



## Deformation Behavior and Properties of Reinforced Concrete

Guest Editor:

### Message from the Guest Editor

**Dr. Junqi Huang**

School of Civil Engineering, Hefei  
University of Technology, Hefei  
230009, China

Deadline for manuscript  
submissions:

**closed (31 August 2024)**

Reinforced concrete, as a commonly used construction material in engineering practice, is susceptible to damage during its service life owing to the severe environment and different loading conditions. The damage of structures may lead to the deterioration of the performance of this component, such as its stiffness, load-carrying capacity, and deformability. Therefore, over the past several decades, the repair and renovation of existing structures have become increasingly attractive. However, evaluating the performance of the structures after strengthening and repair has also become an important issue in this research field.

This Special Issue is devoted to new research and development activities in regard to the behavior and properties of reinforced concrete, particularly for the strengthening and repairing of this member. Topics of interest for this Special Issue include, but are not limited to, the following: strengthening technique; strengthening effect assessment; structural performance; reinforced concrete; and numerical analysis.





## Editor-in-Chief

### Prof. Dr. David Arditi

Construction Engineering and Management Program,  
Department of Civil,  
Architectural, and Environmental  
Engineering, Illinois Institute of  
Technology, 3201 South  
Dearborn Street, Chicago, IL  
60616, USA

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Civil*) / CiteScore - Q1 (Architecture)

## Contact Us

---

Buildings Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/buildings  
buildings@mdpi.com  
X@Buildings\_MDPI