



## Wood Formation and Environmental Constraints: Multiscale Approach

Guest Editors:

**Prof. Dr. Veronica De Micco**

**Dr. Angela Balzano**

**Dr. Arturo Pacheco**

**Dr. Giovanna Battipaglia**

Deadline for manuscript  
submissions:

**closed (15 September 2021)**

### Message from the Guest Editors

The combination of a multidisciplinary approach integrating the analysis of xylogenesis with the retrospective reconstruction of past plant growth behaviour through the quantification of functional anatomical and isotopic traits in long-term tree-ring series has already proven to be a powerful tool to provide invaluable information on plant responses to environmental changes. However, given the large variability of involved factors in plant–environment interactions, it is necessary to apply combined multiscale approaches to achieve a better understanding of the complex wood formation process.

This Special Issue of *Forests* invites contributions in line with a multiscale approach covering a range of different disciplines from the cellular level (genetic, xylogenesis) to individuals (dendrochronology, maximum latewood density, blue intensity, wood anatomy, photosynthesis and flow measurements) and population (modeling).

**Keywords:** xylogenesis; dendrochronology; quantitative wood anatomy; functional anatomical traits; isotopic analysis; blue intensity; environment–growth relationships





# 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