 21 formulas.

SUB CODE: 20, 13/ SUBM DATE: 01Apr66/ ORIG REF: 006/ OTH REF: 006

Card 2/2

ACC NR: AP7002880

(A,N)

SOURCE CODE: UR/0201/66/000/004/0044/0055

AUTHOR: Kalinin, E. K.

ORG: Moscow Aviation Institute (Moskovskiy aviatsionnyy institut)

TITLE: Nonstationary convective heat exchange and hydrodynamics in channels (review of literature on single-phase heat transfer media)

SOURCE: AN BSSR. Vestsi. Seryya fizika-tehnichnykh navuk, no. 4, 1966, 44-55

TOPIC TAGS: convective heat transfer, nonsteady flow, transient heat transfer, hydraulic resistance

ABSTRACT: This review article is devoted to processes that occur in heat-power installations during startup, emergency shutdown, and transients, and is devoted to a determination of the kinetics of the processes occurring in such systems and means of automatically controlling them. The heat-transfer coefficient, which is an important function in the calculation of stationary phenomena, is redefined to include nonstationary effects and to procedures for determining the heat transfer coefficient and the hydraulic resistance under nonstationary conditions. The article consists of two parts, one describing various methods of experimentally determining the nonstationary heat transfer coefficient and solving the empirical equations that are derivable from the experiments, and the other devoted to a procedure for determining the nonstationary coefficient of hydraulic resistance. The various published procedures for these purposes are briefly summarized and their advantages and disadvantages

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ACC NR: AP7002880

tages discussed. The article is based on material obtained by a detailed survey of literature on nonstationary heat exchange and hydrodynamics, compiled by I. I. Berlin, G. A. Dreytsev, V. G. Izosimov, and the author. Orig. art. has: 2 figures and 38 formulas.

SUB CODE: 20, 13/

SUBM DATE: 15Jun66/

ORIG REF: 007/

OTH REF: 001

Card 2/2

PAVLOV, A.; PAKHOMOV, K.; LOBACHEVSKIY, S.; SOTNIKOV, B.; KALININ, F.

People of the seven-year plan. Stroitel' no.2:10-11 F '60.
(MIRA 13:5)

1. Nachal'nik otdela truda i zarplaty tresta Magnitostroy
(for Sotnikov). 2. Nachal'nik Nauchno-issledovatel'skogo
sektora tresta Magnitostroy (for Lobachevskiy). 3. Brigadir
kompleksnoy brigady konechnoy produktsii tresta Mosstroy-17
(for Kalinin).

(Construction workers)

KALININ, F.D.

Divided drive for the TL-40 scutching drum. Obs. tel. copy. [MLP]
no. 4:14-15 '56. (MIRA 11:10)
(Textile machinery)

KALININ, F.I.

Using core and hand electric bits for drilling underground
holes. Razved. i okh. nedr 26 no.5:26-29 My '60.

(MIRA 13:7)

1. Trest Ansherougol'.

(Boring machinery)

KALININ, F. L.

PA 68T85

USSR/Medicine - Wheat
Medicine - Rye

May 1948

"Growth of the Embryo of Winter Rye on the Endosperm of Summer Wheat," F. L. Kalinin, Inst Plant Physiol imeni K. A. Timiryazev, Acad Sci USSR, 3 pp

"Dok Ak Nauk SSSR" Vol LX, No 5

Based on assumption that plant organisms undergo a great change between young stage and developed stage author studied development of rye on foreign endosperm. Determined that development conditions resulted in great variations in growth and development of rye. Submitted by Academician N. A. Maksimov 15 Mar 1948.

68T85

KALININ, F. L.

KALININ, F. L.

Botany - Variation

Cultures of isolated seeds as a possible means to mutation in plants, Trudy Inst. fiziol. rast., 7, No. 2, 1951.

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

KALININ, P.L.; VLASYUK, P.A., diysnyy ohlen.

Vegetative hybridisation of grains by transplanting the embryo growing point.
Dop. AN URSS no.3:219-224 '52. (MLRA 6:9)

1. Akademiya nauk Ukrayins'koyi RS^H (for Vlasjuk). 2. Instytut fiziolohiyi
roslyn ta shrokhimiyi Akademiyi nauk Ukrayins'koyi RS^R (for Kalinin).
(Grain) (Hybridisation, Vegetable)

KALININ, F.L.

Colorimetric determination of mono- and disaccharides, proteins and nonprotein nitrogen, and potassium and phosphorus. F. L. Kalinin and N. I. Yastrebovich. *Vopr. Obshch. Khim. (Kiev)* 1953, 105-23; *Rept. Zhur. Khim. Akad. Nauk Ukr. S.S.R.* (Kiev) 1953, No. 8151. --Place 0.5-1.0 g. of the ground sample into a flask; add H₂O and steep at 80-85° for 15-20 min., then make up to 50 ml. Ppt. proteins (in the same flask) with Zn(OH)₂ or NaOH. Heat to boiling on a water bath for 5 min., cool, again make up 50 ml., and filter. Digest with concd. H₂SO₄ and perhydrol as catalyst. Det. as sol. N, P, and K. Hydrolyze filtrate with 2% HCl and det. mono- and disaccharides; digest again with concd. H₂SO₄ and det. sol. N, P, and K. Det. reducing sugars colorimetrically by the picric acid to picramic acid reduction in alk. sol. Det. N colorimetrically by the Nessler method adding arsenic salt to counteract interference of Ca, Mg, and similar ions. Det. P colorimetrically with the aid of (NH₄)₂MoO₇ and SnCl₂. Det. nitrate formed by subsequent addn. of NaOH colorimetrically by the Lambert method.

