



## Recent Advances in the Mechanical Properties of Hybrid Building Structures

Guest Editor:

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### Message from the Guest Editor

Dear Colleagues,

Hybrid structures that combine two or more different construction and building materials are becoming increasingly prevalent in the construction industry. The unique synergies created by fusing distinct materials into hybrid systems can result in structures with superior mechanical performance compared to single-material designs. This Special Issue seeks to showcase cutting-edge research focused on enhancing and optimizing the mechanical properties of hybrid structures through novel combinations of materials, innovative fabrication techniques and advanced modeling. Contributions should analyze mechanical behaviors including strength, stiffness, toughness and durability for hybrid systems spanning applications in infrastructure, buildings and beyond. By bringing together the latest advancements in this rapidly evolving field, this Special Issue provides a comprehensive overview of the remarkable potential of hybrid structures to meet demanding performance requirements and revolutionize the built environment.





## Editor-in-Chief

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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, 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.

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