Special Issue

Recent Advances in Fibre-Reinforced Cementitious and Polymeric Composites for Construction

Message from the Guest Editors

This Special Issue focuses on recent progress in the development and application of FRP, FRC, and TRM/TRC for new construction and for strengthening/retrofitting existing structures. Topics of interest include (but are not limited to) the following:

- Strengthening and life-extension of existing structures and infrastructure;
- FRP as internal reinforcement for concrete (bars, grids, tendons);
- Fatigue, durability, and fire performance;
- High-strain-rate, impact, and blast response;
- Prefabricated and 3D-printed structural components:
- Lightweight structural systems and components;
- Bond/anchorage behaviour and substrate interaction;
- Reuse, repurposing, and circularity;
- Structural health monitoring (SHM) and digital twins;
- Non-destructive testing (NDT), inspection, and QA/QC.

We welcome original research, state-of-the-art reviews, benchmarks and datasets, case studies, and codeoriented contributions that translate research into safe, constructible, low-carbon practice.

More information:

https://www.mdpi.com/journal/buildings/special_issues /3IO2T4KJK8

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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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