

Vacancy - Soil Science

Climate change is a key challenge for both, science and society. The Cluster of Excellence „Integrated Climate System Analysis and Prediction“ (CliSAP) is responding to this challenge in an integrated way, linking together natural and social sciences. Main partners are the Universität Hamburg, the Max Planck Institute for Meteorology, the Helmholtz-Zentrum Geesthacht and the German Climate Computing Centre DKRZ.

The Cluster of Excellence on “Integrated Climate System Analysis and Prediction (CliSAP)” invites applications for a

research associate (PhD)
(wissenschaftliche/r Mitarbeiter/in)

with a strong background in Soil Science or terrestrial Biogeochemistry

The successful applicant will study the carbon pools, organic matter quality and degradability as well as trace gas fluxes in Arctic wetlands. He/she will conduct laboratory analysis, field research on permafrost soils and GIS analysis in thermokarst landscapes of northeast Siberia.

The position is part of the Soil Ecology and Soil Genesis group of Eva-Maria Pfeiffer. One of the group’s objectives is to study the regulation of carbon turnover in soils focusing on permafrost affected landscapes and permafrost degradation in northern Siberia.

Responsibilities

The successful candidate will conduct field and laboratory experiments and measurements to study carbon pools, organic matter quality and trace gas fluxes in permafrost affected soils from different sates of thermokarst formation. Therefor repeated field investigations in the thermokarst affected northeast Siberian tundra will be conducted. During these field trips surface soil and deep permafrost samples will be collected for further analysis. Furthermore, trace gas fluxes from the soil surface (CO₂, CH₄) will be measured. The laboratory analyses are dedicated to the quantification of organic carbon pools, the characterization of the organic matter quality and its degradability. Soils mapping and GIS analysis have to use to identify the regionalization of processes related to permafrost degradation. The tasks of the hired research associate include the planning of the scientific studies, the participation in repeated field expeditions to the Siberian tundra, the description and characterization of sampled soils and permafrost affected sediments, the sampling of the thermokarst transects, the measurements of trace gas fluxes from the tundra soil surface, conducting the laboratory analysis, processing, analysis of the obtained datasets, GIS analysis as well as the interpretation, presentation and publication of the results. The research project will be conducted in close cooperation with the Alfred-Wegener-Institut für Polar und Meeresforschung, Forschungsstelle Potsdam, and builds on the long standing cooperation with Russian partners. The Institute of Soil Science has been conducting research in the Russian Arctic over the last

20 years. Thus, the project can rely on extensive experience with the logistical and scientific tasks connected to research expeditions to the Arctic.

Requirements

- An above-average university degree in a field relevant for the project (e.g., Diploma or M.Sc. in geosciences or biology) is expected.
- A profound soil-scientific knowledge is required; experience with organic matter quality analysis and field expeditions are desirable.
- Experience with GIS analysis is desirable.
- Experience with Arctic soils, biogeochemistry and/or ecology are advantageous.
- The project requires extensive field work in north-east Siberia.
- Interest and motivation for the logistical preparation of expeditions is required.
- Willingness to participate repeatedly in up to three month long field campaigns in the Russian Arctic under sometimes challenging weather and basic living conditions is a prerequisite for the advertised position.
- Good written and spoken English skills are expected.
- The ability to communicate in Russian would be an asset.

General information

Payment is according to salary group E 13 TV-L/65 %. The position is offered for a maximum of 3 years, starting November 1st, 2014 (see also § 2 of the Academic Fixed-Term Contract Law (Wissenschaftszeitvertragsgesetz)). The position calls for 25 hours per week. The university intends to increase the number of women amongst its academic personnel and expressly encourages qualified women to apply. In compliance with the Hamburg Equal Opportunity Law, preference will be given to qualified female applicants. Application dossiers (cover letter, curriculum vitae, and the names, addresses and telephone numbers of two references) are to be submitted to:

office.clisap@zmaw.de

or to

**Universität Hamburg
CIISAP Office
Code/Reference: Research Area B1
Grindelberg 5
20144 Hamburg**

The selection process will start on September 15th, 2014, and will continue until the position is filled. Please do not submit any original copies of your documents; furthermore, your documents will only be returned if you include a self-addressed and stamped envelope with your application.

For additional information please do not hesitate to contact

Prof. Dr. Eva-Maria Pfeiffer (+49 (0) 40 42838 4194, E.M.Pfeiffer@uni-hamburg.de)

Preference will be given to disabled applicants with equal qualifications.