

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: 109)

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

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

Background:

Nature demonstrates how nano- and microstructures can create intensive colours without using any pigments or dyes. The principles of so-called structural colours can be mimicked, e.g. by cellulose nanocrystals (CNC). The aim of the PhD project is to test CNC as bio-based alternative for environmental friendly, fadeless and durable wood coatings and to design fully recyclable wood products in cooperation with a Design University and international partners.

Responsibilities

The task of the doctoral student is to perform the required scientific research to develop bioinspired coatings based on cellulose:

- ❖ Extraction of cellulosic nanomaterials from biobased raw materials
- ❖ Production of structural colour systems from derived nanomaterials (biomimetic materials) for wood surfaces
- ❖ Fundamental nano-characterisation
- ❖ Literature research; designing and performing laboratory experiments
- ❖ Writing project reports, publications and presenting at (inter)national conferences
- ❖ Participation in doctoral programme (build.nature) is desired

Required skills and qualifications

- ❖ Diploma degree in Chemistry, Material Science, Wood technology, Biobased Materials, Green Chemistry, Physics or other equivalent university degree
- ❖ Language skills: English (very good knowledge in both spoken and written)
- ❖ High motivation in fundamental research
- ❖ Ability to work independently, in a team and reliably
- ❖ Curiosity and good communication skills

Desirable skills and qualifications

- ❖ Lab experience in the field of cellulose science or wood science
- ❖ Willingness for short-term scientific research stay abroad

Applications can be submitted until: 3rd of July 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

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: 109**)

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

www.boku.ac.at