CONTENTS LIST

JOURNAL OF ENGINEERING PHYSICS

(Published in the U.S.S.R. in Russian with English abstracts)

Volume 7, No. 11 November, 1964

	Page
V. M. ANTUFIEV: The relation between heat transfer and resistance, and the heating surface	3
Yu. K. Stasyulyavichyus and P. S. Samoshka: Heat transfer and aerodynamics of staggered tube bundles in an	
air crossflow within the range of $Re > 10^5$	10
I. A. Kuznetsov: Unsteady heat transfer in a pipe-line	16
D. A. KAZENIN: A particular possible transfer scheme for a boundary layer with a phase-conversion surface	22
A. S. TROFIMOV: Allowable rates of heat-transfer fluid temperature change	28
V. E. LISTOVNICHY: Calculation of emissive powers of cylindrical cavities	32
M. S. POVARNITSYN: Calculation of temperature and evaporation rates of plane duct walls with internal heat sources with a developed laminar flow	36
A. I. MIKHAILOV, E. K. KALININ and G. A. DREITSER: Flow friction of a staggered tube bundle in a longitudinal air flow	42
Z. T. GALIULLIN and B. L. KRIVOSHEIN: Non-adiabatic real gas flow in a gas-line	47
L. G. GOLOVKOV: Droplet size distribution in liquid pulverization by centrifugal pulverizers	55
V. B. BALAKIN: Through counting of discontinuous solutions of gas dynamic equations. II	62
YA. S. RABINOVICH: A particular mathematical problem of heat and mass transfer	67
R. A. PAVLOVSKY: A solution of the mixed stationary problem of heat conduction for a cylinder	73
M. YA. BROVMAN and YU. S. DODIN: Calculation of a roller temperature field	77
R. S. MINASYAN: Steady heat propagation in straight parallelepiped	82
P. I. Khristichenko and S. I. Prokopets: Non-stationary temperature field of an unclosed cylindrical shell E. A. Iodko: Analytical method of temperature field calculations in bodies of the simpliest shape with moving	90
boundaries	94
Yu. L. Rozenshtok and A. F. Chudnovsky: Application of the integral single parameter method to the solution	<i>,</i> ,
of heat-conduction problems for a medium with variable thermal properties	98
V. S. ZARUBIN: The effect of a boundary condition approximation method on stability of the numerical solution	
of heat-conduction problems	103
A. N. Erugin: Estimations	109
Letters to the Editor	
V. P. MOTULEVICH: The dependence of burnout heat fluxes on the angle of heating surface wetting	112
S. I. Anisimov: The problem on heat explosion for a hollow cylinder	115
S. I. Kosterin and B. M. Pavlov: A qualitative method for filling an isoteniscope with the liquid of interest	117
Chronicle	
B. M. Berkovsky: The First National Heat Transfer Conference, Japan	120
G. D. RABINOVICH: Conference on Thermodynamics	120
Reader's Guide	
International Journal of Heat and Mass Transfer, Volume 7, No. 8 (August 1964)	122
Heat and Mass Transfer Bibliography	122 124

JOURNAL OF ENGINEERING PHYSICS

(Published in the U.S.S.R. in Russian with English abstracts)

Volume 7, No. 12 December, 1964

	Page
L. S. Shtokolov: Heat-transfer crisis in boiling of ethyl alcohol at high velocities	3
V. A. Borodulya and A. I. Tamarin: Investigation of effective thermal diffusivity of a fluidized bed	8
I. KATTO: A consideration on fully-developed nucleate pool boiling heat transfer	13
B. M. MOGILEVSKY and A. F. CHUDNOVSKY: Measurement of thermal conductivity of semiconductors by the transient method	23
A. S. FRENKEL, I. I. VISHNEVSKY and V. N. SKRIPAK: Temperature distribution in brick-work of the open-hearth furnace root	32
G. M. Volokhov, E. V. Ivashkevich and G. A. Surkov: A transient method for determination of thermal	34
properties of non-metals	39
V. M. KAPINOS: Heat transfer in a gas flow to periphery between two rotating disks	45
O. Yu. Novoselsky and V. L. Ukolov: Determination of optimum sizes of radiating fins	54
B. I. MAKAROV: Errors in measuring temperatures on solid surfaces by means of a thermocouple in heating and cooling according to an arbitrary law	60
V. M. Kazansky and L. N. Bely: Automatic record of the porous body drying rate	66
L. P. Andronov: Automatic control of air humidity for cargo storing according to temperature excess	71
L. S. Freiman: Mass transfer in a wetted maize seed	75
G. I. PAVLOVSKY, E. G. BRATUTA and Yu. V. NAKHMAN: Moist steam flow rate through nozzles in cascade at subsonic velocities	79
G. S. SHANDOROV: Elimination of gasing liquid by non-submerged portion of a turbulent jet	83
P. A. SEMYENOV and A. V. SOLOVIEV: A flow of thin liquid films	85
V. M. YUDIN: The solution of the heat-conduction problem for semi-infinite body with variable heat-transfer coefficient	90
A. M. MKHITARYAN and M. P. OVSYANNIKOV: Determination of linearized disturbance fluxes in a high	30
supersonic air flow round asymmetric conical bodies	95
I. V. SERGEEV: Application of variational method to non-uniform fuel burn-up	106
O. I. YASKO: Correlation for electric arc characteristics	112
Letters to the Editor	
V. B. Lembersky: Study of heat transfer in a slotted nozzle	117
L. M. GALONEN: A steady-state heat-conduction problem of a parallel plane wall with various thermal regimes	
on its surface	119
E. Ruckenstein: Comments on the convective diffusion equation	121
Discussion	
S. M. Volosov: Comments on the paper by YA. Z. KAZAVCHINSKY "Use of classical concepts in a new system	
of justification of the Second Law of Thermodynamics", JEP No. 3, 1964	123
A. L. ASHKENAZI: On justification of the Second Law of Thermodynamics	125
Book Reviews	
Review of the book Heat and Mass Transfer, Vol. 5. Methods of Calculation and Simulation of Heat and Mass Transfer Processes published in the Journal Technical Digest, No. 5, 1964, Prague, Czechoslovakia	127
Reader's Guide	
International Journal of Heat and Mass Transfer, Volume 7, No. 9 (September 1964)	128
Contents of the Journal of Engineering Physics, 1964	130