



## Measurement and Application of Computed Tomography Technology in Wood

Guest Editors:

**Dr. Jorge Martinez Garcia**

Center of Thermal Energy Storage, Lucerne University of Applied Science and Arts, School of Engineering and Architecture, Horw, Lucerne, Switzerland

**Dr. Jörg Stelzner**

Leibniz-Zentrum für Archäologie, Mainz, Germany

Deadline for manuscript submissions:

**closed (15 February 2024)**

### Message from the Guest Editors

Dear Colleagues,

Archaeological wood holds or provides access to unique and essential information for cultural heritage research in terms of past procedures, technologies, and environments. Wooden artefacts, however, are commonly degraded, strongly distorting their anatomical structure; therefore, there is a demand for advanced analysis methods able to reveal the historical information encoded in them. Computed tomography (CT) has emerged as an essential tool for the non-destructive three-dimensional (3D) analysis of the microstructure of archaeological wood. The interaction of the incoming beam (e.g., X-rays, neutrons) with the atoms produced can be imaged using radiographies and tomograms, i.e., internal 3D views, providing relevant imaging data for a fully quantitative characterisation of the material's microstructure and the dynamic processes occurring within it.

This Special Issue potential topics include, but are not limited to, the following:

- Conventional X-ray, synchrotron and neutron CT imaging
- Image-based and statistical method developments
- Assessing conservation methods
- Tree ring and morphology analysis
- Hardware/software development





# forests



an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giacomo Alessandro Gerosa**

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

## Message from the Editor-in-Chief

*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 - Q2 (Forestry) / CiteScore - Q1 (Forestry)

## Contact Us

---

Forests Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

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