Special Issue

Multiscale Calculation of Structural Concrete

Message from the Guest Editors

This Special Issue aims to stimulate an exchange of ideas and knowledge on multiscale calculations for concrete materials and structures. Original contributions describing new research, case studies, and applications or state-of-the-art discussion on the following and related topics are welcome:

- Multiscale characterization of cement-based composites;
- Multiscale design, fabrication, and synthesis for structural concrete;
- Multiscale micromechanics and poromechanics;
- Multiscale modeling of concrete durability;
- Multiscale numerical simulations of material and structure;
- Multiscale of combined physics/chemistry/mechanics in concrete.

For scholars interested to submit papers to the Special Issue, please click "Submit to Special Issue" or contact Astoria Yao: astoria.yao@mdpi.com.

Guest Editors

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Deadline for manuscript submissions

closed (30 May 2023)

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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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