CONTENTS LISTS

JOURNAL OF ENGINEERING PHYSICS

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

Volume XII, No. 1 January, 1967 V. I. BALAKHONOVA: Heat and mass transfer in evaporation from the free surface of a liquid in the atmosphere of a rarefied gas 3 V. A. SVINARYOV, A. N. PLANOVSKII, S. P. RUDOBASHTA and A. P. FOKIN: Heat and mass transfer between a spherical solid and turbulent gas flow 10 A. S. GINEVSKII and K. A. POCHKINA: The initial turbulence effect on axisymmetrical jet properties 15 M. D. TARNOPOL'SKII: Propagation of a fan jet in a finite space 20 I. A. BELOV and R. N. KOGTEV: Gas flow in a closed axisymmetrical tube 26 N. V. KLIENTOV: Laminar compressible fluid jet propagation along a plane wall 31 A. B. Verzhinskaya and R. Sh. Vainberg: Thermal properties of two-phase disperse system saturated with different liquids 38 V. A. SHEIMAN and G. E. REZNIKOVA: Thermal calculation theory of rotating disperse packing regenerators 43 Yu. L. RASTORGUEV, Z. I. GELLER and B. A. GRIGOR'EV: On the temperature dependence of thermal conductivity of Ozeksauk narrow-boiling range oil 50 I. T. EL'PERIN and I. F. PIKUS: On the transient heating of solids without temperature gradient 56 N. N. PROKHORENKO and N. B. KONDUKOV: Analysis of solid motion in a fluidized bed based on probability approach 62 N. V. PAK: Comparison of thermal conductivities of moist capillary-porous materials at temperatures above and below 0°C 68 M. G. Kogan: Solution of non-linear heat-conduction problems by Kantorovich's method 72 A. A. ALEKSASHENKO, V. A. ALEKSASHENKO and N. V. SELEZNYOV: On a particular method of solution of linear partial boundary-value equations 82 N. G. KONDRASHOV and V. B. RYVKIN: On a singularity in the solution of a conjugated problem 86 L. A. SOKOLOV: Heat-transfer pecularities between liquid metal and a crystallized solid metal crust on a copper wall 92 cooled by water A. E. KLYUCHARYOV, N. A. TIKHONOV, G. A. KARDASHEV and P. E. MIKHAILOV: Infrared drying of mineral-wool 99 products Survey 104 S. S. BATSANOV: Physical chemistry of pulse pressures Prominent Soviet Scientists PANTELEIMON DMITRIEVICH LEBEDEV (Commemoration of his 60th birthday) 120 Shorter Communications P. V. CHERPAKOV and L. S. MILOVSKAYA: Solution of some non-linear heat-transfer problems 123 Contents list of the International Journal of Heat and Mass Transfer, Vol. 9, No. 9 (1966) 126 Heat and Mass Transfer Bibliography 129

JOURNAL OF ENGINEERING PHYSICS

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

Volume XII, No. 2 February,	1967
	Page
L. A. Vulis and V. L. Goryachev: On the thermal regime of electric arc combustion	147
T. MIZUSHINA and E. KURYVAKY: Turbulent heat transfer in non-Newtonian fluids	152
A. S. NEVSKII: On some relationships between the emissivities of emitting volumes and the mutual radiative heat-	-
transfer coefficients	165
V. K. Shchukin and V. A. Filin: Convective heat transfer in short curved ducts	169
E. B. MANUSOV: Determination of heat-transfer coefficients by dynamic characteristics	177
S. S. KUTATELADZE and N. N. MAMONTOVA: Burnout heat fluxes in pool boiling at low pressures	181
B, V. Berg and A. P. Baskakov: Local heat transfer of a circular cylinder moving across a fluidized bed	187
M. A. KAGANOV: Effectiveness of semi-conductor thermoelectric coolants and heaters of liquid and gas flows	192
N. S. Nosov and G. P. Yasnikov: Polytropic changes of the state of gas-solid system	200
V. P. KHARITONOV: Heat transfer in gas flow through stationary loose packing with variable gas inlet temperature	205
G. V. Shantyr': Hydrodynamic boundary layer on a disc in transverse flow	212
I. N. SADIKOV: Viscous-fluid motion at the starting length of a plane duct	219
V. R. Shelyag: Calculation of the temperature fields in a laminar gas flow in flat-slot channels	227
I. YA. KOLESNIK: On one of the methods of solving a diffusion equation	234
V. P. DUSHCHENKO and V. S. DROVOZYUK: Kinetics of temperature field of a three-layer colloidal body	240
A. N. Korovkin and Yu. L. Levkovskii: Closing of a cavitation hole near a solid wall	246
V. F. Dunskii and N. V. Nikitin: Determination of the spectrum of drop sizes in liquid spraying	254
Survey	
V. I. TYUKAEV and A. G. SHASHKOV: High-temperature materials in modern technique and methods of determining	g 263
their thermal properties at temperatures up to 3500°C	203
Shorter Communications	
V. I. Popov and E. M. Khabakhpasheva: Investigation of heat transfer in laminar flow of plug-viscous liquids A. G. Gorelik: On heat transfer with thermoradiative heating and drying of granular material in a fluidized bed	278 281
Reader's Guide	
Contents list of the International Journal of Heat and Mass Transfer Vol. 9, No. 10 (1966)	285

JOURNAL OF ENGINEERING PHYSICS

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

Volume XII, No. 3	arch, 1967
	Page
K. I. STRAKHOVICH and S. L. LUR'E: Flat plate thermal boundary layer in non-Newtonian fluid with non-line	
conduction law	291
S. WRONSKII: Temperature distribution in a laminar flow at high shear stresses	296
L. A. DORFMAN: Heat transfer and viscous liquid flow on a rotating disc	309
V. B. LEMBERSKII: On plug-viscous boundary-layer flow along a plate	317
E. F. Avdeev and F. Aliev: Turbulent mixing in a system of plane non-isothermal jets	322
B. I. STRIKITSA: Solution of problems of the reverse heat transfer by the transient function method	330
V. G. Leitsina and N. V. Pavlyukevich: On boundary conditions at the surface subliming into rarefied	
component gas	336
A. A. VASSERMAN and V. A. RABINOVICH: Liquid nitrogen equations of state	342
E. A. IODKO: On the analytical solution of solidification problems	349
R. B. NUDEL'MAN: On particular heat conduction problems in non-homogeneous body	354
S. YA. YAREMA and M. P. SAVRUK: The temperature field in plates and slightly inclined shells with intern	al heat
sources	360
A. G. BESSONOV and Yu. R. IVANOV: Steady temperature field of the finite enveloped cylinder	368
A. N. REZNIKOV, M. D. SMIRNOV and V. V. BASOV: Thermal stresses and displacements in plane wedges	374
Yu. E. BAGDASAROV and I. A. Kuznetsov: Calculations of unsteady-state thermal stress in a flat wall	382
E. KOLBE and D. TREDUP: Infrared pulse drying at different pressures	389
Prominent Soviet Scientists	
ALEKSANDER ADOLFOVICH GUKHMAN (To his 70th birthday)	395
•	
Shorter Communications	
I. L. Mar'yasın, Z. A. Nabutovskii, V. G. Knorre, V. P. Karevskii and V. A. Gur'yankin: System of diap breaking for a single-pulse shock tube	ohragm 398
Reader's Guide	
Heat and Mass Transfer Bibliography	401