



Swedish University of Agricultural Sciences
Department of Forest Ecology and Management, Umeå

Postdoc Position in Boreal Landscape Carbon Dynamics and Exchanges

SLU develops the understanding and sustainable use of biological natural resources. This is achieved through research, teaching, environmental monitoring and assessment and information extension.

SLU has 3000 employees, 4200 undergraduate and postgraduate students.

Main campuses are located at Alnarp, Skara, Uppsala and Umeå.

www.slu.se

The Department of Forest Ecology and Management (<http://www.slu.se/en/departments/forest-ecology-management/>) conducts research and education in both basic and applied science in the areas of Vegetation Ecology, Soil Science and Forest Management. The major research focus is on the boreal landscape, including peatlands, forests and surface waters, but we have activities also in other biomes. The current position is in Soil Science/Biogeochemistry. In a recent evaluation (2009) of the university the Soil Science/Soil Biogeochemistry group was ranked among the top seven out of a total of 130 groups at the university. The department has about 85 members of staff of which 12 are professors. Research areas include plant-soil interactions, surface water hydrogeochemistry, soil chemistry, soil biology, biosphere-atmosphere exchange, forest history, forest management, forest regeneration, plant population and community ecology. The department has modern technical facilities, close collaboration with several state-of-the-art technical platforms at Umeå University, and access to unique long-term forest ecosystem experiments and other field sites.

We are seeking a highly motivated Postdoctoral Researcher with focus on: Boreal Landscape Carbon Dynamics and Exchanges

Project and Tasks

The postdoc will investigate the carbon balance of a boreal landscape in Northern Sweden. For this project, the postdoc will use a unique set up that integrates the well-established SITES research infrastructure of the Krycklan catchment with the ICOS-Svartberget tall tower flux station providing data of all terrestrial and aquatic C fluxes over a 68 km² managed forest catchment. Combined with >500 forest inventory plots, 16 long-term monitored streams, high-resolution Lidar scans and an advanced hydrology model, these state-of-the-art research tools provide exceptional resources for investigating forest C dynamics, budgets and its underlying drivers spanning from the plot to the landscape scale.

The successful candidate will be mainly responsible for processing and interpreting eddy-covariance data and for publishing findings in relevant high-rank scientific journals. Additional opportunities include integrating tower flux data with closed chamber, climate and forest inventory data.

The postdoc location is at the Forestry Faculty of the Swedish University of Agricultural Sciences (SLU), Department of Forest Ecology & Management, in Umeå, Sweden. The field work will be carried out around the ICOS Svartberget flux station (www.icos-sweden.se/station_svartberget.html) which includes eddy covariance and meteorological measurements on a 150m tall tower located within the Krycklan Catchment (<http://www.slu.se/Krycklan>) and Svartberget Experimental Forests (www.slu.se/en/departments/field-based-forest-research/experimental-forests/vindeln-experimental-forests/),

SLU is an equal opportunity employer.

Further information about the position is provided by

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Documents that should be included with the application: CV, publication list, PhD diploma, copies of up to three relevant publications and a short but well-conceived motivation letter (max. 2 pages) outlining previous research, current research interests and other activities of relevance for the position. Names and contact information of at least two reference persons are also required. All application documents should be written in English.

Application:
We welcome your application marked with **Ref no. SLU ua 4118/2015**.

Please submit your application to the Registrar of SLU, P.O. Box 7070, SE-750 07 Uppsala, Sweden, or registrator@slu.se no later than **January 4, 2016**.

where research related to watershed biogeochemistry and forestry, respectively, has been carried out for several decades. This excellent research infrastructure including permanently employed and skilled technical staff will provide the postdoc with access to state-of-the-art field instrumentation and long-term data, and offer ample possibilities for scientific interactions and career development.

Qualifications:

- The candidate must have a PhD awarded within the last three years in environmental sciences, ecology, physical geography, micrometeorology, biogeochemistry, forestry or any other closely related subject
- Demonstrated experience in working with an eddy covariance system including data processing and interpretation is required
- The candidate must be able to independently conduct field work, which also requires a driver's license valid in Sweden.
- The candidate must be fluent in English to be able to write, communicate and interact in an English-speaking environment.
- The candidate must have documented experience in writing and publishing scientific articles
- Experience in either one or more of the following is considered a merit: carbon cycle research in boreal landscapes (i.e. forests and peatlands), eddy covariance measurements with a tall tower and/or in complex terrain, chamber flux measurements, forest inventory, watershed biogeochemistry as well as skills in GIS, logger programming and/or in the handling and processing of large, multiple-source, data sets

Place of work: Umeå

Form of employment: Temporary employment for 2 years

Extent: 100%

Starting date: April 1, 2016