



The Properties of Composite Materials in Construction

Guest Editor:

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Message from the Guest Editor

The development of composite building materials in recent years has significantly improved their properties. Breakthroughs in novel technologies, such as building materials from waste materials, artificial intelligence, low-carbon technologies, and resilient structures, provide new opportunities for developing civil engineering disciplines. This Special Issue aims to present the latest findings on developing and testing environmentally friendly materials and solutions to the problems associated with achieving sustainability in civil engineering.

It is my pleasure to invite you to submit an original manuscript to this Special Issue focusing on gathering knowledge and experience in the latest advances and trends in the above areas. Potential topics but are not limited to:

The testing of structures composed of novel concrete materials

Real-time damage detection and damage imaging

Novel algorithms for non-destructive testing (NDT) data analysis

Artificial intelligence and machine learning applications for the analysis of data from NDT measurement

Health and stability monitoring in civil engineering by the NDT method

Other non-destructive acoustic testing methods for composite materials





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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