



Faculty/Department: Seminar/Institute: Mathematics, Informatics, Natural Sciences Institute of Soil Science

Universität Hamburg invites applications for a Research Associate in the field of A1 "**Carbon Dynamics in the Arctic: Soil-plant-atmosphere interactions in thawing permafrost landscapes"** for the project **Climate, Climatic Change, and Society (CliCCS)** in accordance with Section 28 subsection 3 of the Hamburg higher education act (Hamburgisches Hochschulgesetz, HmbHG). The position commences on July 1<sup>st</sup>, 2019.

CliCCS is an ambitious research program at Universität Hamburg and strong partner institutions. Funded by the German Research Foundation (DFG), it is part of Germany's Excellence Strategy. The program aims to understand climate changes, taking into account internal variability, extreme events and unexpected side effects, addressing the natural and social spheres as well as their interactions. Thus CliCCS' overarching research question is: Which climate futures are possible and which are plausible? CliCCS will investigate how climate changes and how society changes with it, thereby feeding back on climate. It will identify those climate futures that are consistent with both climate and social dynamics (possible), and those we expect to unfold with appreciable probability (plausible).

The project with focus on processes in the soil-vegetation-atmosphere continuum examines the impact of thawing permafrost on organic matter turnover in the North Siberian Arctic. Permafrost thaw due to rising arctic temperatures causes the release of organic matter and nutrients. The project aims to quantify the effect of permafrost thaw on the  $CO_2$  and  $CH_4$  turnover.

It is remunerated at the salary level TV-L 13 and calls for 65% of standard work hours per week<sup>\*</sup>. The fixed-term nature of this contract is based upon Section 2 of the academic fixed-term labor contract act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The term is fixed for a period of 3 years.

The University aims to increase the number of women in research and teaching and explicitly encourages women to apply. Equally qualified female applicants will receive preference in accordance with the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HmbGleiG).

PhD candidates are members of our graduate school which aims to help young academics thrive through all stages of their training, for more information please check the link: <u>Graduate School</u>

## **Responsibilities:**

Duties include academic services in the project named above. Research associates can also pursue independent research and further academic qualifications.

## Specific Duties:

The research assistant will conduct field and laboratory experiments to study the formation and decomposition of organic matter in permafrost soils. One focus will be on the turnover of trace gases (CO<sub>2</sub>, CH<sub>4</sub>) in the soils-vegetation-atmosphere system. He/she will use soil chemical, physical and biological methods, chamber flux measurements and isotope techniques at different Siberian permafrost sites. His/her responsibility is to develop and conduct the necessary field and laboratory experiments both in Germany and in the Russian Arctic, analyze the obtained data and present the results in international conferences and publications.

## **Requirements:**

We expect an academic degree in the geosciences or biology and the following skills:

- Knowledge in soil science
- Profound interest in processes of the greenhouse gas cycles
- Profound mathematical, physical and chemical knowledge
- Experience in developing and conducting field and laboratory experiments
- Ability to conduct independent work
- Strong oral and written communication skills, including profound knowledge in English

The research assistant has to join summer expeditions for several weeks to the Russian Arctic to conduct both field and laboratory analysis at the Russian field sites. The knowledge of the Russian language is advantageous.

Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact Prof. Dr. Eva-Maria Pfeiffer (<u>eva-maria.pfeiffer@uni-hamburg.de</u>) or Dr. Christian Knoblauch (<u>Christian.Knoblauch@uni-hamburg.de</u>) or consult our website at <u>https://www.cliccs.uni-hamburg.de/</u>.

Applications should include a motivation letter, curriculum vitae and copies of degree certificate(s), submitted as **one single PDF file**. The application deadline is 28. February 2019. Please send applications (reference code A1PhDPfeiffer) to: cliccs-jobs.cen@uni-hamburg.de.