NTNU

Norwegian University of Science and Technology

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

PhD position in LCA and sustainability thinking in large infrastructure projects

The Norwegian Public Roads Administration (NPRA) is running a project “Coastal Highway Route E39”. More information about the project - which is about developing this route into a more efficient corridor with no ferry connections - is available at http://www.vegvesen.no/Vegprosjekter/ferjefriE39/English.

Large infrastructure projects in general and road transportation in particular has significant environmental impacts. However, these typical change fast with the introduction of new technologies. The development of E39 is scheduled in the middle of a rapid change in vehicle technologies. These changes will significantly influence the overall environmental impacts from the E39 program.

In large programs like E39, it is important to facilitate knowledge-based decisions. This need is particularly pressing when the premises for decision-making is changing. A pressing concern is the need for a tool that can calculate the environmental impacts from infrastructure developments in various scenarios for the future concerning both vehicle technology and climate change. The proposed tool is intended to assess environmental impacts from infrastructure projects, that incorporates the effect of construction work, operation and maintenance, geometrical design, vehicle technologies and future energy production.

The project will also work in close cooperation with the parallel activities on Infrastructure Assessment and Visualization at Chalmers in Sweden.

Conditions around a PhD position

Suitable background (master’s degree or equivalent) of the applicants would be within MSC in engineering, industrial ecology, economics, physics or applied mathematics. Relevant experience from the particularities of the Norwegian construction industry and/or an academic position will be an advantage. The PhD applicants is expected to carry out theoretical development and extensive field work. The successful applicants are motivated and ambitious students. Good cooperation abilities will be emphasized.

PhD Candidates are remunerated in code 1017, and are normally remunerated at wage level 50,
gross NOK 429 400 before tax. The salary is adjusted according to the recent wage negotiations,
and given subject to the final approval of the Storting (the Norwegian Parliament). There will be 2% deduction to the Norwegian Public Service Pension Fund from gross wage.

The goal of the announced position is to obtain a PhD degree. Applicants will engage in an organized PhD training program, and appointment requires approval of the applicants plan for a PhD study within three months from the date of commencement. See http://www.ntnu.edu/ivt/phd for more information.

General conditions

Engagement as a PhD candidate is done in accordance with “Regulation concerning terms and conditions of employment for the posts of post-doctoral research fellow, research fellow, research assistant and resident”, given by the Ministry of Education and Research of 19.07.2010. The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants. The positions adhere to the Norwegian Government's policy of balanced ethnicity, age and gender. According to the new Freedom of Information Act, information concerning the applicant may be made public even if the applicant has requested not to be included in the list of applicants.

The PhD candidate will be required to work in Trondheim at the Department of Civil and Transport Engineering, NTNU. The PhD position is limited to 3 years.
Applications with CV, possible publications and other scientific works, certified copies of transcripts and reference letters should be submitted electronically via jobbnorge.no. Mark your application with ref.no. IVT- 159/14.

Application deadline: 27 Nov 2014

For further information please contact Associate Professor Rolf André Bohne, rolf.bohne@ntnu.no

Jobbnorge ID: 106927, Deadline: Closed