

Contents

J. MILEWSKI and J. LEWANDOWSKI: Solid oxide fuel cell fuelled by biogases ...	3
J. MILEWSKI, K. ŚWIRSKI, M. SANTARELLI and P. LEONE: Modelling of fuel composition influences on solid oxide fuel cell performance by artificial neural network	13
J. MILEWSKI, A. MILLER, A. DMOWSKI and P. BICZEL: Methodology for the control strategy for a solid oxide fuel cell hybrid system	25
A. CEBULA and D. TALER: Modelling of air flow and heat transfer in compact heat exchangers	45
D. TALER: Control of the rate of heat flow in a compact heat exchanger by changing the speed of fan rotation	67
J. TALER and P. DZIERWA: A new method of drum heating determination during start-up of steam boilers	81
R.V. FILKOSKI: Radiation heat transfer modelling and CFD analysis of pulverised-coal combustion with staged air introduction	97
A. KLIMANEK and R.A. BIAŁECKI: A 3D CFD model of a natural draft wet-cooling tower	119
M. TRELA, R. KWIDZIŃSKI, J. GŁUCH and D. BUTRYMOWICZ: Feasibility study on application of steam injectors as feedwater heaters in supercritical Rankine cycle	133
W. KOSMAN: The possibilities to reduce casing thermal loads of the supercritical steam turbines	149

Z. GNUTEK, P. KOLASIŃSKI and M. POMORSKI: Influence of the type of working substance and its thermodynamic parameters for selection of sliding vane expanders	163
A. BORSUKIEWICZ-GOZDUR and W. NOWAK: Increasing of electricity generation capacity of biogas power generator by application of sub- and supercritical modules of Organic Rankine Cycle	175
A. GRZEBIELEC: Experimental study on adsorption heat pump	189
H. HANUSZKIEWICZ-DRAPAŁA: Heating system with vapour compressor heat pump and horizontal ground heat exchanger	201
M. SZEGA: Advantages of an application of the generalized method of data reconciliation in thermal technology	219