Special Issue

Green, Resilient, and Sustainable Composite Structures: Development, Design, and Construction: 2nd Edition

Message from the Guest Editors

This Special Issue is dedicated to the advances in the development, design and construction of green, resilient and sustainable composite structures, the topics of interest include (but are not limited to):

- Design ofcomposite structures with green and sustainable materials, e.g., High performance fibre reinforced cementitious materials; Recycled concrete; Stainless steel; Aluminium alloy; Fibre reinforced polymer (FRP); Geopolymer concrete
- Development and design of earthquake-resilient prefabricated composite structures;
- The safety assessment of underground structures (such as tunnels, subways, underground caverns, or foundations);
- Self-centering composite structures;
- Composite structuresin bridge engineering;
- Retrofitting of existing structures;
- Machine-learning based design/modelling of composite structures
- Reliability analysis of composite structures;
- Composite structures under extreme loads or events:
- Novel numerical analysis and simulation methods of composite structures

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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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