



Sustainability and Innovation in Phase Change Materials for Efficient Thermal Energy Storage

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Message from the Guest Editors

This Special Issue seeks to highlight the latest innovations and developments in phase change materials for thermal energy storage. By gathering cutting-edge research and review articles, we aim to provide a comprehensive overview of the field, offering insights into novel material designs, system integration strategies, and real-world applications.

Potential topics include, but are not limited to, the following:

- Development of new PCMs for enhanced thermal energy storage;
- Nanocomposites and hybrid materials for PCM applications;
- Advanced encapsulation techniques for PCMs;
- Improving thermal conductivity and phase transition properties;
- Long-term performance and reliability of PCM-based systems;
- Environmental and sustainability assessments of PCM technologies;
- Integration of PCMs in buildings, industrial processes, and renewable energy systems;
- Economic analysis and scalability of PCM thermal energy storage;
- Case studies and real-world applications of PCM technologies;
- Regulatory frameworks and policies for PCM deployment.





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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.

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