



*forests*

an Open Access Journal by MDPI



## Frontiers in Modification of Wood and Wood-Based Composites

Guest Editors:

**Dr. Seng Hua Lee**

Department of Wood Industry,  
Faculty of Applied Sciences,  
Universiti Teknologi MARA  
Pahang Branch Campus Jengka,  
Bandar Tun Razak 26400,  
Pahang, Malaysia

**Dr. Wei Chen Lum**

Institute for Infrastructure  
Engineering and Sustainable  
Management (IIESM), Universiti  
Teknologi MARA, Shah Alam  
40450, Selangor, Malaysia

**Dr. Manfred Dunky**

University Lecturer, St. Poelten,  
Austria

Deadline for manuscript  
submissions:

**closed (30 June 2023)**

### Message from the Guest Editors

Dimensional stability and biological durability are very critical criteria for different types of wood. The hygroscopic nature of wood and wood-based composites is responsible for the dimensional instability and decay of wooden structures. Suitable modification methods to reduce the hygroscopic behavior of wood are highly sought after. Wood modification refers to the process of altering the properties of a material through the use of chemical, mechanical, physical, or biological methods. In the interest of environmental protection, more environmentally friendly treatments utilizing non-toxic chemicals are strongly encouraged. As a result, advancements in the modification of wood and wood-based composites are critical. This Special Issue aimed to collect high-quality original research and systematic review articles on the most recent advancements in wood and wood-based composites modification technologies. Additionally, this Special Issue will feature selected contributions on the modification of non-wood materials such as bamboo and palm, as well as the procedure for the modification, characterization, and applications of modified wood and wood-based composites.



[mdpi.com/si/113518](https://mdpi.com/si/113518)

# Special Issue



# forests



an Open Access Journal by MDPI

## Editors-in-Chief

### **Prof. Dr. Cate Macinnis-Ng**

Department of Biological Sciences, Faculty of Science, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand

### **Prof. Dr. Giacomo Alessandro Gerosa**

Department of Mathematics and Physics, Catholic University of Brescia, I-25121 Brescia, Italy

## Message from the Editorial Board

*Forests* (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access.

Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

## 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), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

**Journal Rank:** JCR - Q1 (*Forestry*) / CiteScore - Q1 (*Forestry*)

## Contact Us

---

Forests Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/forests  
forests@mdpi.com  
X@Forests\_MDPI