



## Modeling and Simulation of Phase-Change Materials: Latest Advances and Prospects

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Deadline for manuscript  
submissions:

**closed (1 December 2022)**

### Message from the Guest Editor

Dear Colleagues,

Thermal energy storage using phase change materials (PCM) is becoming an important feature of energy systems due to an increasing mismatch between power production and consumption. Adjusting the demand side to irregular energy supplies from energy systems, including renewable energy sources, is possible by on-site heat accumulation in any type of PCM reservoirs. Such a storage system can be performed in the form of tanks (local or peripheral) or building components (wall, roof, and window) containing PCM. The behaviour of PCM depends on many factors and can be well predicted by dynamic methods by using computational techniques.

Topics covered include the following, among others:

- PCM in building fabrics, construction, and insulation composites;
- PCM windows including thermal and optical properties;
- Combined PV-PCM systems including building-integrated PV;
- Solar thermal collectors modified by PCM;
- Thermal energy storage tanks and reservoirs;
- Passive and active walls and facades modified by PCM;
- Hygrothermal behaviour of PCM composites.





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## Editor-in-Chief

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## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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