

## 2 PhD Positions – 3 years

Applications are invited for an EU funded PhD programme at the University of Tromsø, Norway. Two positions are available starting from October 2010. This project forms part of the EU funded Marie Curie Initial Training Network “CASE – The changing Arctic and Sub-Arctic environment: A research and training programme on marine biotic indicators of recent climate changes in the high latitudes of the North Atlantic” (<http://caseitn.epoc.u-bordeaux1.fr>). The two PhD positions are for 36 months duration each.

### Research Project

This project is part of the European Marie Curie Network for Initial Training program CASE. The research focuses on marine biotic proxies and modeling of past climate changes in high northern latitudes. It will be implemented through a joint research project aiming to describe and identify the mechanisms and impacts of recent environmental changes in the Nordic Seas. The main geographical areas are: 1) Fram Strait and the continental margins of Svalbard, 2) Barents Sea and North Norwegian continental margin and 3) eastern Greenland.

**PhD project 1** focus on quantification of sea surface temperatures and the relation of surface water masses and the variability of the MOC through the Holocene. PhD project 1 also aims to improve the knowledge on the relation between planktic foraminifera and other biotic groups in addition to their relation to ocean circulation temperature, sea ice distribution and marine production in view of recent environmental changes. The methodology includes census counts of planktic foraminiferal assemblages, quantitative estimates through a suite of statistical approaches (transfer functions) and measurements of Mg/Ca ratios. A good background in marine geological techniques and Quaternary paleoceanography is necessary. Experience with marine micropaleontological techniques and applications will be an advantage in addition to knowledge and use of statistical methods in paleoceanography. This project will be carried out close collaboration with “Environnements et Paléoenvironnements Océaniques (EPOC)”, a joint University of Bordeaux and CNRS institution, France.

**PhD project 2** focus on quantitative and qualitative characterization of the intermediate and bottom water masses and their relation to the variability of MOC during the Holocene. The characterization includes biogenic carbonate production, bottom water temperature and ventilation. PhD project 2 also aims to improve the knowledge on the relation between benthic foraminifera and other biotic groups in addition to their relation to ocean circulation temperature and marine production in view of recent environmental changes. The candidate will use census counts of benthic foraminiferal assemblages and measurements of Mg/Ca ratios. A good background in marine geological techniques and Quaternary paleoceanography is necessary. Experience with marine micropaleontological techniques and applications (especially foraminifera) are highly desirable. This project will be carried out close collaboration with Leibniz Institut für Meereswissenschaften an der Universität Kiel (IFM-GEOMAR), Germany.

## Requirements and Training

To be eligible for these positions you must hold a Master of Science/Diploma or equivalent in marine geology and an appropriate education in physical sciences and an appropriate qualification in the English language. Full training in the scientific background to the project will be given, and there will also be the opportunity to participate in a variety of complementary skills training programmes offered as part of the CASE network. There will also be the opportunity to travel to and take part in events at other sites within the network.

Since the contractor is a Norwegian Research Institute, candidates from EU member states, Associated Countries (except Norway) and eligible International Cooperation Partner Countries are invited to apply for these two positions. Please note that candidates must not have been resident in Norway for more than 12 months in the past 3 years. We prefer candidates with team spirit, who would like to work in an internationally oriented environment. The CASE network is committed to equal opportunities and diversity in employment. The University of Tromsø encourages applications from female scientists. The candidates are expected to finish the project with a PhD thesis and disseminate the results through publications in peer-reviewed journals and presentations at international conferences.

## Salary

The gross salary will be €4,012.00 per man/month for candidates only. Candidates will also be entitled to a gross monthly mobility allowance of € 656.00, a travel allowance based on the direct distance (in a straight line) between the place of origin and Tromsø in Norway payable each 12 months, as well as a career exploratory allowance of € 2,000.00 payable once according to the Marie Curie Actions Programme conditions. Gross salary means net salary plus all compulsory deductions under the Norwegian legislation.

## Further information

More information about the planned work of the ITN "CASE" and the Quaternary Geology and Climate team can be found on <http://caseitn.epoc.u-bordeaux1.fr>. For further information, please contact project leader Katrine Husum ([katrine.husum@uit.no](mailto:katrine.husum@uit.no)). Applications should not be sent later than September 16 2010. The application must be submitted electronically on the application form available at: <http://www.jobbnorge.no/job.aspx?jobid=68909>

A supplementary application form for admission to the PhD study must be enclosed the application; *application form in [English](#)*

In addition, the application, including CV, certified copies of diplomas and references, application for admission to the PhD study and the list of scientific works, are to be sent in 4 copies by the deadline for applications, *directly* to: Faculty of Science and Technology, University of Tromsø, NO-9037, Tromsø, Norway.

*All documentation that is to be evaluated must be certified and translated into English or a Scandinavian language.*