Special Issue

Applications of Phase Change Materials (PCMs) in Buildings

Message from the Guest Editors

We are pleased to invite you submit a paper to this new Special Issue of Buildings entitled "Applications of Phase Change Materials (PCMs) in Buildings". Incorporating PCMs into building materials such as walls, floors, and ceilings, can absorb excess heat during the day and release it at night, reducing a building's energy consumption and improving its efficiency. PCMs also reduce peak energy demand and improve the electricity grid's stability. PCMs are crucial for enhancing the energy efficiency and sustainability of buildings, becoming increasingly critical in building design and construction. This Special Issue brings together recent research that highlights how PCMs can reduce energy consumption and improve comfort in buildings. Please submit original research articles and reviews, exploring the applications of PCM in building construction and energy management. We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

closed (31 October 2024)



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About the Journal

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

Editor-in-Chief

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