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Novel Steel and Steel-Concrete Composite Structures

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Message from the Guest Editors

Steel and steel-concrete composite structures have experienced rapid developments in recent years. To meet the requirements of practical engineering structures, including high bearing capacity, high seismic resistance and ductility, large span, good resilience, economic efficiency, etc., novel steel and steel-concrete composite structures are expected to improve the performance of current structural systems. The research toward novel steel and steel-concrete composite structures includes the development of novel structures, the structural behavior of novel structures and design approaches. Detailed investigations may be conducted by establishing new analytical and simulating techniques. The aim of this Special Issue is to promote novel steel and steel-concrete composite structural systems and expand their applications. The scope of this Special Issue includes, but is not limited to, the following aspects:

- Novel steel structures
- Novel steel-concrete composite structures
- Steel plate-concrete composite structures and technique
- Earthquake-resistant structures
- Large-span and spatial structures
- Composite structures with high-performance materials



Specialsue







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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, 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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