

1 PhD student in the research education subject: Soil Science

Diversified *Salix* plantations and soil carbon cycling

The aim of this project is to evaluate the link between above-ground *Salix* plant trait diversity and below-ground carbon cycling in soils. The PhD project will combine controlled experiments at different spatial scales combining thermodynamic, biochemical and metabolomics methods. The project will employ established field sites with cultivar blends of willow energy crops along a 1500 km latitudinal gradient from Sweden to Germany. The successful candidate will join a collaborative group of graduate students, postdocs and senior scientists conducting unique research evaluating diversified *Salix* plantations and their potential for mitigation of climate change. Data will be used in soil organic matter models which will be applied to quantify the carbon sequestration potential of various *Salix*-agroecosystems.

Qualifications

The applicant should have a Master's degree (or equivalent) in environmental science, earth sciences, soil science, ecology, agronomy or similar. We are seeking a highly motivated candidate with a strong interest in integrative work at the chemical and biophysical interface in soils. Knowledge in soil biogeochemistry and soil biology with experience working in the laboratory are desirable. Understanding of soil organic matter models, experiences in planning and executing experiments and scientific writing skills will count as merits. The applicant should have the ability to work both independently and in a team. A proven good ability to communicate in written and spoken English is required. Evaluation will be based on the motivation letter, Master thesis and other publications. A selection of candidates will be interviewed, and if needed a written essay may follow.

Forms for funding or employment

Employment as PhD student

SLU is an Equal Opportunity Employer.

A person has basic eligibility for third cycle education if he or she has taken a second cycle qualification or has completed course requirements of at least 240 higher education credits, including at least 60 higher education credits at second cycle education. Upper secondary school grades equivalent to English B/English 6 are a basic requirement.

Selection among applicants meeting the requirements is made with reference to written application including curriculum vitae, copies of degrees and transcripts of academic records, one copy of the dissertation for masters or undergraduate degree, a list of at least two references familiar with the applicant's qualifications, certified knowledge of the English language and an interview.

Read about the PhD education at SLU at www.slu.se/en/education/programmes-courses/postgraduate-studies/

Use this [APPLICATION FORM](#)

Further information:

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Applications, marked with **ref no SLU ua 2018.2.5.1-736**, must have arrived at the Registrar of SLU, P.O. Box 7070, SE-750 07 Uppsala or registrator@slu.se no later than **2018-05-07**.