Special Issue

Wood Anatomy and Evaluation of Wood Structures and Their Modifications

Message from the Guest Editors

Wood is a remarkably complex and fascinating biological structure and natural lignocellulosic polymer. Xylem provides water conductive function, and structural support to the tree, and serves in the storage of nutrients. Although the general features of the xylem are species-specific, many quantitative traits are modified by the growth environment (such as extreme events: frost, drought, flooding, lack of light, and pests). These modifications appear as anomalies in the xylem and in tree rings such as false-, frost-, light-, and bluerings, etc. Mechanical stress (such as wind, snow, ice storms, mechanical injuries, and pruning) can also lead to the formation of atypical wood structures, such as reaction wood, wound wood, scar tissue, callus, necrotic tissue, etc. Moreover, understanding xylem structures and responses may be useful in predicting functional trends and climate change impacts on woody plants. This Special Issue aims to provide an overview of the latest knowledge on xylem anatomy evaluation and codification of xvlem structures linked with their functional and ecological rule.

Guest Editors

Dr. Angela Balzano

Dr. Maks Merela

Prof. Dr. Veronica De Micco

Deadline for manuscript submissions

closed (5 July 2023)



Forests

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 4.4



mdpi.com/si/123103

Forests
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
forests@mdpi.com

mdpi.com/journal/ forests





Forests

an Open Access Journal by MDPI

Impact Factor 2.4 CiteScore 4.4





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.

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

Author Benefits

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)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2024).

