

Announcement for PhD student position in Forest Ecology and Management

Exploring boreal peatland greenhouse gas exchanges in response to climate and vegetation controls using an automated chamber system

A PhD student position for exploring peatland greenhouse gas exchanges is available at the Department of Forest Ecology and Management, SLU. The main goal of this PhD project is to improve our understanding of the peatland net CO₂ and CH₄ exchanges as well as their separate component fluxes (i.e. production, consumption and respiration) in response to climate and vegetation controls. The project is based on high temporal resolution measurements of these underlying component fluxes using an automated chamber system supported by a comprehensive suit of environmental and vegetation data. Ultimately, these detailed data will be used to further improve a state-of-the-art process-based wetland carbon cycle model. The study site is the Degerö peatland field station (www.slu.se/en/departments/field-based-forest-research/experimental-forests/vindelns-experimental-forests/degero_stormyr/) which is located close to Vindelns (Västerbotten county) and combines the ICOS (www.icos-sweden.se/station_degero.html) and SITES (www.slu.se/en/departments/field-based-forest-research/experimental-forests/vindelns-experimental-forests/) research infrastructures.

The candidate will join a collaborative group of graduate students and senior scientists conducting unique research in boreal peatland and forests ecosystems. The student will be given opportunities for cross-project collaborations and to use existing data to explore additional areas of interest.

Qualifications

We are searching for a highly motivated student with the following qualifications:

- MSc degree in Environmental Sciences, Physical Geography, Ecology or any related field
- The candidate must have good communication skills, a strong work ethic, be a team player and work well in a research environment
- The candidate must be fluent in English to be able to interact in an English-speaking work environment
- A driving license valid in Sweden is required for accessing the field sites
- Ability to conduct field work and interest in helping with instrument maintenance is required
- Knowledge of the peatland carbon cycle and its main drivers is desired
- Experience with field data collection methods (ideally from flux chamber measurements) and computer program skills (Matlab, R) for handling large, high-frequency data sets are considered as strong merits

Application information

Students interested in this position should send a statement of interest outlining relevant research qualifications and a CV including contact information for three academic references via email to Associate Prof. Matthias Peichl (Matthias.Peichl@slu.se) who also serves as contact for additional information. Applications should be submitted no later than **January 13, 2020**.

The position start date is flexible but is anticipated to be at the latest in May 2020. Full funding is available for 4 years and the holder of the position is expected to achieve a PhD degree at the end of this project period. The affiliation of the PhD student will be the Department of Forest Ecology and Management, SLU, in Umeå, Sweden (www.slu.se/en/departments/forest-ecology-management/). Umeå is one of Sweden's fastest growing cities and is a lively student town that offers world-class art, drama, films, industries, music and research (www.visitumea.se/en).