



## Recent Developments in Timber Engineering

Guest Editors:

### Dr. Bidur Kafle

School of Engineering, Faculty of  
Science Engineering & Built  
Environment, Deakin University,  
Waurm Ponds, VIC 3216, Australia

### Dr. Mahbube Subhani

School of Engineering, Deakin  
University, Geelong, VIC 3216,  
Australia

### Dr. Kazem Ghabraie

School of Engineering, Deakin  
University, Waurm Ponds, VIC  
3216, Australia

Deadline for manuscript  
submissions:

**closed (30 October 2023)**

### Message from the Guest Editors

This Special Issue aims to offer a research platform for communicating and discussing recent findings and developments in timber engineering, including wood characterisation, manufacturing of new engineered timber products, densification of timber, development of adhesive system, and use of end-of-life timber.

The aim of this Special Issue is to attract prominent research groups to share and contribute to the body of knowledge in this field by presenting their findings related to analytical, numerical, and/or experimental investigation of timber engineering, thus creating sustainable and resilient communities. The topics relevant to this Special Issue include, but are not limited to:

- Densification of timber;
- Characterization of densified timber;
- Repurposing end-of-life timber;
- Material characterisation of various wood species;
- Engineered mass timber panels using softwood and hardwood;
- Development and use of bio-resin for mass engineered products;
- Veneer based timber products;
- Recent development in nail laminated timber, laminated veneer lumber, plywood, and oriented strand board.





## 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