



PhD Position/Job-offer

Debris flow impact dynamics on engineering structures.

Expiration Date: April 7, 2021

The University of Natural Resources and Life Sciences, Vienna is recruiting a Ph.D. student to research superstructures of bridges exposed to debris flow impacts. The PhD candidate will be part of the recently granted PhD project “Debris flow impact forces on bridge superstructures (Defsup)” funded by the FWF (Austrian Science Fund). Within the scope of this project, the forces on the superstructure of bridges due to debris flow impacts are to be investigated experimentally.

We are looking for a PhD student focusing on better understanding debris-flow behaviour especially at subcritical flow conditions and modelling debris flow impact forces on bridge superstructures. You will perform laboratory experiments, collecting data to analyse horizontal and impact forces on structures and write algorithms to interpret this data.

You hold a Masters degree in Environmental Engineering, Geophysics, Civil Engineering or any other related discipline, and you have knowledge of and/or strong interest in natural hazard risk management. You have basic knowledge of computer programming (Python, MatLab, R), and an interest and/or background in physical modelling. You are fluent in English, have good written and oral communication skills, and can work independently. We seek candidates who can bring creativity and initiative to the study, with experience or interest in thinking across disciplines and the ability to work collaboratively.

This position is hosted by the Institute of Mountain Risk Engineering (IAN), University of Natural Resources and Life Sciences, Vienna. IAN supports graduate degrees in Civil and Environmental Engineering, Forestry, Geography, Mechanical Engineering, Water Resources, Environmental Science, and Geological Sciences. The candidate will be supervised by Professor Dr. Dirk Proske and PD Dr. Christian Scheidl.

To discuss your qualifications before applying, please contact dirk.proske@boku.ac.at or christian.scheidl@boku.ac.at

Start Date: May 2021.

Position Details and Benefits: The student will be housed in the IAN, BOKU and supported with a graduate research assistantship for 3 years based on the standard personnel costs (doctoral candidates) and salaries for FWF project proposals (2021; <https://www.fwf.ac.at/en/research-funding/personnel-costs/>). Support includes conference travel and further training, e.g. summer schools. Teaching assistant opportunities within the department are also available. The University of Natural Resources and Life Sciences is located in Vienna, Austria-Europe, the capital of Austria with excellent cultural, dining, and recreational opportunities locally as well as in the nearby region.

Interested? Please email to ian@boku.ac.at with the subject line “DEFSUP” and attach as a single PDF: 1) a 1-page cover letter describing your interest in and suitability for the position; and 2) your current CV or resume.