



Sustainable and Renewable Thermal Energy Systems

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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





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