

## Contents

- 1) Efstatios E. Michaelides,  
A holistic approach to the total energy and cost for carbon capture and sequestration ..... 5–16
- 2) Wei Zhang, Huaqiao Jiang,  
Simulation and experimental study of the thermal characteristics of a high-speed motorized spindle..... 17–22
- 3) Prabhakar Bhandari,  
Numerical assessment of solar air heater performance having broken arc and broken S-shaped ribs  
as roughness ..... 23–31
- 4) Jitendra Singh, Atul Lanjewar,  
Experimental investigation and performance prediction of SAH using different arc rib roughness  
geometry- A comparative study ..... 33–44
- 5) Jacek Kluska, Jakub Ramotowski,  
Combustion characteristics of biochars from food processing waste..... 45–51
- 6) Aleksandr Terekh, Aleksandr Rudenko, Yevhenii Alekseik,  
Experimental investigation of heat transfer and aerodynamic drag of novel heat sinks  
with lamellar fins..... 53–63
- 7) Abdeljalil Benmansour, Houssem Laidoudi,  
Evaluation of the effect of rotational speed and rheological nature on heat transfer  
of complex fluid between two cylinders..... 65–73
- 8) Temjennaro Jamir, Hemanta Konwar,  
Soret and Dufour effects on an unsteady MHD flow about a permeable rotating vertical cone  
with variable fluid properties..... 75–86
- 9) Amardeep, Rakesh Kumar, Naveen Kumar,  
Waste plastic oil as an alternative fuel: A review ..... 87–97
- 10) Mohd Ahmed, Harveer Pali, Mohammad Khan,  
Allometry of nanoparticles on diesel-biodiesel blends for CI engine performance, combustion  
and emissions..... 99–108
- 11) Ashish Singh, Harveer Pali, Mohammad Khan,  
Experimental investigations of CI engine performance using ternary blends  
of n-butanol/biodiesel/diesel and n-octanol/biodiesel/diesel..... 109–118
- 12) Ramon de Paoli Mendes, Juan José Garcia Pabon, Willian Moreira Duarte, Luiz Machado,  
Experimental validation of a dynamic lumped parameter model of an automotive cabin..... 119–128
- 13) Wanting He, Hai Huang, Research on optimization of heating system in buildings in cold regions  
by energy-saving control..... 129–135
- 14) Fabian Dietrich, Łukasz Cieślikiewicz, Piotr Furmański, Piotr Łapka, Experimental study  
of the potential of concentrated NaCl solutions for use in pressure-retarded osmosis proces ..... 137–143
- 15) Ryszard Bialecki, Wojciech Adamczyk, Ziemowit Ostrowski,  
Selected aspects of blood flow simulations in arteries..... 145–153
- 16) Virendra Kumar, Surendra Yadav, Anil Kumar, Nishant Singh, Lalta Prasad,  
Numerical study on effect of operating pressures on crkec-based two-stage ejector..... 155–164
- 17) Joel Mathews, Talla Hymavathi,  
Unsteady magnetohydrodynamic free convection and heat transfer flow of Al<sub>2</sub>O<sub>3</sub>—Cu/water  
nanofluid over a non-linear stretching sheet in a porous medium ..... 165–173