Special Issue

Advanced Research on Steel Joints and Structures: Mechanical Behavior, Performance Analysis, and Stability Design

Message from the Guest Editors

This Special Issue, titled "Advanced Research on Steel Joints and Structures: Mechanical Behavior, Performance Analysis, and Stability Design", aims to bring together the latest findings and innovative approaches in this critical area of research. Topics of interest include, but are not limited to, the following research areas:

- Mechanical behavior of steel joints under various loading conditions: Performance analysis of steel structures under extreme events (e.g., earthquakes, fires, and impacts).
- Stability design considerations for steel frames and connections: Innovative design concepts and methodologies for steel structures.
- Experimental and numerical investigations on the behavior of steel members and connections.
- High-strength steel applications and their implications on structural performance: The use of advanced materials in conjunction with steel to enhance structural performance.
- 3D printing technologies in the fabrication of steel structures and their impact on design and construction..
- Machine learning and artificial intelligence applications in the design and optimization of steel 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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