

The Department of Biotechnology, Institute of Bioprocess Science and Engineering is currently seeking a

## **Postgraduate Research Associate**

(Reference code: 228)

Extent of employment: 30 hours per week

<u>Duration of employment:</u> 1<sup>st</sup> of March 2024, limited to 28<sup>th</sup> of February 2027

Workplace: 1190 Vienna, Muthgasse 18

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

## Responsibilities

- Perform PhD thesis is desired
- Join the PhD program BioToP (<u>https://biotop.boku.ac.at</u>) at BOKU, participate in the lectures, events, workshops and retreats
- Carry out research project "Understanding protein-body formation and purification" (see https://biotop.boku.ac.at/application.html for a detailed project description)
- Investigation of physio-chemical PB properties and factors causing PB heterogeneity
- Use of the high-throughput method 'plant cell packs' to express zeins and trigger PB formation
- Perform a coarse characterization of PB variability including methods like microscopic analysis, dynamic light scattering and protein-chemical analysis as well as the use of microfluidic devices that facilitate time-resolved microscopic observation of single cells in the course of PB formation
- Design, test and optimize purification strategies for PBs based on the results of the characterization of PBs (potential methods are PB concentration by membrane technologies, PB capture using fiber-based chromatography, polishing using core-shell resins, aqueous two-phase separation, depth filters with large pores (>20µm) or fractionated precipitation)
- Assess the impact of purification processes on PB properties

## Required skills and qualifications

- Diploma degree in Biotechnology, Chemistry or other equivalent university degree
- Language skills: English, German

## Desirable skills and qualifications

- Practical experience in one or more of the above mentioned characterization and purification methods desired
- Confidence in communicating and presenting scientific work to colleagues, at conferences and to public
- An organized approach with strong attention to detail and good communication skills in German and/or English with ability to work well in teams
- Experience in writing scientific publications
- Practical experience with plant cell expression systems of advantage
- Practical experience in working with protein bodies of advantage
- Interest in working on an interdisciplinary topic

Applications can be submitted until: 8th of December 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.

- BioToP applications form (download from https://biotop.boku.ac.at/application.html)
- Copies of degree certificates
- Copy of your passport

to Personnel Management, University of Natural Resources and Life Sciences, Peter-Jordan-Straße 70, 1190 Vienna; E-Mail: <a href="mailto:kerstin.buchmueller@boku.ac.at">kerstin.buchmueller@boku.ac.at</a>. (Reference code: 228)

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

www.boku.ac.at