H. S. Levine

①

KALININ, F. L.

✓ An apparatus for the gasometric determination of catalase.
P. L. Kalinin and N. I. Yustrenkoviets, *Voprosy Obshchei
Veshchei Sel'skokhoz. Razved.*, Izdat'stvo Akad. Nauk
Ukr. S.S.R. (Kiev) 1953, 124-7; *Referat. Zhur. Khim., Biol.
Khim.*, 1955, No. 0051. It is claimed that catalase detms.
can be made by th's method on tissue samples as small as
100-200 mg. H. S. Levin

Name: KALININ, Fedor Leontiyevich

Dissertation: Physiological and biochemical features of the embryonic development of plants

Degree: Doc Biol Sci

Affiliation: Inst of Physiology of Plants and Agr Chemistry,
Acad Sci UkSSR

Defense Date, Place: 31 May 56, Council of Inst of Physiology of
Plants imeni Timiryazev, Acad Sci USSR

Certification Date: 6 Apr 57

Source: BMVO 14/57

17(1)

AUTHOR:

Kalinin, F. L.

SOV/20-124-3-50/67

TITLE:

Some Morpho-Physiological Peculiarities of Plant Embryogenesis
(Nekotoryye morfo-fiziologicheskiye osobennosti embriogeneza
rasteniy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 3, pp 703-706 (USSR)

ABSTRACT:

The process of seed formation covers the entire period of the embryonic formation of the plant organism. The physiologico-biochemical trend in embryology facilitates the study of the rules that govern the more intricate interrelations between form and metabolism and which provide a material basis for the development of experimental embryology. The author used the winter wheat *Lutescens 17* (*Lytutestsens 17*), the summer wheat *Arnautka Nemerchanskaya*, and the radish variety *Grayvoronskaya* to study the peculiarities, mentioned in the title, of the embryo and endosperm during their formation. The following factors were observed at different stages of embryogenesis: the peculiarities at the stage of vernalization at 0 - 3,5, and 12°; changes in germinative capacity; germinative energy; process of growth and differentiation into tissues and organs; increase in dry substance; the capacity of the germ in vitro to grow on simple and complex organic culture

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SOV/20-124-3-60/67

Some Morpho-Physiological Peculiarities of Plant Embryogenesis

media, and finally changes in the water contents of the tissues. From the character and the date of the noticeable changes in the embryo 3 different states can be indicated: (1) Stage of the preponderant formation of the endosperm, lasting to the 7th - 10th day of seed maturation. At this stage, the first cell divisions take place in the embryo. Cell mass is accumulated, but there is no differentiation into organs. The endosperm grows intensively, and 7 - 8 days after pollination, reaches its definite size; the tissues are highly enriched in water. At this stage, the increase in dry substance is insignificant. (2) The preponderant development of the embryo lasts from about the 7th - 10th day to the 17th - 21st day of seed maturation. In the embryo, processes start that lead up to organ differentiation. Towards the end of this stage, the embryo attains about 90% of its structural and biochemical development. Even then the increase in dry substance is low. It is only at this stage that the embryo acquires the capacity of growing and developing, separated from the mother organism, in complex synthetic culture media into a full-grown plant. The endosperm grows little, the increase in its dry substance is intensive. The tissue moisture content gradually decreases. The

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Some Morpho-Physiological Peculiarities of Plant Embryogenesis

seed is in the "milk" or green stage of maturation. The embryo shows considerable physiological activity. (3) The s t o r i n g o f n u t r i t i v e s u b s t a n c e s lasts from the 20th - 21st day to the completion of seed maturation. In the embryo the differentiation processes are completed. It attains its definite size. A marked tissue moisture decrease is accompanied by an intensive accumulation of dry substance. The isolated embryo is capable of growing on culture media of mineral salts with saccharose. In the endosperm, the processes initiated at the 2nd stage continue and are completed. The seed attains its full maturity, it possesses germinative capacity, and its susceptibility to low temperatures decreases again. The two other initially mentioned plant varieties show similar courses of development.-There are 1 figure and 5 references, 3 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut fiziologii rasteniy Ukrainskoy Akademii sel'skokhozyaystvennykh nauk (Scientific Research Institute of Plant Physiology of the Ukraine Academy of Agricultural Sciences)

Card 3/4

17(1)

AUTHOR:

Kalinin, F. L.

