

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: 19

Extent of employment: 30 hours per week
Duration of employment: 1st of April 2022, limited to 31st of March 2025

Workplace: 3430 Tulln

Gross monthly salary and pay grade in terms of collective agreement for university staff (payable 14 times per year): B1, € 2.294,00

Environmentally friendly products of the future require the development of bio-based, non-toxic adhesives. Proteins are promising resources. Such adhesives currently still have various weaknesses that slow down the final breakthrough. In this project, the viscosity and homogeneity of protein dispersions, together with the adhesion performance to the adherend wood shall be significantly improved through various mechanical treatments. This precursor can then be turned into an efficient bio-adhesive for wood products through the targeted addition of chemical and physical crosslinkers.

Responsibilities

- The PhD candidate is responsible for operative, scientific research in the field of protein technology and processing, protein-adhesive engineering and their application as adhesive for wood adherends
- Tasks including literature research, designing and performing laboratory experiments, designing high-performance wood adhesives, mechanical protein treatment and analytics, adhesive synthesis, adhesive and material testing, evaluating results
- Close cooperation with project partners from industry
- Project reporting, publishing in scientific journals and participation at (inter)national conferences
- It is desired that the candidate is willing to perform a PhD study to obtain a doctorate degree (with the possibility to apply for the doctoral school Build.Nature)

Required skills and qualifications

- Diploma degree in food science, biotechnology, chemistry, wood technology, material sciences or other equivalent university degree
- Basic understanding of proteins and/or wood is required
- Interest in the complementary scientific field (wood and/or proteins) is required
- High motivation to develop future-proof solutions for technological questions
- Curiosity and a knowledge-based, creative approach to problem solving
- Ability to work in a team, self-reliance, reliability and communication skills
- Very good knowledge of written English (however, the everyday working language can also be German)

Desirable skills and qualifications

- Experience in working with proteins or adhesives
- Experience in researching scientific literature and scientific writing
- Knowledge of relevant software for data processing, statistics or experimental design

Applications can be submitted until: 21st of February 2022

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 department, University of Natural Resources and Life Sciences, Peter-Jordan-Straße 70, 1190 Vienna; E-Mail: kerstin.buchmueller@boku.ac.at. (**Reference code: 19**)

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

www.boku.ac.at