

*The Norwegian University of Science and Technology (NTNU) in Trondheim represents academic eminence in technology and the natural sciences as well as in other academic disciplines ranging from the social sciences, the arts, medicine, teacher education, architecture to fine art. Cross-disciplinary cooperation results in innovative breakthroughs and creative solutions with far-reaching social and economic impact.*

**Faculty of Engineering Science and Technology  
Department of Civil and Transport Engineering**

## **Ph.D. Research Fellowship - Characterization and Modelling of Creep Processes in Peat**

The Department of Civil and Transport Engineering invites applicants for a four years research fellowship with the Geotechnical research group. The area of research is creep in geomaterials, with a particular focus on creep in peat.

The Ph.D. Research Fellowship is closely linked to the FP7 Marie Curie Industry-Academia Partnerships and Pathways (IAPP) project "CREEP" coordinated by the Norwegian University of Science and Technology aiming at establishing a consensus in creep modelling and generating tools and knowledge to improve analysis of creep deformations. IAPP stands for Industry-Academia Partnerships & Pathways. IAPP facilitates cooperation of companies and public research organisations to work in a network on a joint R&D project.

IAPP project "CREEP" has 6 partners and is coordinated by the Norwegian University of Science and Technology, Trondheim, Norway. The research topic of this collaboration project is creep behaviour of geomaterials and its embedment in geotechnical design; the project aims at establishing a consensus in creep modelling. Tools and knowledge will be generated to improve analysis of creep deformations. While past research was generally directed at soft silts and clays, problem soils such as peat, sand and warm permafrost will also receive attention in the CREEP project.

The objectives of the Ph.D. Research Fellowship are studies of creep processes in peat leading to a doctorate degree and it is therefore a requirement that applicants are to be admitted to the Ph.D. program at NTNU. The studies are undertaken in close cooperation with CREEP network partners, in particular with Deltares, an independent institute for applied research in the field of water, subsurface and infrastructure located in Delft, The Netherlands. The successful candidate will therefore be seconded to Delft for a period up to 24 months during the studies.

Applicants for the research fellowship should have a Master's degree in Civil Engineering or a related discipline, with strong credentials. Knowledge of geotechnical laboratory testing techniques and a background in continuum mechanics, finite element programming and knowledge of computing languages such as Fortran or C++ are desirable.

Further information can be obtained by contacting Professor Thomas Benz, phone: +47 73 59 68 70, e-mail: [thomas.benz@ntnu.no](mailto:thomas.benz@ntnu.no).

### **Benefits:**

Ph.D. candidates are remunerated in code 1017, grade 48-56 on the Norwegian State salary scale, gross NOK 391 100 to NOK 448 080 per year (before tax). Ph.D. students are normally remunerated at wage level 48. There will be a 2 % deduction to the Norwegian Public Service Pension Fund from gross salary. During secondment to the project partner Deltares, the successful candidate will be remunerated in line with rules for Marie Curie grant holders.

Engagement as a Ph.D. candidate is done in accordance with current appointment regulations with supplementary rules in force giving guidelines for scholarship appointments in universities and university colleges. The goal of the announced position is to obtain a Ph.D. degree. Applicants are obliged to engage in an organized Ph.D. training program, and appointment requires approval of the applicant's plan for a Ph.D. study within three months from the date of commencement. A contract of

employment will be set up for the engagement period regulating the rights and duties of the Ph.D. student.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants.

The position adheres to the Norwegian Government's policy of balanced ethnicity, age and gender. Persons with immigrant background are encouraged to apply. NTNU's objective is to increase the number of females in scientific positions. Female applicants are therefore encouraged to apply. The application must contain information of educational background and work experience. Certified copies of transcripts and reference letters should be enclosed.

An application inclusive CV, project description (1-2 pages), grade transcripts, and other enclosures are to be submitted via [www.jobbnorge.no](http://www.jobbnorge.no), marked with ref.no. IVT-52/12. **Application deadline: 6 June 2012.**