



Wood and Composite Wood in Sustainable Construction

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Message from the Guest Editors

The building construction and usage have unacceptable negative effects on the ecosystem due to the energy used during building operation as well as the materials and energy required for building construction and disposal once the building is dismantled. The constructions of buildings accounts for over 39% of the world's total carbon dioxide emissions due to the vast bulk of them being composed of concrete and steel. To encourage sustainability and application, high-performance bio-composite research is essential.

A summary of the most current developments in the fields of wood modification, high-performance wood composites, bio-based materials, and their performance in the application of sustainable construction will be provided in this Special Issue.

For further reading, please follow the link to the Special Issue Website at:

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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.

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