

The Department of Landscape, Water and Infrastructure, Institute for Structural Engineering is currently seeking a

Postgraduate Research Associate

(Reference code 71)

Extent of employment: 30 hours per week Duration of employment: 1st of July 2025, limited to 30th of June 2028 (with option of a temporary extension and top-up with third party funding) Workplace: Vienna Allocation in compliance with the Collective Agreement for University Staff to job group: B1

Gross monthly salary: (depending on previous eligible experience) at least: € 2.786,10 (payable 14 times per year)

Responsibilities

- Research in constitutive modeling of different materials and interfaces involved in structural bonding (e.g., polymers for cohesive agents, or bonded materials such as concrete or wood)
- Focus on fracture, creep, ageing and inelastic deformations
- Development and implementation of advanced material models
- Application of these constitutive models in large scale numerical studies
- Calibration of material models based on comprehensive experimental programs with industrial partners, and novel methods such as AI
- Software contributions to closed-source and open-source simulation software
- Conducting doctoral research and writing a PhD thesis on constitutive modeling in structural bonding is desired
- Publication of peer-reviewed journal papers in high quality journals and conference contributions
- Collaboration in related research projects with industrial partners
- Collaboration in international research projects
- Teaching (e.g., strength of materials, structural analysis, finite elements)

Required skills and qualifications

- Diploma degree in civil engineering, mechanical engineering or related fields or other equivalent university degree
- Language skills: English, willingness to learn German
- Strong background in solid continuum mechanics and structural analysis

- Strong interest in numerical methods (FEM, or related methods)
- Experience and interest in programming (preferably C++ and/or Python)
- Didactic skills

Applications can be submitted until: 22nd of April 2025

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 Management, University of Natural Resources and Life Sciences, Peter-Jordan-Straße 70, 1190 Vienna; E-Mail: <u>recruiting@boku.ac.at</u>. **(Reference code: 71)**

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

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