Contents

1) Adam Pawłowski, Wiesław Zima, Sławomir Grądziel, Artur Cebula, Monika Piwowarczyk, Ewa Kozak-Jagieła
Experimental verification of the effectiveness of CO2 capture from flue gas after pulverised coal combustion 5–14

2) Katarzyna Katana, Andrzej Grzebielec, Adam Szelągowski, Maksymilian Kruk, Krzysztof Bruzi
Experimental study of a reversible ventilation – heat pump system with a ceramic regenerator 15–24

3) Nadiya Philip, Prakash Chandra Ghosh
Phase change material for thermal management of high-temperature proton exchange membrane fuel cells in electric vehicle 25–30

4) Robert Szczepaniak, Andrzej J. Panas, Łukasz Omen, Maciej Starczewski, Maciej Kowalski
Comparative experimental studies of the specific heat of Fe and Ni using scanning calorimetry methods 31–39

5) Youcef Lakahal, Houssem Laidoudi
Rheological and porous effects on mixed convection: Power-law fluid flow in a finned annular configuration 41–55

6) Seweryn Szultka, Stanislaw Czapp, Adam Tomaszewski, Marian Czapp
A method for determining the current-carrying capacity and durability of power cables based on variable ambient temperature and solar radiation 57–67

7) Aed Ibrahim Owaid, Sabah M. Hadi, Husam Sabeeh Al-Arab
A novel passive solar energy space heating design of an emergency tent 69–77

8) Emad Jaleel Mahdi, Hussein Fawzi Hussein, Ali Isam Ata
Dual-use PV canopies for public gardens: Performance, techno-economic feasibility, and CO_2 mitigation of an 84.5 kWp grid-tied system in Baghdad, Iraq 79–88

9) Tuba Fatima, Saurabh Patel
Numerical investigation of heat transfer in a partially porous-filled channel with core and wall configurations 89–98

10) Chegu Ramprasad, Chundru Maheswari, Bhavanam Naga Lakshmi, Tadavarthi Madhu Mohan, Ravuri Mohana Ramana
Mixed convective chemically reacted hybrid nanofluid flowing over a non-isothermal/non-isosolutal cone/wedge with heat generation/absorption: A numerical study 99–110

11) Syed Shahzad Ali, Muhammad Imran Khan, Mohammed Almakki, Ahmed Zeeshan
Physics-Informed Deep Learning Optimisation for Heat Transfer Analysis of Non-Similar Flow over Porous Moving Surface 111–123

12) Muhammad Yousuf Rafiq, Zaheer Abbas, Ayesha Naeem
Analysis of oscillatory flow and heat transfer of Maxwell fluid through a porous circular microchannel with Hall effects 125–137

13) Ali K. Abdul Razzaq, Khudheyer S. Mushatet, Riyam Ali Khaled
Numerical investigation of a double twisted tube heat exchanger in different configurations 139–146

14) Akashdeep Negi, Lalit Ranakoti, Kapil Kumar Sharma, Adhirath Mandal, Mansi Sharma, Deepak Kumar, Jeetendra Mohan Khare, Shobhit Sharma, Prabhakar Bhandari, Sneha Singh
Enhancing Solar Still Productivity through Fin, Solar Collector and Wick Modifications: A Comprehensive Review 147–156

15) Asmaa Nadia Bouguesri, Houssem Laidoudi, Abderrahmane Aissa
Enhancement of buoyancy-driven flow in an annular system by using nano-encapsulated phase change material fluid 157–172

16) Liliana Mirosz
Experimental validation of the CFD model of heat losses from the horizontal rectangular flue gas duct exposed to wind and solar radiation 173–186

17) Kinga Strąk, Dariusz Strąk
Experimental investigation of flow boiling heat transfer in a minichannel heat exchanger with countercurrent hot and cold fluid circuits 187–197

18) Katarzyna Stolecka-Antczak, Andrzej Rusin
Safety aspects of the use of ammonia and an ammonia-hydrogen mixture 199–211

19) Veljko Minic, Nikola Bojanic, Milena Zecevic, Aleksandar Djordjevic, Dragan Manasijevic, Milan Kolarevic
Experimental test and simulation of properties from ternary Bi-Ni-Pb system: microstructural, mechanical, electrical properties, Scheil and Lever simulation 213–232

20) Salma Seham Jameel, Ali Rahim Ali, Hussein Fawzi Hussein, Alaa Hussein Ali, Shaalan Bdaiwi Ahmed
Experimental Investigation of Microplastic Removal from Drinking Water Using Aluminium Electrocoagulation: Process Performance and Operating Parameters 233–240

21) P. Sudarsana Reddy, P. Sreedevi
Impact of activation energy and Deborah number on heat and mass transfer of three dimensional rotating magnetic nanofluid over a stretching surface 241–252

22) Heyu Jia, Wenzhe Dang, Xiaopo Wang
Analysis of phase behaviour of R1243zf/lubricant oil mixtures and its impact on the performance of vapour-compression refrigeration cycle 253–260