

The Department of Forest- and Soil Sciences, Institute of Soil Research is currently seeking a

## **Postgraduate Research Associate project employment**

(Reference code: 215)

Extent of employment: 30 hours per week  
Duration of employment: 1<sup>st</sup> of January 2023, limited to 31<sup>st</sup> of December 2025

Workplace: UFT Tulln

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

We are seeking a motivated PhD student to work in the Europe-Horizon funded project “Root2Res: Root phenotyping and genetic improvement for rotational crops resilient to environmental change”. Root2Res aims at investigating relevant (belowground) plants traits to help design crops with a high yield resilience under increasing environmental challenges posed by climate change.

Within this framework, the focus of this PhD position lies on studying root exudation of contrasting crop lines grown under varying environmental conditions. Experiments will be conducted in close collaboration with the James Hutton Institute in Scotland, UK and experimental work will include soil-based exudation sampling approaches as well as LC-MS based exudate analysis. Joint experiments with other project partners (including soil microbiologists, plant geneticists, crop breeders) will provide the opportunity to be part of an interdisciplinary team with the potential to establish highly visible and internationally competitive research. The Institute of Soil Research Tulln is well connected to public transportation and is fully equipped with state-of-the-art instrumentation required for plant, soil and exudate analysis providing an excellent working environment.

### **Responsibilities**

- Investigate root exudation of different crop species grown under varying environmental conditions
- Research stay (3-6 months) at James Hutton Institute, Scotland, UK for joint experiments
- Analysis of root exudates by LC-MS/MS
- Collaborate with other members of the Root2Res project to link root exudation with crop performance, plant gene expression and the associated rhizobiome
- Write scientific publications
- Participate in training courses, workshops, project meetings and conferences

### **Required skills and qualifications**

- Diploma degree in Agriculture, Biology, Plant Sciences, Soil Science, or other equivalent university degree

### **Desirable skills and qualifications**

- Experience with lab work, chemical analysis (mass spectrometry, liquid chromatography), data processing; knowledge on statistics is welcome
- Very good skills in communication / English language skills
- Ability to work independently in an interdisciplinary team
- Stress resilience, reliability

Applications can be submitted until: 18<sup>th</sup> of November 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 incl. references

to Personnel department, University of Natural Resources and Life Sciences, Peter-Jordan-Straße 70, 1190 Vienna; E-Mail: [kerstin.buchmueller@boku.ac.at](mailto:kerstin.buchmueller@boku.ac.at). (**Reference code: 215**)

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

**[www.boku.ac.at](http://www.boku.ac.at)**