



## Phase Change Materials in Buildings

Guest Editor:

**Prof. Dr. Laurent Zalewski**

Laboratoire de Génie Civil et géo-  
Environnement (LGCgE),  
Université d'Artois, ULR 4515, F-  
62400 Béthune, France

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### Message from the Guest Editor

Dear Colleagues,

The IEA reports that “The building and building construction sectors are responsible for 36% of overall final energy consumption and nearly 40% of total direct and indirect CO<sub>2</sub> emissions”. Heating, cooling, and water heating are amongst the most important energy uses. Due to their energy storage potential, phase change materials (PCMs) could contribute significantly to reducing the energy consumption of buildings. By storing renewable thermal energy or waste energy, they can reduce heating consumption by delaying the start of heating systems or avoiding/limiting the use of cooling systems. This Special Issue will publish high-quality research and synthesis articles on the application of PCM in building systems, materials, and walls.

Keywords:

- phase change materials
- thermal energy storage (TES)
- active/passive thermal regulation
- building energy consumption
- effectiveness of phase change materials

Prof. Dr. Laurent Zalewski

*Guest Editor*





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## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
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## Message from the Editor-in-Chief

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