Special Issue

Phase Change Materials in Buildings

Message from the Guest Editor

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 CO2 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)
- actice/passive thermal regulation
- building energy consumption
- effectiveness of phase change materials

Guest Editor

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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.

Editor-in-Chief

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