

The Thünen Institute of Climate-Smart Agriculture of the Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries in Braunschweig (Germany) invites applications for a

**PhD position (f/m/d)**

with 65 % of the regular weekly working time in the research project 'Minimizing GHG emissions and optimizing biomass yields of paludiculture on rewetted fen peatlands'.

The position is for a fixed term of four years and to be filled at the earliest opportunity.

The position is directed to applicants who, in addition to their employment, wish to pursue their own academic career, in particular their doctorate. In this context, the Thünen Institute of Climate-Smart Agriculture cooperates with various universities. The employment is a fixed-term position in accordance with §2 (1) sentence 1 of the Wissenschaftszeitvertragsgesetz (German law regarding academic fixed-term contracts).

Drained peatlands are hotspots for greenhouse gas (GHG) emissions. Paludiculture, the use of formerly drained peatlands under near-natural hydrological conditions, offers the opportunity of mitigating these emissions.

**Project aims:**

- generating complete greenhouse gas balances for paludicultures on rewetted fen peatland (*Phragmites australis*, *Typha latifolia* and *Typha angustifolia*)
- quantification of the effect of biomass harvest on the GHG exchange, and
- evaluation of the effect of topsoil removal on the GHG exchange as well the identification of the optimum of biomass yields and GHG emissions

The position is based in a working group at the Thünen Institute of Climate-Smart Agriculture conducting research on national and international level in the area of organic soils. We offer a comprehensive job dealing with a current research topic covering field work and challenging data analyses.

**Detailed tasks:**

- Compiling a meta-analysis on the CO<sub>2</sub>- and CH<sub>4</sub>-exchange of *Phragmites australis*, *Typha latifolia* and *Typha angustifolia*
- Conducting field measurements of the gas exchange between soil, vegetation and atmosphere using manual chambers
- Measurement of soil physical and chemical as well as meteorological drivers
- Quality assurance, data analysis and modelling of annual greenhouse gas balances and development of a campaign-based model for annual balances of CH<sub>4</sub>
- Writing scientific publications

**Requirements:**

- University degree (Univ.-Diplom or M.Sc.) in the field of geoecology, hydrology, agriculture, environmental or soil science or related subjects
- Profound knowledge in biogeochemistry, plant physiology or soil science
- Proficiency in computer software and experience with R, Python or other programming languages
- Knowledge of peatlands or greenhouse gas emissions from soils are beneficial
- Willingness to conduct physically demanding field work during regular field trips over several days
- Team spirit, flexibility, high motivation and the ability to work independently
- Scientific curiosity and willingness to work on a doctoral thesis
- Excellent communication and writing skills in English
- Valid driving licence

The salary is based on the collective agreement for civil service (TVöD). Depending on the fulfilment of personal and tariff requirements the salary accounts for 65 % of level E13 TVöD.

The Thünen Institute supports gender equality at work and encourages female candidates to apply for this position.

Equally qualified applicants with disabilities will be given preferential treatment. Only a minimum physical aptitude is expected from them.

For further inquiries please contact Dr. Bärbel Tiemeyer (baerbel.tiemeyer@thuenen.de, +49 531-596 2644) or Dr. Arndt Piayda (arndt.piayda@thuenen.de, +49 531-596 2638).

Applications with the usual documentation (CV, cover letter, certificates) including the keyword '**2020-160-AK/Niedermoorpaludikultur**' shall be sent (preferably by email as one pdf file) until **31.08.2020** to

ak@thuenen.de

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Information on Artikel 13 DSGVO: [www.thuenen.de/datenschutzhinweis-bewerbungen](http://www.thuenen.de/datenschutzhinweis-bewerbungen).