



The Institute of Geotechnical Engineering at the University of Stuttgart (IGS) invites applications from motivated, committed and talented candidates for the position of a

**Research / Teaching Assistant (PhD Student)  
in the field of Computational Geotechnics,**

especially for modelling large deformations and its application in the field of Geotechnical Engineering. The position is remunerated in accordance with TV-L, pay scale E13 and is limited in accordance with the requirements of the WissZeitVG, as per the current valid version.

**About the institute**

The Institute of Geotechnical Engineering (IGS) is part of Faculty 2 – Civil and Environmental Engineering – at the University of Stuttgart. Main fields of work in research, teaching and consulting include soil and rock mechanics, numerical geotechnics, foundations and earthworks, foundation engineering and tunnel construction as well as environmental geotechnics.

**Tasks**

- continuing the development of an in-house multi-phase Convected Particle Domain Interpolation Method code, an advanced version of the Material Point Method (MPM)
- working in third-party research project VISSKA, which aims to simulate offshore pile installation by vibratory driving along with calculation of pressure-waves in the ocean due to pile driving, and communicating with research partners in the Industry and at other Universities
- tutoring Master's level courses and taking part in miscellaneous administrative duties at the Institute

**Profile**

- graduation with an excellent cumulative grade (M.Sc. or Dipl.-Ing) in the field of Computational Mechanics, with emphasis on Finite Element Methods
- sound knowledge in soil mechanics desirable
- basic knowledge in theory of porous media desirable
- sound knowledge in FORTRAN, C++/Python desirable
- interest and motivation towards conduct of independent scientific work
- an open-minded and confident personality, with an ability to work in teams
- very good command over English language, good command over German language desirable

All interested candidates irrespective of age, gender, race, disability, religion or ethnic background are encouraged to apply. The University of Stuttgart strives to increase the number of females in science and encourages women to apply. Applicants with disability and with equal qualification will be given preference.

Please send your application packet including your curriculum vitae, transcript of grades, job references, and an electronical copy of the final thesis of your studies or relevant research papers in English or German by May 31<sup>st</sup>, 2021 (extended deadline) preferably by E-Mail as a PDF to: [christian.moormann@igs.uni-stuttgart.de](mailto:christian.moormann@igs.uni-stuttgart.de)

or alternatively to:

Universität Stuttgart, Institut für Geotechnik (IGS)  
Univ.-Prof. Dr.-Ing. habil. Christian Moormann  
Pfaffenwaldring 35, D-70569 Stuttgart

If there are any questions about the offered position, it will be gladly answered. Please direct your queries to: Univ.-Prof. Dr.-Ing. habil. Christian Moormann, Tel. 0711 / 685 62437

For more information: <http://www.uni-stuttgart.de/igs/>