University of Natural Resources and Life Sciences, Vienna

Department of Civil Engineering and Natural Hazards Institute of Geotechnical Engineering



The Institute of Geotechnical Engineering of the University of Natural Resources and Life Sciences, Vienna invites application for the following position in the framework of the project STRECROPA funded by the Austria Science Fund (FWF):

PhD researcher

for the experimental modelling of construction of cross passages of shallow tunnels

Key information

Project start: 04.10.2021Project duration: 36 months

Workplace: Institute of Geotechnical Engineering, Feistmantelstraße 4, 1180,

Vienna, Austria

Salary: EUR 39780 per annum

Application deadline: 30.06.2021

University overview

The University of Natural Resources and Life Sciences, Vienna (BOKU) is one of the best universities for sustainability in Europe and brings together scientific, technical and socio-economic topics. BOKU sees itself as an innovation leader in the green economy, with the goal of integrating sustainability into all processes in society.

Project description

The main goal of this project is to improve the understanding of stress redistribution along the main tunnel due to the construction of the cross passages in soft soils. To attain this objective, the magnitude and extent of the area of the stress-strain increase in the main tunnel will be ascertained and the sensitivity of the results to different parameters and modelling features will be explored.

Job description:

The successful candidate will perform model tests in the geotechnical centrifuge. The tasks to perform also include: soil selection and gathering (e.g. from a local quarry), soil testing (particle size distribution, Atterberg and Proctor tests, triaxial tests on partially saturated samples) and detailed design of the model container for the centrifuge testing.

Prerequisites

- Master's degree in civil engineering with specialisation in geotechnics or related area
- Candidates from other scientific disciplines with experience in scientific testing are also welcome
- Laboratory experience is a must
- Knowledge of geotechnical testing (including centrifuge testing) is a strong plus

Further qualifications

- Excellent command of written and spoken English
- Outgoing personality with strong communication skills across different cultures
- Drive for excellence and scientific mind-set
- Ability to work in a team and independent working style

Application and additional information

Please send your application to the Institute of Geotechnical Engineering with subject "STRECROPA-EXP" at geotech@boku.ac.at alongside the following documents:

- A detailed curriculum vitae or resume outlining the academic and industry achievements and the educational background. A list of publications and completed projects or products should be included if applicable
- A short cover letter of maximum one page introducing yourself and describing how the position matches your skills and interests

BOKU values diversity and inclusion and recognizes employment opportunities must not be limited by socio-economic background, race, religion or gender. Hence, BOKU actively encourages applications from women and candidates from culturally and linguistically diverse backgrounds and its selection panel strives for the gender balance among its employees.

For more information please contact the Principal Investigator, Dr. Enrico Soranzo at enrico.soranzo@boku.ac.at