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Advances in Micro-Encapsulated Phase Change Materials for Passive and Active Thermal Energy Storage Applications

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Message from the Guest Editors

Dear Colleagues,

The aim of this Special Issue is to address the current possibilities of PCM materials that are being under investigation in some of the leading research groups of the world, paying special attention to several approaches such as micro and nano encapsulation of PCMs with polymeric shells, improvement of thermal properties in encapsulated PCMs circumventing the high supercooling and reduced thermal conductivity problems of these materials, manufacturing of shape-stabilized PCMs limiting encapsulation issues and novel possibilities towards more effective and environmentally friendly synthesis procedures for the obtention of encapsulated PCMs. Moreover, the production of encapsulated PCM slurries (PCS) where the final product is a pumpable liquid with thermal storage capacity will be specially attended in the current SI.

Finally, different applications of those materials, both for passive and active thermal energy storage (TES) will be particularly considered in this issue, focusing on sustainable alternatives for renewable energy.





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Message from the Editor-in-Chief

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