

## Special Issue

# Advances in Reinforced Concrete Infrastructure: Enhancing Structural Resilience and Promoting Sustainability, 2nd Edition

### Message from the Guest Editors

This Special Issue is dedicated to exploring the transformative advances in reinforced concrete. We aim to highlight the critical convergence of enhanced structural resilience and profound sustainability, moving beyond conventional design paradigms. We will discuss breakthrough materials, including self-healing concretes, ultra-high-performance composites (UHPCs), non-corrosive reinforcements such as fiber-reinforced polymers (FRPs) and shape memory alloys (SMAs), and composite materials that extend service life to a large degree and reduce maintenance. The rise of smart infrastructure, enabled by structural health monitoring (SHM) systems, has been fundamental to these advancements. These networks of sensors provide real-time data on structural integrity, facilitating predictive maintenance, informing lifecycle management, and creating structures that can diagnose their own health. This data-driven approach is synergized with advanced modelling and digital twin technologies, allowing for designs stronger, materially and energy efficient. By using low-carbon cements, recycled aggregates, and optimized construction techniques, this field is addressing its environmental footprint.

### Guest Editors

Dr. Haibin Zhang

Dr. Mohanad M. Abdulazeez

Prof. Dr. Ganesh Thiagarajan

Dr. Akram Jawdhari

Dr. Zeinab Bayati

### Deadline for manuscript submissions

31 May 2026



## Infrastructures

an Open Access Journal  
by MDPI

Impact Factor 2.9  
CiteScore 6.0



[mdpi.com/si/260273](https://mdpi.com/si/260273)

*Infrastructures*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[infrastructures@mdpi.com](mailto:infrastructures@mdpi.com)

[mdpi.com/journal/  
infrastructures](https://mdpi.com/journal/infrastructures)





## Infrastructures

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.9  
CiteScore 6.0



[mdpi.com/journal/  
infrastructures](https://mdpi.com/journal/infrastructures)



## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute a research article, review or short communication for consideration and publication in *Infrastructures* (ISSN 2412-3811). There is no restriction on the length of the papers. *Infrastructures* is published in open access format. The scientific community and general public have unlimited free access to the content as soon as it is published. *Infrastructures* is supported by the authors by the payment of article processing charges for accepted manuscripts. Please consider *Infrastructures* as an exceptional opportunity to publish your work.

---

### Editor-in-Chief

Dr. Pedro Arias-Sánchez

Applied Geotechnologies Group, Department of Natural Resources and Environmental Engineering, School of Mining Engineering, University of Vigo, 36310 Vigo, Spain

---

### Author Benefits

#### Open Access:

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

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Construction and Building Technology) /  
CiteScore - Q1 (Building and Construction)