## **CONTENTS LIST**

## JOURNAL OF ENGINEERING PHYSICS

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

Volume 6, No. 4 April,	1963
	Page
B. S. Petukhov and L. G. Genin: Heat transfer in tubes with internal heat sources in a liquid flow	3
V. P. MOTULEVICH: The effect of porous suction or injection of various substances on heat transfer of blunt	9
bodies in a flow of liquid V. I. Subbotin, P. A. Ushakov, B. N. Gabrianovich, V. D. Talanov and I. P. Sviridenko: Heat transfer	7
with liquid mercury flow in circular tubes	16
V. V. Usanov: On possible solutions of the equations for thermodynamics of gas flows with heat transfer	22
in a viscous flow  M. G. KAGANER and L. I. GLEBOVA: The effect of volume weight of porous materials on heat transfer	22 27
D. A. LABUNTSOV: Bubble growth mechanism on a heating surface	33
I. N. Sadikov: Exact solutions of energy equations for an incompressible viscous liquid flow in tubes	40
A. S. KADINOVA, G. N. KHEIFETS and N. YU. TAITS: On the mode of heat transfer with spray cooling	46
E. A. KAZAKOVA, A. I. DENEGA and L. V. MUZYCHENKO: Heat transfer between granular particles and air in a fluidized bed	51
L. I. KUDRYASHEV and V. K. LYAKHOV: The dependence of heat-transfer coefficient on the degree of longi-	. 31
tudinal and transverse temperature nonuniformity in a turbulent liquid flow under the internal problem	
conditions	56
V. A. Sheiman: On the design of pressure operated gas dryers  L. M. Nikitina: On determination of mass-transfer potential	61 67
V. S. MILLER: An effective method for reducing contact thermal resistance	71
Notes	
Y. P. Os'minin; Heat capacity of liquid alkali metals	75
V. F. MIRONOV: Heat and mass transfer in capillary-porous bodies in a pulsating air flow	78
E. L. MITELMAN and Y. I. PANOVA: On thermal conductivity of powdery inorganic insulators	83
V. E. Stetsyuk: Heat-transfer coefficients of raw cane-sugar	86
A. I. TAMARIN: On the choice of the number of stages of a multistage heat exchanger with a fluidized bed E. P. ZIMIN: Operating conditions in a magnetohydrodynamic channel	88 92
N. N. Gvozdkov: On non-stationary heating of a cone	96
G. S. Komaishko, V. K. Stumbur and A. F. Chudnovsky: A semiconductive soil strain-gauge	101
G. P. BOIKOV: Quick calculation of body heating by radiation	105
A. F. Khrustalev: On one non-stationary heat conduction problem for a cylinder P. V. Tsoi: Solution of a system of differential equations of molecular transfer at the presence of three inter-	108
connected flows of generalized charges	111
V. A. RABINOVICH: The calculation of the thermodynamic properties of deuterium	118
Survey	
A. S. Predvoditelev: On critical phenomena of liquids and gases	123
	123
Book Reviews	
I. S. Lisker: On A. G. Shashkov and A. S. Kasperovich's monograph <i>Dynamic properties of thermistor circuits</i> . Gosenergoizdat, ML., 1962	134
EVGENIT KUZMA: On I. F. Voloshin's monograph Electrical direct-current thermistor circuits (fundamentals of the	154
theory). Izd. AN BSSR, Minsk, 1962	136
Chronicle	
The Conference of Readers of the Journal of Engineering Physics in Dushanbe	137
Reader's Guide	
International Journal of Heat and Mass Transfer, Volume 6, January 1963	139