SOV/20-125-5-55/61

TITLE:

The Periodicity of the Redox Rate of a Plant Embryo During Its Development (Periodichnost' oksilitel'no-vosstanovitel'nogo rezhima formiruyushchegosya zarodysha rasteniy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 5, pp 1154-1157 (USSR)

ABSTRACT:

In the characterization of the redox rate of plant embryos and -endosperms the author proceeded from a given adjustment of the living cell to an energy exploitation in small quantities. These small quantities of energy are necessary for the realization of the processes of synthesis, structure formation, and vital action. This liberation of energy is based upon gradually proceeding redox processes which reflect the physical and biochemical state of the tissue, the organs, and the organism as a whole. The author occupied himself above all with the respiration energy, the activity of oxidative enzymes, the value of the redox potential, the pH value of the medium, and with several redox systems. Winter wheat *Lutescens* (*Lutescens*) 17, summer wheat *Arnautka* *Memerchanskaya* and radish served as experimental objects. Figure 1 represents graphically the variation character of each index of the redox rate for the afore-mentioned winter wheat. These results (Figs 1 : 1,11) show

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The Periodicity of the Redox Rate of a Plant Embryo During SOV/20-125-5-55/61
Its Development

that the respiration energy of the embryo and the endosperm decreases continuously with the growth of the embryo. This is sometimes an abrupt reduction. Figure 1 shows furthermore that in the formation of wheat seeds the activity of the catalase, peroxidase, and polyphenoloxidase differ considerably from one another. In the first formation period (Figs 1:2,12) the peroxidase activity increases rapidly and has a high level. The activity of the polyphenoloxidase is, however, scarcely observed. The oxidative reactions of later stages take place on the whole under the influence of polyphenoloxidase (Figs 1:3,14). Thus, the activity of the two aforementioned ferments changes in opposite directions. A similar dependence was found in the activity of the peroxidase and catalase, however, only in the endosperm (Figs 1:4,14). In the fetal part of the seed the peroxidase- and catalase activity proceed in parallel. The variation of the activity of the cytochrome system (characteristic of organisms with a heterotrophic nutrition character, as is the case with plants during the fetal period) is rather interesting. The cytochrome oxidase activity (Figs 1:5,15) in the embryo and in the endosperm is peculiar during their formation period. It occurs in the endosperm only during the predominating endosperm development.

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The Periodicity of the Redox Rate of a Plant Embryo
During Its Development

SOV/20-125-5-55/61

In the embryo as well exists then a high cytochrome oxidase activity which is reduced rapidly during the predominating fetal development. In the last stage - accumulation of supply substances - it is not observed. Thus the activity increase of certain enzymes is accompanied as a rule by the activity reduction or by the complete vanishing of other enzymes in each morphological embryogenesis stage. The mentioned rapid transitions of the activity of individual enzymes to various stages of the embryogenesis confirm the existence of 3 morpho-physiological stages of the fetal development separated by the author. This is a proof that the respiration processes are qualitatively different in certain stages. The redox reactions are catalyzed here not by one but by several enzyme systems. Examples are given (Refs 4-6, 8-10). The respiration enzyme cannot be a mixture, but is bound to be a complex of coordinated redox enzymes of the cell. The total activity of the dehydrases of the malic-, citric-, succinic-, and glutamic acid is gradually reduced in the course of the embryogenesis (Figs 1:6,10). The redox processes are in a living cell never in equilibrium and are chemically as well as with respect to energy related to each other (Figs 1:7,16). The

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ascorbic acid and compounds with hydrosulfide groups play an important rôle in the redox processes. There are 1 figure and 10 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut fiziologii rasteniy Ukrainskoy Akademii sel'skokhozyaystvennykh nauk (Scientific Research Institute of Plant Physiology of the Ukr. Academy of Agricultural Sciences)

PRESENTED: October 29, 1958, by A. L. Kursanov, Academician

SUBMITTED: September 29, 1958

Card 4/4

VLASYUK, Petr Antipovich, akademik; KALININ, F.L., doktor biolog.nauk, red.

[Michurin's teaching in the people's service] Michurins'ke
vchenia na sluzhbi narodu. Kyiv, 1960. 79 p. (Tovarystvo dlia
poshyrennia politychnykh i naukovykh znan' Ukrain's'koi RSR. Ser.4,
no.2-3). (MIRA 13:6)

1. President Ukrainskoy Akademii sel'skokhosyaystveanykh nauk (for
Vlasyuk).

(Agricultural research)

KALININ, F.L.

Morphophysiological periodicity in the embryogenesis of angiosperms.
Izv.AN SSSR. Ser.biol. no.6:886-908 N-D '60. (MIRA 13:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii rasteniy,
Kiyev.

(BOTANY--EMBRYOLOGY)
(ANGIOSPERMS)

KALININ, F.L.; YASTREBNOVICH, N.I. [Iastrembovych, M.I.]

Biological characteristics of unripe corn seeds. Ukr.bot.zhur.
18 no.4:30-37 '61. (MIRA 14:8)

1. Ukrainskaya akademiya sel'skokhozyaystvenny'kh nauk, Institut
fiziologii rasteniy.

(Corn (Maize)) (Seeds)

KALININ, F.L.; SUD'INA, Ye.G. [Sud'ina, O.H.]

Fifth International Biochemical Congress and main problems of the
biochemistry of plants. Ukr.bot.zhur. 18 no.6:114-118 '61.

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(Biochemistry--Congresses)

KALININ, F.L.; YASTREMOVICH, N.I.

Device for determining the energy of plant respiration. Nauch.
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(MIRA 16:2)

(Plants--Respiration)

(Botanical apparatus)

YASTREMOVICH, N.I.; KALININ, F.L.; SHALABAY, M.S.

