



Swedish University of Agricultural Sciences
Department of Aquatic Sciences and Assessment, Uppsala

Postdoc in aquatic biogeochemistry

– Nutrient leakage from forested landscapes - source apportionment

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

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The Department of Aquatic Sciences and Assessment (www.ma.slu.se) has a unique national responsibility for assessing the condition of Swedish surface waters with respect to both water chemistry and the aquatic biota. The mission of the department is to provide the knowledge about human impacts on aquatic ecosystems that society needs to achieve its environmental goals for surface waters. This mission involves the design and implementation of long-term surveillance programs across a range of spatial and temporal scales, studies of the chemical and ecological processes underlying environmental change, as well as the knowledge and tools needed to interpret environmental data and assess management alternatives.

Work description: In Sweden, more than 50% of the net loadings of nitrogen (N) and phosphorus (P) from diffuse sources to the sea originate from forestland, peat land and alpine areas. The transports of N and P are to a large extent coupled to the export of DOC and governed by a number of factors such as weather patterns and forestry practices. Recent findings indicate that both the DOC and N leakage is coupled to forest production. Both the temporal and spatial variation may be captured by quantitative approaches using landscape biogeochemical models on different scales. From this, conclusions can be drawn on how silviculture practices, forest production, and climate change will affect nutrient leakage.

We are seeking a post-doctoral researcher who will use long-term monitoring data on N, P, DOC etc., as well as meteorological, hydrological and land use data to address the control of climate and landscape parameters on the temporal and spatial variation in nutrient leakage in boreal forests.

Applicants should hold a PhD in aquatic biogeochemistry or equivalent. Experience of empirical and mechanistic biogeochemical models, as well as insight in source apportionment models is a merit.

To be appointed as a postdoc, applicants should have been awarded her/his PhD no more than three years ago at the time of application. Applicants awarded a PhD degree more than three years ago can be appointed as a researcher. The position is full-time and will be granted for a period of two years, starting as soon as possible.

SLU is an equal opportunity employer.

Further information:

Stefan Löfgren
+46 (0)70-69 55 177

Stefan.Lofgren@vatten.slu.se

Academic union representatives:

Lars Eriksson, SACO
+ 46 (0)18-67 31 37

Lars.Eriksson@vatten.slu.se

Monica Östman, ST
+46 (0)18-67 15 36

Monica.Ostman@mark.slu.se

*We welcome your application marked with **ref no 1977/09**. The application should be written in English. Applications should include a letter of intent, a CV with publication list, relevant publications, and a 2-page description of research ideas.*

*Please submit your application to the Registrar of SLU, P.O. Box 7070, S-750 07 Uppsala, Sweden or registrator@slu.se no later than **August 17, 2009**.*