

The Department of Material Sciences and Process Engineering, Institute of Wood Technology and Renewable Materials is currently seeking a

Postgraduate Research Associate project employment (Reference code: 191)

Extent of employment: 30 hours per week
Duration of employment: 1st of December 2023, limited to 30th of November 2026

Workplace: 3430 Tulln an der Donau

Gross monthly salary and pay grade in terms of collective agreement for university staff (payable 14 times per year): B1, € 2.458,00

Background:

The transition to climate-friendly cities has led to a renaissance of renewable building materials like wood. To prevent severe raw material shortages in the future, the material-first utilization in resource-efficient engineered products and constructions will be key. One possible resource-efficient utilization is in timber frame construction. However, current timber frame systems also consist of non-natural materials as for example cladding and insulation component. Therefore, this PhD-project aims to utilize material selection principles to screen and identify possible bio-based material combinations and enhance their suitability for the application in timber frame solutions with the goal to further increase the share of sustainable materials in the construction sector.

Responsibilities

- Operative, scientific research in the field of wood-based building materials
- Familiarization with the topic and literature research on the subject area
- Material procurement and test specimen production
- Material characterization and statistical analysis of results
- Optimization of materials and products on a laboratory scale
- Project reporting, publishing in scientific journals and participation an (inter)national conferences
- It is expected that the candidate is willing to attend the doctoral school ABC&M (<https://boku.ac.at/docservice/doktoratsstudien/doktoratsschulen/abcm>)

In addition to a fundamental understanding of established materials for timber frame construction (e.g. cladding and insulation materials), their sustainability and resource efficiency should be assessed. Furthermore, the suitability of sustainable raw and intermediate materials and their possible implementation in an automated production process should be investigated.

Required skills and qualifications

- Diploma degree in wood technology, material science, renewable resources, civil engineering or other equivalent university degree
- Language skills: English
- Basic understanding of wood technology and construction materials is required
- Interest in the complementary scientific field (wood and/or civil engineering and/or material sciences)
- Curiosity and a knowledge-based, creative approach to problem solving
- Ability to work in a team, self-reliance, reliability and communication skills

Desirable skills and qualifications

- Experience in working with wood and other natural resources
- Experience in researching scientific literature and scientific writing
- Knowledge of relevant software for data processing, statistics or experimental design
- Knowledge of German desirable, but not mandatory

Applications can be submitted until: 13th of October 2023

University of Natural Resources and Life Sciences Vienna seeks to increase the number of its female faculty and staff members. Therefore qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference unless reasons specific to an individual male candidate tilt the balance in his favour.

People with disabilities and appropriate qualifications are specifically encouraged to apply.

Please send your job application incl.

- motivation letter
- CV
- Copy of Diploma / master's degree certificate

to Personnel Management, University of Natural Resources and Life Sciences, Peter-Jordan-Straße 70, 1190 Vienna; E-Mail: kerstin.buchmueller@boku.ac.at. **(Reference code: 191)**

We regret that we cannot reimburse applicants travel and lodging expenses incurred as part of the selection and hiring process.

www.boku.ac.at