Effect of the nature of metabolism in stems and reproductive
organs on the productivity of wheat. Nauch.trudy Ukr.nauch.-
issl.inst.fiziol.rast. 23:88-118 '62. (MIRA 16:2)
(Polesye wheat) (Plants--Metabolism)

YASTREMOVICH, N.I.; KALININ, F.L.

Determining carbohydrates and soluble nitrogen compounds in a single batch of vegetative material. Nauch.trudy Ukr.nauch.-issl.inst.fiziol.rast. no.23:119-131 '62. (MIRA 16:2)
(Plants--Chemical analysis)

TARSHIS, G.I.; KALININ, F.L., prof., rukovoditel' raboty

Physiological and biochemical evaluation of promising methods
for controlling *Acroptilon picris* (Fall) Fisch et Mey. Nauch.
trudy Ukr.nauch.-issl.inst.fiziol.rast. no.23:157-172 '62.

(MIRA 16:2)

(Ukraine--Centaurea)

(Ukraine--Weed control)

LOBOV, V.P.; KALININ, F.L.; LEPPIK, L.A.

Studying the effect of 77 different substances on *Acroptilon*
picris. Nauch.trudy Ukr.nauch.-issl.inst.fiziol.rast. no.23:
173-183 '62. (MIRA 16:2)
(Acroptilon) (Herbicides)

SEMENOV, A.G.; KALININ, F.L., prof., rukovoditel' raboty

Physiological principles of the application of herbicides
together with fertilizers. Nauch.trudy Ukr.nauch.-issl.inst.
fiziol.rast. no.23:184-199 '62. (MIRA 16:2)
(Herbicides) (Fertilizers and manures)

VLASYUK, P.A., akademik, otv. red.; MANORIK, A.V. [Manoryk, A.V.],
kand. biol. nauk, red.; OKANENKO, A.S., doktor biol. nauk,
red.; OSTROVSKAYA, L.K. [Ostrovs'ka, L.K.], doktor biol.
nauk, red.; KALININ, E.L., doktor biol. nauk, red.;
PROTSENKO, D.P., prof., red.; KAPITANCHUK, V.A., nauchn.
sotr., red.; BLANINA, L.F., r.d.; LAPCHENKO, K.P., tekhn.
red.

[Physiological and biochemical principles underlying in-
crease in the productivity of plants] Fiziologo-biokhimichni
osnovy pidvyshchennia produktyvnosti roslyn; pratsi. Kyiv,
Derzhsil'hospvydav URSR, 1963. 458 p. (MIRA 16:10)

1. Ukrain's'ka Respublikans'ka naukova konferentsiia molo-
dykh uchenykh v haluzi fiziologii roslyn, lst, 1962.
2. Akademiya nauk Ukr.SSR i Vsesoyuznaya akademiya sel'sko-
khozyaystvennykh nauk imeni V.I.Lenina (for Vlasyuk).
(Plant physiology) (Plants, Cultivated)

KALININ F.I.; ZHELYUK, V.M.

Physiological and biochemical changes in winter rape during the transition to the reproductive development under the influence of gibberellic acid. Ukr. bot. zhur. 20 no.2:14-20 '63. (MIRA 16:6)

1. Ukrainskiy nauchno-issledovatel'skiy inatitut fiziologii rasteniy.

(Gibberellic acid) (Rape(Plant))
(Plant physiology)

LOBOV, V.P.; KALININ, F.L.

Nature of physiological changes in monocotyledons and dicotyledons
under the influence of herbicides. Ukr. bot. zhur. 20 no.3:19-24
'63. (MIRA 17:9)

1. Institut fiziologii rasteniy AN UkrSSR.

KALININ, Fedor Leont'yevich, prof.; BELCUSOVA, O.M. [Belcusova, O.M.],
red.; NEMCHENKO, I.Yu., tekhn. red.

[Plant growth regulators] Regulatory rostu roslin. Kyiv,
Derzhsil'hospvydav URSR, 1964. 47 p. (MIRA 17:3)

KALININ, F. L.

"Concentration and potential gradients between embryo and endosperm tissues as a factor of embryogenesis."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

AS UkSSR, Kiev.

KALININ, F.L.

[Plant growth regulating substances] Rohulatory rostu
roslyn. Kyiv, Derzh. vyd-vo sel's'kohospodara'koi lit-
ry URSR, 1964. 47 p. (MIRA 17:9)

VLASYUK, P.A., akademik, otv. red.; OKANENKO, A.S., doktor biol. nauk, red.; MANORIK, A.V., kand. biol. nauk, red.; KALININ, F.L., doktor biol. nauk, red.; PROTSENKO, D.F., doktor biol. nauk, red.; SIROCHENKO, I.A., doktor sel'khoz. nauk, red.; KAPITANCHUK, V.A., red.; ANDRIYCHUK, M.D. red.

[Photosynthesis and crop yields] Fotosintez i produktivnost' rastenii. Kiev, Naukova dumka, 1965. 280 p.
(MIRA 18:6)

1. Akademiya nauk URSR, Kiev. Instytut fiziologii roslyn ta agrokhimii.

SARNATEKAYA, V.V. [Sarnats'ka, V.V.]; KALININ, F.I.

