

Name First Name: Mr TONDI Gianluca

Function: Researcher, Department HTB/HTW – Forest Products Technology & Timber Construction

Affiliation: Salzburg University of Applied Sciences

Address: Markt 136a

Postal Code, City: 5431 Kuchl

Country: AUSTRIA

Email: gianluca.tondi@fh-salzburg.ac.at

Website: <http://www.fh-salzburg.ac.at/forschung-entwicklung/holz-und-biogene-technologien/ueber-uns/forschungsteam/>

Involvement in the COST Action: MC Member, Member of WG1Research interest

Polymerization reaction of natural products. Formulation of natural resin as wood adhesives, coating and wood preservation. Production of biobased foams for insulation purposes. Study of composite materials (lightweight panels, particleboards). Valorization of the waste biomass and improvement of the chemical properties of materials with limited environmental impact.

Specialized technique available in my lab

Lab equipment for

- preparation of biogenic material based panels (e.g. wood, leather based panels)
- preparation and impregnation of wood with tannin based wood preservatives
- natural weathering, artificial weathering (QUV accelerated weathering testing equipment)
- NIR and visible analysis of the surfaces
- Mercury porosimeter for the measurement of porosity

Additional comment

The HTB/HTW research team focuses its research on intelligent resource utilization of wood, the development of eco-friendly products and processes (e.g. environmentally friendly wood adhesive, bonding technologies, preparation of adhesives and wood preservatives using natural products, natural derivatives, by-products of processing natural materials) and sustainability and eco-efficiency of the developed products or processes. It is also specialized in the modelling and simulation of colour changes of wood surfaces.