

## NTNU – Innovation and Creativity

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, architecture to fine arts. Cross-disciplinary cooperation results in innovative breakthroughs and creative solutions with far-reaching social and economic impact.



Faculty of Engineering Science and Technology, NTNU

# 5 PhD - positions at Structural Impact Laboratory

The Research Council of Norway has defined SIMLab (Structural Impact Laboratory) as a Centre for Research-based Innovation (CRI) for the period 2007-2014. The Centre is hosted by NTNU and involves Department of Structural Engineering in cooperation with Department of Materials Technology and SINTEF. The objective of the CRI scheme is to strengthen Norwegian research groups that work in close collaboration with partners from industry and public enterprises in order to support long-term research that promotes innovation and value creation. The user partners in the Centre are Hydro Aluminium Structures, Hydro Aluminium Metals, Hydro Aluminium Products, BMW, AUDI, Renault, the Norwegian Public Roads Administration and the Norwegian Defence Estates Agency.

The main objective with the Centre is to develop a technology platform for safe and cost effective structures in aluminium, high-strength steels and polymers through advances in research areas such as materials, solution techniques and structures.

The ability of light-weight structures to withstand loads from collisions and explosions is a key issue in the Centre. Examples of applications are safety in the automotive industry, improved highway safety as well as protective structures for international peacekeeping operations. The technology platform developed is also relevant for other segments of Norwegian industry, e.g. for safety assessments in the offshore oil and gas industry as well as for all industry making products by forming and machining.

Applicants should have a M.Sc. or similar degree in structural engineering, mechanical engineering, marine structures, materials technology or physics. The position can have a duration of either four years where 25% of the time is spent as a teaching assistant or three years with no teaching duties.

One position is open in each of the following research programmes, with start summer/fall 2007:

- A: Behaviour and modelling of polymers
- B: Fracture and crack propagation in steel and aluminium
- C: Multi-scale modelling

D: Behaviour and modelling of structural joints

E: Light-weight protective systems

The applicants should indicate which research programme is of most interest.

Contact persons:

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PhD students follow code 1017, grade 41 - 46 of the Norwegian State Salary scale, gross NOK 310 500 to 338 300 per year. PhD students are normally remunerated at wage level 41. There is a compulsory 2 % deduction to the pension fund.

Engagement as a PhD candidate is done in accordance with current appointment regulations dated 31.01.06 with supplementary rules in force giving guidelines for scholarship appointments in universities and university colleges. The goal of each of the announced positions is to obtain a PhD degree. Applicants are obliged to engage in an organized PhD training program, and appointment requires approval of the applicant's plan for a PhD 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 PhD 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 wishes to increase the proportion of women in scientific posts, and women are encouraged to apply.

Applications, marked IVT-06/07, with CV and certified copies of transcripts should be sent electronically through <http://www.jobbnorge.no>.

**Application deadline: March 15, 2007.**