Adding 2,4 dichlorophenoxyacetic acid to fertilizers in tomato
growing. Khim. prom, [Ukr.] no.1:48-49 Ja-Mr '65. (MIRA 18:4)

OSTROVSKAYA, L.K., doktor biol. nauk, otv. red.; VLASYUK, P.A.,
akademik, red.; MANORIK, A.V., kand. biol. nauk, red.;
KALININ, F.L., doktor biol. nauk, red.; OKANENKO, A.S.,
doktor biol. nauk, red.; PROTSENKO, D.F., doktor biol.
nauk, red.; SIROCHENKO, I.A., doktor biol. nauk, red.;
KAPITANCHUK, V.A., red.; MAKAROVA, G.M., red.

[Complexons as a means against lime-induced chlorosis
of plants] Kompleksory kak sredstvo protiv izvestkovogo
khloroza rastenii. Kiev, Naukova dumka, 1965. 194 p.
(MIRA 18:7)

1. Institut fiziologii rasteniy AN Ukr.SSR (for
Ostrovskaya). 2. AN Ukr.SSR (for Vlasyuk).

KALININ, Fedor Leontiyevich; MEREZHINSKIY, Yuriy Georgiyevich;
LYUDINSKIY, N.A., doktor biol. nauk, otv.red.;
SHITKOVSKAYA, V.L., red.

[Plant growth regulators; the biochemistry of their action
and their use] Regulatory rosta rastenii; biokhimiia
deistviia i primenenie. Kiev, Naukova dumka, 1965. 405 p.
(MIRA 18:7)

KALININ, F. P.

KALININ, F. P.

Geography - Study and Teaching

Study of local lore in school. Geog. v shkole, No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

KALININ, F. P.

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Maps

Getting acquainted with a topographical map on the spot. Geog. v. shkole No. 3 (1952)

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Shkol'naiia kraevédchaskaia rabota uchitelia geografii [Geography teacher's regional study work in school]. Moskva, Uchpedgiz, 1952. 104 p.

SO: Monthly List of Russian Accessions, Vcl 6 No 6 September 1953

KALININ, F.P.

Importance of geography in polytechnical education. Geog. v shkole no.2:
30-35 Mr-Ap '53. (MLRA 6:5)

(Geography, Economic--Study and teaching)

BOGOYAVLENSKIY, G.

School work of a geography teacher on local lore. Reviewed by G. Bogoyavlenskiy. Geog. v shkole no.3:77-78 My-Je '53. (MLRA 6:6)
(Kalinin, F.P.) (Geography--Study and teaching)

BARANSKIY, N.N.; BARKOV, A.S.; ~~KALININ, F.P.~~; KANYAKHINA, O.I.;
DOMETTI, A.A.

In memory of M.S.Bodnarskii; obituary. Geog.v shkole no.1:57
Ja-F '54. (MLRA 7:1)

(Bodnarskii, Mitrofan Stepanovich, 1870-1953)

WALLING. J.F.

BARANSKIY, N.N.; DOMETTI, A.A.; KALININ, F.P.; KONYAKHINA, O.I.;
PREOBRAZHENSKIY, A.I.; RAUSH, V.A.; SAUSHKIN, Yu.G.;
STROYEV, K.F.; TEREKHOV, P.G.

In illustrious memory of A.S.Barkov. Goog.v shkole no.2:61
Mr-Ap '54. (MLRA 7:2)
(Barkov, Aleksandr Sergeevich, 1873-1954)

KALININ, F.P.

Some practical exercises and observations in the applied
geography site. Geog.v shkole 18 no.4:54-56 J1-Ag '55.
(MIRA 8:10)
(Physical geography--Study and teaching)

KALININ, F.

BARANSKIY, N.; BAKHMUTSKAYA, S.; VASIL'YEVA, I.; GEDRONOV, A.; KALININ, F.;
KOTEL'NIKOV, V.; MIKHALENKO, I.; MONAKHOVA, V.; MONAKHOVA, Y.; MOSEYEV, S.
MOROSHKINA, O.; PASHKAICH, K.; PRCOBRASHENSKIY, A.; RAUSH, V.; SAUSHKIN,
Yu.; TEREKHOV, P.; TESSMAN, N.; ERDELI, V.

In memory of A.A.Polovinkin, N.Baranskii and others. Geog.v shkole
18 no.5:70 S-0 '55. (MIRA 8:12)
(Polovinkin, Aleksandr Aleksandrovich, 1887-1955)

KALININ, F.F.

Working model of a spring and a well. Geog.v shkole 18 no.6:
54-55 N-D '55. (MLRA 9:1)
(Wells) (Springs)

11/11/1977
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[Practical work in physical geography; based on experience] Prakticheskie raboty po fizicheskoi geografii; iz opyta raboty. Moskva, Gos.uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1957. 125 p.
(MIRA 11:3)

(Physical geography--Laboratory manuals)

KALININ, F.P.

Geographical study room in schools. Geog. v shkole 21 no. 4:58-
59 JI-Ag '58. (MIRA 11:7)

1. Shkola No. 580 Moskvy.
(Geography--Study and teaching)

KALININ, F.P.

