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## **Preface**

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### **Can Özgür Colpan\* and Mehmet Akif Ezan**

Department of Mechanical Engineering,  
Faculty of Engineering,  
Dokuz Eylul University,  
Buca, Izmir, 35397, Turkey  
Email: ozgur.colpan@deu.edu.tr  
Email: mehmetezan@gmail.com  
\*Corresponding author

**Biographical notes:** Can Özgür Colpan is an Associate Professor from the Department of Mechanical Engineering at the Dokuz Eylul University. His research areas are multi-physics modelling of fuel cells, manufacturing, and characterisation of fuel cells, organic Rankine cycles, heat exchanger design, and modelling, thermodynamic modelling of integrated energy systems and renewable energy systems.

Mehmet Akif Ezan is an Associate Professor from the Department of Mechanical Engineering at the Dokuz Eylul University. His main research interests cover thermal energy storage systems, natural-convection-driven melting/solidification processes, development, and characterisation of phase change materials and photovoltaic/thermal system.

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This special issue consists of 12 papers selected from the submissions presented at the 7th Global Conference on Global Warming (GCGW-2018), which was held between June 24–28 2018 in Izmir, Turkey. This conference was a multi-disciplinary international conference, which provided an opportunity for the participants to discuss the recent progress in the causes, impacts, and solutions of global warming. Researchers, scientists, and engineers from different countries shared their research and exchanged information in these areas.

High-quality submissions from GCGW-2018 related to the applications of exergy were selected for this special issue. Extended forms of these submissions were undergone an additional peer-review process to enhance their quality further. The topics of these papers mainly include two-stage cycle, parabolic trough collector, refrigeration system, organic Rankine cycles, air conditioning system, coal-fired power plant, photovoltaic power plant, geothermal cooling systems, and several multi-generation systems.

We would like to take this opportunity to warmly thank Professor Ibrahim Dincer (the founding chair of GCGW-2018), and the editorial team of Inderscience, all contributing authors and reviewers for their efforts that have made this special issue a true and unique success.