Special Issue

Phase Change Technology for Energy and Thermal Management

Message from the Guest Editor

Rapid population growth, as well as the fast urbanisation and industrialisation seen over the last decades, have led to a drastic increase in world energy consumption. This has further resulted in the issues of and aroused public concerns surrounding energy security, environmental deterioration and global warming. To address these energy and environmental issues, a variety of sustainable and environmentally friendly technologies have been developed and applied. Among these technologies, thermal energy storage (TES) using phase-change materials (PCMs) has been attracting increasing attention. PCMs are substances that can absorb, store and release a large amount of thermal energy within a narrow temperature range through phase transitions. They therefore have been widely recognised as a promising solution to rationalise energy and thermal management, thereby deepening renewable energy penetration and enhancing energy efficiency. This Special Issue aims to gather original research and review articles regarding the development, optimisation and application of PCMs and PCM TES technologies for energy and thermal management in different sectors.

Guest Editor

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Message from the Editor-in-Chief

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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