Homemade tellurian. Geog. v shkole 22 no.1:67-70 Jan '59.
(MIRA 12:4)

1. Shkola No.580, Moskva.
(Astronomy--Study and teaching)

KALININ, F.P.

Sighting ruler with a mirror. Geog. v shkole 23 no.4:72-73 J1-Ag
'60. (MIRA 13:10)

1. 580-ya shkola g.Moskvy.
(Rulers (Instruments))

KALININ, Fedor Pavlovich; FISHCHEVA, T.V., red.; TSYPKO, R.V.,
tekh.n.ed.

[Work on geography for popular use; from teacher's work
practice] Osnovatel'no poleznaia rabota po geografii; iz
opyta raboty uchitelia. Moskva, Gos.uchebno-pedagog.izd-vo
M-va prosv.RSSR, 1961. 56 p. (MIRA 15:5)
(Geography--Study and teaching)

KALININ, F.P.

Role of schools in the conservation of nature. Geog. v shkole 24
no.2:39-41 Mr-Av '67. (MIRA 14:3)

1. 580-ya shkola g. Moskvy.
(Natural resources--Study and teaching)

DOMETTI, A.A.; ZIMINA, A.M.; KALININ, F.P.; LAKTIONOVA, P.I.; MOROSHKINA, O.I.;
MYASISHCHEVA, Ye.I.; NECHAYEVA, Yu.A.; PREOBRAZHENSKIY, A.I.; RUSH,
V.A.; RYNDIN, A.A.; SAUCHKIN, Yu.G.; STROYEV, K.F.; TEREKHOV, P.G.
[deceased]; FREYKIN, Z.G.; SHESTAKOV, V.N.

Nikolai Nikolaevich Baranskii's 80th birthday. Geog. v shkole 24
no.4:7-8 J1-Ag '61. (MIRA 14:8)
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KALININ, F. V.

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Correcting poor bee hibernation Pchelovodstvo 29 No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May ² 1958, Uncl.

KALININ, G.

Fruit of public workers activity. Okhr. truda i sots. strakh. 4 no: 1:25-26
Ja '61. (MIRA 14:3)

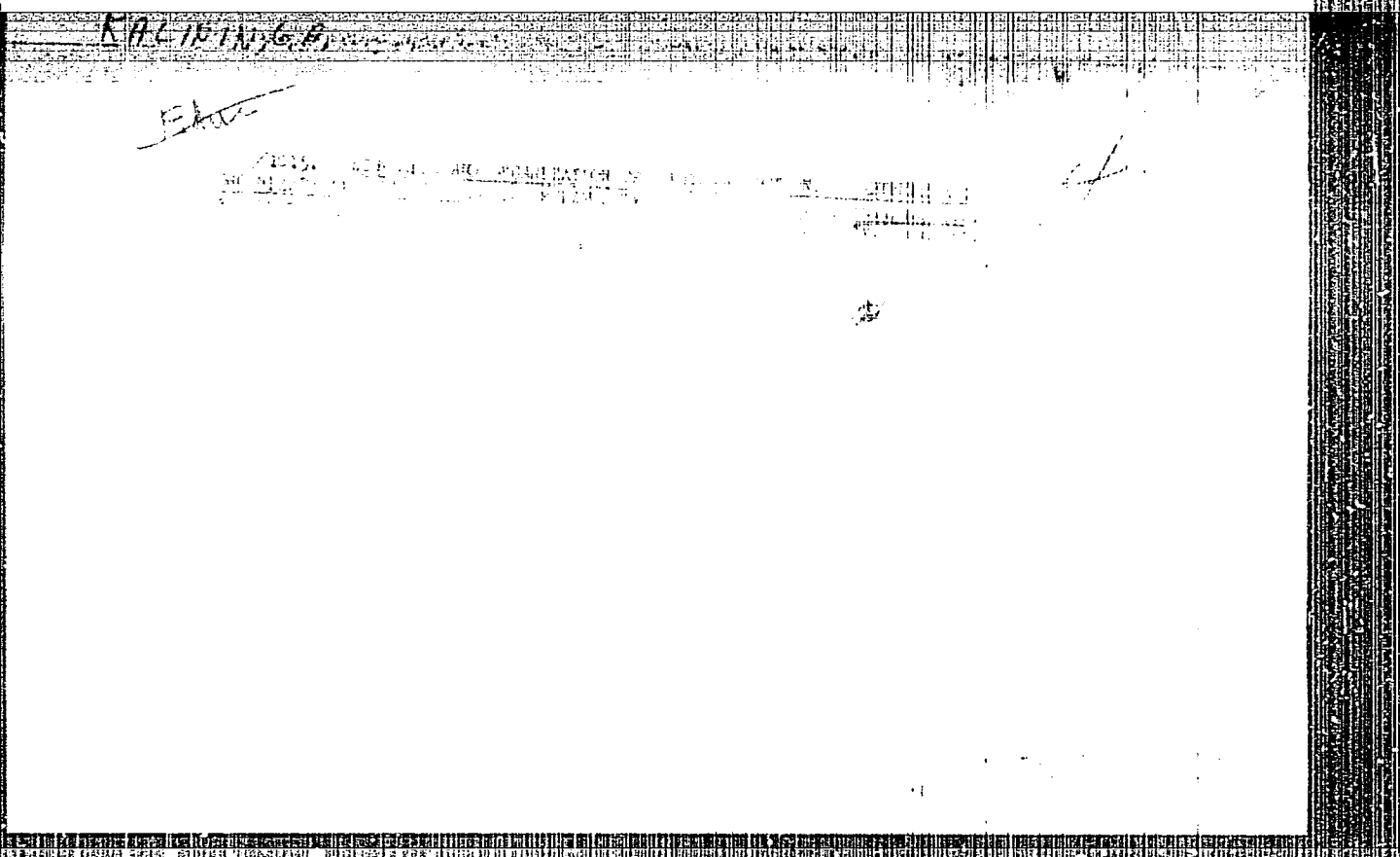
1. Zaveduyushchiy otdelom okhrany truda Belorusskogo respublikanskogo
soveta profsoyuzov.

