

Aalto University is a new university with over a century of experience. Created from a high-profile merger between three leading universities in Finland – the Helsinki School of Economics, Helsinki University of Technology and the University of Art and Design Helsinki – Aalto University opens up new possibilities for strong multidisciplinary education and research. The university has 20 000 students and a staff of 5 000 including 350 professors.

Aalto University School of Engineering, Department of Civil and Environmental Engineering invites applications for:

POSTDOCTORAL RESEARCHER POSITION in THMC modelling of bentonite

The Geoengineering research and teaching group is seeking a highly motivated and creative postdoctoral researcher who would undertake the task of developing the constitutive model for bentonite, implement it into numerical software and use it for simulation of problems related to nuclear waste storage within the framework of THEBES (THMC behaviour of the swelling clay barriers) project.

The individual will work in an international group at Aalto University in Espoo, Finland under supervision of Assistant Professor Wojciech Sołowski. The researcher is expected to spend approximately 3 months each year outside Finland visiting international institutions.

The position will allow you to establish yourself as an emerging world-class expert on unsaturated soil modelling. It should allow you to not only to publish your outstanding research, but also become a noted member of the world research community.

Research Group

The above mentioned position is located in the Geoengineering research and teaching group in the Department of Civil and Environmental Engineering, see <http://civil.aalto.fi/en/research/geoengineering/>. For more general information of the research and teaching of the Department, go to <http://civil.aalto.fi/en/>.

Detailed project description

Please see the job announcement at Aalto webpage: <http://www.aalto.fi/en/about/careers/jobs/view/445/>.

Essential requirements:

- Excellent interpersonal skills
- Excellent ability to work in a team
- Creativity, open mind and willingness to accept new ideas
- PhD degree in geotechnical engineering or in a related area (e.g. modelling of granular materials and similar)
 - it is, however, possible that you will officially graduate only after being appointed for the position
- Proficiency in English language
- Willingness to travel

Desired qualities:

- Deep understanding of existing constitutive models soils
- Experience in constitutive modelling of soils
- Knowledge of unsaturated soil behaviour
- Interest in microstructure of soil
- Experience in numerical methods and simulations of soil behaviour
- Programming skills

Duration and salary

Aalto University applies the salary system of Finnish universities. The intended initial salary for this position is 3300€ per month. The successful candidate should start on the 1st of June 2015 or as soon afterwards as possible.

The position is contract-based. The first contract will be signed till the end of January 2016. That contract may be extended during the project lifetime. The THEBES project is scheduled to run till January 2019.

For more information

Additional information regarding the post may be obtained from Wojciech Sołowski, e-mail: [wojciech.solowski\[at\]aalto.fi](mailto:wojciech.solowski@aalto.fi) (in urgent matters please call or text at +358 50 5925 254).

How to apply

The applications for the postdoctoral researcher position are to be submitted through the eRecruitment system **no later than on Wednesday, the 1st of April, 2015:** <http://www.aalto.fi/en/about/careers/jobs/view/445/>.

The application for the position should contain (pdf files in English):

- Cover letter
- Highly personalised motivation letter.
- Detailed resume
- Names of two referees who will provide references
- A certified copy of the PhD diploma (or a letter from the university stating your eligibility for getting the doctoral degree during nearest graduation ceremony) (document is not required at the application stage)
- it is suggested to attach the full text of the most important publication(s) to the application (no more than 3)