

ADVANCED COMPUTATIONAL MODELLING OF WOOD, WOOD-BASED PRODUCTS, BIOCOMPOSITES, AND TIMBER STRUCTURES

400 - GEOMECHANICS AND NATURAL MATERIALS

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ABSTRACT

This minisymposium serves as a platform for scientists and engineers operating in the realm of computational wood mechanics, wood technology, and related biocomposite computational mechanics.

The papers submitted should reflect recent advancements and breakthroughs in the analytical and numerical exploration of the mechanical and physical properties of wood, biocomposites, and structures created from these materials. We also invite papers detailing developments in wood processing, innovative wood and bio-composites, and novel experimental investigations.

The topics that the minisymposium encompasses include:

- Theoretical, numerical, and experimental investigations related to computational mechanics of wood and biocomposites across different length scales.
- Microscale studies of wood and biocomposites, focusing on cell behavior, fibers, pulp, and paper.
- Macroscale investigations into solid wood, wood- and plant-based products, laminated components, and joints.
- Structural scale research, centering on building constructions and construction details.