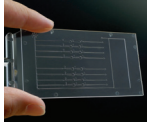


Master thesis – Polymers and Composites

We are looking for master students for the following projects in Oslo. Candidates should have a strong foundation in material science, mechanics, mathematics and/or programming. The work can start in January or August 2010. Please contact research team leader Einar Hinrichsen for further details.

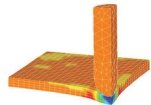
Lab-on-a-chip fabrication



We are involved in the development and fabrication of lab-on-a-chip systems for medical diagnostics and other microfluidics applications. Integrating optics on-chip will be an essential part of the project. www.sintef.no/mpc

Impact loading of composite structures

Composites are used extensively in applications such as free falling life boats and gas containers, where impact loading is a concern. This research project shall establish experimental and numerical methods for designing safe and robust composite structures.



Demanding polyolefin applications



Polyolefins such as PE and PP are increasingly being used sub-sea and in other demanding environments. In this project, the long term material properties under high loads and in contact with corrosive substances will be studied. Modelling of the foaming process used to make insulation materials will also be central.

New surface concepts for office chairs

This goal of this project with the office furniture manufacturer HÅG is to develop concepts for surfaces which are good to touch, nice to look at and scratch resistant. Last, but not least, the concepts must comply with HÅG's stringent environmental policy.



Materials for the Arctic



Norwegian industry is expanding in arctic areas and reliable composite materials are needed for use in this extremely cold climate. Testing, characterisation and modelling of composite materials will be central in the project. The goal is to be able to predict material performance under arctic conditions.