Special Issue

Application of Finite Element Modelling in Civil and Structural Engineering

Message from the Guest Editors

Computer-based FE modelling is a very popular and extensively used numerical simulation technique for simulating complex real-world problems. Finite element modelling (FEM) techniques offer a cost-efficient and -effective way to simulate the structural response of small- and full-scale structural elements and structures. This Special Issue deals with the application of finite element modelling in structural engineering and civil infrastructures. The range of potential topics includes numerical simulation of the static and dynamic (cyclic, seismic, impact and blast loadings) behaviour of concrete, steel and composite structures. In addition, other topics include simulating the structural performance of retrofitted, strengthened and rehabilitated structures numerically by using finite element modelling. This Special Issue will also accept state-of-the-art reviews on the application of finite element modelling in structural engineering.

Guest Editors

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Deadline for manuscript submissions

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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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