

Five research positions in aquatic science, remote sensing, and meteorology

We are looking for post docs and PhD students in limnology/aquatic biogeochemistry, remote sensing, and meteorology for a strong research environment on inland waters and climate change

The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning supports a 5-year Centre of Excellence on “The Color of Water – interplay with climate, and effects on drinking water supply” (see www.geo.uu.se/cow/). Within the Centre, several post docs and PhD student positions will be recruited. The positions will be based in Uppsala, and there will be ambitious programs for integration and for the involvement of senior guest researchers.

One of the most prominent changes in Swedish lakes from climate change is increased runoff of dissolved organic carbon (DOC) from land. DOC is the major regulator of the role of lakes in the carbon cycle, including emission of greenhouse gases. The aim of the Color of Water project is to 1) develop the monitoring of the quality and quantity of DOC employing fluorescence spectroscopy as well as remote sensing, 2) develop techniques for improved drinking water treatment at changing DOC, 3) assess the role of DOC in the carbon cycle (e.g., greenhouse gas emission, C sequestration), and 4) predict the quality and quantity of DOC in a changing climate.

In the first phase of the project, the following positions are open, with deadline for applications March 22, 2010:

PhD student position in Limnology, Aquatic Biogeochemistry at the Department of Ecology and Evolution, program for Limnology, Uppsala University, focusing on **regional differences in the quality of dissolved organic carbon (DOC) in boreal lakes**. Within the project, drivers for the differences in the DOC quality in Sweden and consequences for the global carbon cycle will be examined. For further information and application procedures, see http://www.personalavd.uu.se/ledigaplats/526dorand_eng.html (contact person: Gesa Weyhenmeyer, gesa.weyhenmeyer@ebc.uu.se, phone +46 18 471 2711).

PhD student position in Limnology, Aquatic Biogeochemistry at the Department of Ecology and Evolution, program for Limnology, Uppsala University, focusing on **the quality and reactivity of dissolved organic carbon (DOC) in lakes**. Natural DOC is a complex mixture of organic moieties, and characterization by specific analytical-chemical approaches is difficult. An important aim of this position is to link the properties of DOC to its dynamics in the environment, e.g. via availability for bacterial mineralization. For further information and application procedures, see http://www.personalavd.uu.se/ledigaplats/547dorand_eng.html (contact person: Lars Tranvik, lars.tranvik@ebc.uu.se, phone +46 18 471 2722).

PhD student position in Meteorology at the Department of Earth Sciences, program for Air- water and landscape science, at Uppsala University, with **focus on carbon transport between inland lakes and the atmosphere**. This project aims at studying the exchange of methane and carbon dioxide between lakes and the atmosphere by

using the Eddy-Correlation (EC) method in combination with flux-chamber studies. .
For further information and application procedures, see
http://www.personalavd.uu.se/ledigaplatser/323dorand_eng.html (contact person:
Anna Rutgersson, Anna.Rutgersson@met.uu.se , phone +46 18 - 471 2523).

Post doc in Aquatic Remote Sensing at the Department of Ecology and Evolution, program for Limnology, Uppsala University, **focusing on remote sensing studies of lakes concentrating on colored dissolved organic matter, and its dependence on climate**. The work will address operative monitoring of lake water quality at the regional scale as well as global estimates. For further information and application procedures, see <http://www.personalavd.uu.se/ledigaplatser/engindex.html#other> (contact person: Tiit Kutser, tiit.kutser@sea.ee , and Lars Tranvik, lars.tranvik@ebc.uu.se , phone +46 18 471 2722).

Post doc in Limnology, Aquatic Biogeochemistry at the Department of Ecology and Evolution, program for Limnology, Uppsala University, **focusing on quality and dynamics of dissolved organic carbon (DOC)**. Special emphasis will be put on the issue of removal of DOC during drinking water treatment, an emerging problem in Nordic countries. The research will address how the reactivity and cycling of dissolved organic carbon (DOC) depends on climate.. For further information and application procedures, see
<http://www.personalavd.uu.se/ledigaplatser/engindex.html#other> (contact person: Lars Tranvik, lars.tranvik@ebc.uu.se , phone +46 18 471 2722).