Special Issue

Modelling and Simulation of Thermal Energy Systems II

Message from the Guest Editors

Reducing energy consumption in buildings and/or substitution with low/zero-carbon alternatives are among the critical components in meeting carbon reduction commitments. Thermal energy storage (TES) is one of the key low-cost technologies that can enable the increased use of intermittent renewable heat/electricity production to meet non-concurrent heat demands. TES systems can be classified into three categories: sensible heat storage (SHS), latent heat energy storage (LHS), and thermochemical energy storage (TCES). The validated numerical modelling and simulation of TES systems is an attractive approach for the evaluation of the probable store performance of different applications, identifying potential optimum store designs and key operational parameters. This Special Issue focuses on recent approaches to the modelling and simulation of TES systems for different built environmental applications including water and space heating, waste heat utilisation, cooling and air conditioning.

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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