(White Russia—Industrial hygiene)

OSTROVSKIY, L., kand.yuridicheskikh nauk; KALININ, G.

Reviewed by L. Ostrovskii, G. Kalinin. Okhr. truda i sots.
strakh. 5 no.7:28-29 JI '62. (MIRA 15:7)

1. Zaveduyushchiy otdelom okhrany truda Belorusskogo
respublikanskogo soveta profsoyuzov (for Kalinin).
(Industrial hygiene--Law and legislation)



VASIL'YEV, N.S.; KASIMOV, V.I.; KALININ, G.A.; KUYAKIN, V.P.; MEDVEDEV, A.P.;
FAYVILEVICH, Ya.A.; KHRIPUNOV, V.P.; YERMAKOV, D.A., redaktor;
NEMOV, A.P., redaktor; OSTROVSKIY, Ya.M., redaktor; RYL'SKAYA, D.D.,
redaktor; FRIDKIN, A.M., tekhnicheskij redaktor

[Experience in operating the Kashira Hydroelectric Power Station]
Opyt ekspluatatsii Kashirskoi GRES. Moskva, Gos. energ. izd-vo,
1956. 179 p. (MIRA 9:9)
(Kashira Hydroelectric Power Station)

18057

KALININ, G. A.

USSR/Elec Power Plant 4501.0700 Nov 1947

"Bashirskiy GRES on the Thirtieth Anniversary of
the October Revolution," G. A. Kalinin, Engr, 2 pp

"Elek Stantsii" Vol XVIII, No 11

Sketches progress of this power plant from its be-
ginning in 1919 to present day. Describes changes
in equipment and modernization in general. Describes
good work and safety record of plant. Gives special
mention and details of good labor turnover record.

18057

IC

KALININ, GEORGIY ALEKSEYEVICH

PRUZNER, Saul L'vovich; KALININ, Georgiy Alekseyevich; SHERSHOV, Sergey Fedorovich; PETROV, D.V., redaktor; FRIDELIN, A.M., tekhnicheskii redaktor

[Economics and organization of power production] Ekonomika i organizatsiia energeticheskogo proizvodstva. Moskva, Gos. energ. izd-vo, 1956. 368 p. (MIRA 9:3)
(Electric power)

KALININ, G.A., inzh.; SHCHELKUNOV, V.V., kand.tekhn.nauk.

Determining the stresses experienced by the stock rail and switch point. Vest.TSNII MPS 21 no.4:34-37 '62. (MIRA 15:6)

1. Arkhangel'skiy lesotekhnicheskiy institut.
(Railroads--Rails) (Strains and stresses)

KALININ, G. B.

Country: USSR
 Category: Diseases of Farm Animals.
 General Problems. R-1
 Ann. Jour. VZhBiol., No. 4, 1959, No. 16795

Auth. of: Kalinin, G.B.
 Institut. Leningrad Sci. Res. Inst. of Veterinary Medicine
 Title: The Application of Chlortetracycline (Biomycin)
 as a Growth Stimulating Therapeutic and Propy-
 lactic Preparation for Gastro-Intestinal Diseases
 Orig. Pub. Byul. nauchno-tekhn. inform. Leningr.n.-i.vet.
 in-ta, 1957, v/p.4, 6-8

Abstract: Chlortetracycline was administered in doses of
 0.02-0.1 g per day to piglets (in 1% sol.form)
 ranging from the age of one day to one month,
 both by syringe and with feed. Piglet survival
 among those treated with chlortetracycline was
 100%, that of the control -- 92.2%. Gastro-
 intestinal diseases were lacking in the treated
 piglets, while 50% of the control animals became
 afflicted.

*in Piglets.

Card: 1/1

DOMAYEV, Foma Vasil'yevich; KALININ, G.N., inzh., retsenzent; RYASNOY,
I.F., inzh., retsenzeng; SHISHLYKOV, Ye.S., inzh., red.;
VOROTNIKOVA, L.F., tekhn. red.

[Repairing basic units of electric gantry cranes and fork lift
trucks] Remont osnovnykh uzlov elektrokozlovykh kranov i avto-
pogruzchikov. Moskva, Transzheldorizdat, 1962. 94 p.

(MIRA 15:7)

(Electric cranes--Maintenance and repair)

(Fork lift trucks--Maintenance and repair)

KALININ, I. A.

