

## Special Issue

# Flexural Strengthening of Reinforced Concrete Beams

### Message from the Guest Editors

Dear Colleague, Recently, advanced construction materials have been widely applied to concrete structures due to the flexural strengthening of reinforced concrete. Advanced construction materials have been used for the strengthening of concrete structures in various methods. Various methods have also been used for the flexural strengthening of reinforced concrete and prestressed concrete structures. The goal of this Special Issue is to disseminate original research and review studies that address (experimental, theoretical) advances, trends, challenges, and future perspectives regarding the development, characterization, and application of strengthening method to concrete structures. The topics proposed for this Special Issue include but are not limited to the following:

- Flexural performance of reinforced concrete beams;
- Strengthening of concrete structures using various methods;
- Effect of strengthening method for reinforced concrete beams;
- Numerical modeling of reinforced concrete beams;
- Failure mechanism of strengthened concrete structures;
- Advanced material application;
- Innovative applications for the construction industry.

### Guest Editors

Dr. Heeyoung Lee

Department of Civil Engineering, Cho Sun University, Gwangju, 61452, Korea

Dr. Ting Tan

Department of Civil Engineering, University of Vermont, Burlington, VT 05405, USA

### Deadline for manuscript submissions

closed (25 March 2022)



## CivilEng

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.0  
CiteScore 4.0



[mdpi.com/si/93699](https://mdpi.com/si/93699)

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

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





# CivilEng

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.0  
CiteScore 4.0



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



## About the Journal

### Message from the Editor-in-Chief

The journal is devoted to academic researchers, working in the main fields of civil engineering, who want to spread their findings in the scientific community. Topics include: solid mechanics, structural and earthquake engineering, environmental and geotechnical engineering, survey and geo-spatial engineering, coastal and harbor engineering, building physics and sustainable materials, municipal or urban engineering, engineering and economy, and construction engineering. Contributions which are a good mixture of rigorous theoretical principles and experience-based technical solutions are especially welcome. Purely numerical or experimental approaches are also accepted, provided they are accompanied by a strong speculative investigation, finalized to extract a physical interpretation, and useful for enlarging the general knowledge of the problem.

---

### Editor-in-Chief

Prof. Angelo Luongo

Department of Civil, Architecture and Building and Environmental Engineering, University of L'Aquila, Via Giovanni Gronchi 18, 67100 L'Aquila, Italy

---

### Author Benefits

#### High Visibility:

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

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 27 days after submission; acceptance to publication is undertaken in 3.7 days (median values for papers published in this journal in the first half of 2025).

#### Journal Rank:

CiteScore - Q2 (Safety, Risk, Reliability and Quality)