# University of Natural Resources and Life Sciences Vienna – responsibility for Humans and Nature. We work for the sustainable use and protection of natural resources.



The Department of Civil Engineering and Natural Hazards, Institute of Structural Engineering is currently seeking a

## Postdoctoral Research Associate

(Reference code: 158)

Extent of employment: 40 hours per week

<u>Duration of employment:</u> 1st of October 2024, limited to 30th of September 2027

Workplace: Vienna

Gross monthly salary and pay grade in terms of collective agreement for university staff (payable 14 times per year): B1 lit. b, € 4.752,30

### Responsibilities

- Development, implementation and application of constitutive models for different materials and interfaces involved in structural bonding (e.g., polymers for cohesive agents, or bonded materials such as concrete or wood)
- Application of advanced 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
- 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

- Doctoral degree/PhD
- Language skills: English
- Strong background in solid continuum mechanics and material modeling (e.g., nonlinear elasticity, plasticity, visco-elasticity and damage)
- Strong background in numerical methods (FEM, or related methods)
- Strong programming skills (preferably C++ and/or Python)
- Experience with numerical simulation software (e.g., MOOSE, deal.II, Kratos, Abaqus, Ansys)

#### Desirable skills and qualifications

- Team and communication skills
- Flexibility
- Social competence
- Didactic skills

Applications can be submitted until: 31st of August 2024

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: <a href="mailto:recruiting@boku.ac.at">recruiting@boku.ac.at</a>. (Reference code: 158)

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

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