Chem Obs v48

1-25-54

General, Physical

chemistry

Chem.

3

2

Modeling consecutive reactions. S. I. Sklyarenko and I. A. Kalinin. *Uspekhi Khim.* 22, 1010-15 (1953).—The mathematics of consecutive reactions is briefly summarized, and a general description is given of an app. for class instruction to demonstrate the effects of rates of the component reactions by a series of vessels, contg. a fluid, that are connected by suitable tubes of various diam. 13 referer ccs. G. M. Kosolapoff

MF

KALININ, Igor' Aleksandrovich; KATRENKO, D.A., redaktor; CHMUTOV, K.V.
redaktor; AKHLAMOV, S.N., tekhnicheskly redaktor.

[Catalysis (accelerators of chemical reactions) Kataliz (Uskoriteli
khimicheskikh reaktsii) Pod red. K.V.Chmutova. Moskva, Gos.izd-vo
tekhniko-teoret. lit-ry, 1955. 39 p. (Nauchno-populiarnaya biblio-
teka, no.80) (MLRA 9:1)
(Catalysis)

KALININ, I. A.

USSR/Nuclear Physics - Instruments and Installations. Methods of
Measurement and Investigation

C-2

Abst Journal : Referat Zhur - Fizika, No 12, 1956, 33879

Author : Kalinin, I. A. and Vertebyny, P. Ya.

Institution : None

Title : Calculation of Physical Dose of Gamma Radiation. 1. Dose from
Point Source. Determination of Thickness of Shielding

Original

Periodical : Zh. fiz. khimii, 1956, 30, No 2, 457-463

Abstract : A simplified method is given for calculating the thickness of
shielding layers for the case of point sources, based on the
assumption that the scattered rays can be calculated from a
relationship of the form $1 + \alpha \mu l$ (l , thickness; μ , attenua-
tion coefficient; α , coefficient depending on the kind of
medium).

Card 1/1

MANZHULA, A.P.; KALININ, I.A.

Sedimentation of particles suspended in a turbulent stream
[with summary in English]. Inzh.-fiz.zhur. 1 no.8:23-29 Ag '58.
(MIRA 11:8)

(Sedimentation and deposition)

SOV/76-32-9-37/46

AUTHORS: Kalinin, I. A., Vertebnyy, P. Ya. (Zagorsk)

TITLE: Calculation of the Physical Dosage of γ -Irradiation (Raschet fizicheskoy dozy γ -izlucheniya) II. The Dosage Intensity From a Flat and a Three-Dimensional Source (II. Moshchnost' dozy ot ploskogo i ob'yemnogo istochnikov)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 9, pp 2192-2198 (USSR)

ABSTRACT: In the previous article (Ref 1) the strength of radiation from a point source of radiation was calculated. In the present paper the radiation strength from a level source is calculated. This calculation is made for the general case and is then applied to three specific examples. Nomograms are shown for the following cases: 1) the strength of the gamma radiation at a point 1 m above the center of a circular source of radiation (Fig 3); 2) the strength of the gamma radiation at a point 1 m above the edge of a circular, level radiation source (Fig 4). For three-dimensional radiation sources the formula is again given for the general case and then demonstrated with two examples. For these example cases nomograms are also given:

Card 1/2

SOV/76-32-9-37/46

Calculation of the Physical Dosage of γ -Irradiation. II. The Dosage Intensity
From a Flat and a Three-Dimensional Source

1) the radiation strength of a circular cylindrical radiation source (Fig 6); 2) the radiation strength at a point on the surface of a cylinder or a ball when the linear over-all dimensions are greater than or equal to the mean free path of the gamma quanta (F. g 7). There are 7 figures, 1 table, and 5 references, 5 of which are Soviet.

SUBMITTED: February 14, 1958

Card 2/2

LUVISHIS, L. A., starshiy nauchnyy sotrudnik; KOVALEVA, N. S., starshiy
nauchnyy sotrudnik; KALININ, I. A., starshiy nauchnyy sotrudnik;
KHARITONOV, Yu. P., mladshiy nauchnyy sotrudnik

Laboratory fire-testing method of fabrics. Tekst. prom. 21
no.10:76-78 0 '61. (MIRA 14:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sherstyanyoy
promyshlennosti.

(Clothing, Protective)
(Fire-testing)

SAMOYLOV, Sergey Ivanovich, prof.; GORELOV, Valentin Mikhaylovich, inzh.;
BRASLAVSKIY, Veniamin Markovich, kand. tekhn. nauk; KONDRATOV,
Yuriy Nikolayevich, inzh.; KALININ, Ignat Andreyevich, inzh.;
KUROCHKIN, Vasilii Mikhaylovich, inzh.; POPOV, Vladimir
Artem'yevich, inzh.; KOZLOV, Kirill Georgiyevich, inzh.; FEDOROV,
Boris Fedorovich, kand. tekhn.nauk; STEPANOV, Valentin
Vladimirovich, kand. tekhn. nauk; DUGINA, N.A., tekhn. red.

[Technological processes in the manufacture of heavy machinery]
Tekhnologiya tiazhelogo mashinostroeniya. Pod red. S.I.Samolova
Moskva, Mashgiz, 1962. 589 p. (MIRA 16:4)
(Machinery industry)