



Sustainable and Renewable Thermal Energy Systems

Guest Editors:

Dr. Ahmed Amine Hachicha

Department of Sustainable and Renewable Energy Engineering, College of Engineering, University of Sharjah, Sharjah 27272, United Arab Emirates

Dr. Essam Abo-Zahhad

1. Renewable Energy and Energy Efficiency Research Group, Sustainable Energy and Power Systems Research Centre, Research Institute for Sciences and Engineering (RISE), University of Sharjah, Sharjah PO Box 27272, United Arab Emirates
2. Mechanical Power Engineering Department, Faculty of Energy Engineering, Aswan University, Aswan 81528, Egypt

Deadline for manuscript submissions:

30 April 2025

Message from the Guest Editors

Sustainable and renewable thermal energy systems have attracted the attention of energy professionals and researchers as efficient and sustainable solutions for heating, cooling and industrial process heating applications. These technologies are capable of delivering the required thermal energy at different temperature levels and can be adapted from small- to large-scale applications. However, low-efficiency thermal storage and the high cost of such devices are still challenging aspects that need more improvement and consideration. Furthermore, the application of optimization algorithms and artificial intelligence techniques in renewable thermal energy systems create the potential for improving the performance, prediction and system operation.

The current Special Issue seeks novel research on renewable thermal solutions, considered a state-of-the-art alternative for climate protection and reducing CO₂ emissions. Contributions to this Special Issue are expected to address the most relevant challenges in renewable thermal systems in terms of performance, operation and cost.

We look forward to receiving your contributions.

Dr. Ahmed Amine Hachicha

Dr. Essam Abo-Zahhad

Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and
Applied Science, University of
Ontario Institute of Technology,
Oshawa, ON L1G 0C5, Canada

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
[X@Sus_MDPI](https://twitter.com/Sus_MDPI)