Special Issue

Advances in Mechanical Behavior of Prefabricated Structures

Message from the Guest Editors

This Special Issue will highlight recent developments in, and insights into, the mechanical behavior of prefabricated structure systems. Possible topics for papers in this Special Issue include, but are not limited to:

- The mechanical behavior and structural integrity of prefabricated components under various loading conditions;
- Innovations in materials used in prefabrication, including high-strength concrete, advanced composites, and sustainable materials;
- The effects of connection types and systems on the overall mechanical behavior of prefabricated structures;
- Numerical modelling and simulation methods for analyzing the mechanical properties of prefabricated components;
- Performance assessments of prefabricated structures under dynamic loading scenarios, such as seismic events and wind loads:
- Case studies showcasing successful applications of prefabricated structures;
- Advances in manufacturing and assembly techniques that influence the mechanical behavior of prefabricated elements.

We look forward to receiving your submissions and advancing our understanding of the mechanical behavior of prefabricated structures.

Guest Editors

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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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