

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 payed

PhD position (f/m/d)

with 65 % of the regular weekly working time (65 % of 39 hours per week) in the research project 'Development and improvement of methods for German national reporting on emissions from soils under agricultural use'. 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 fixedterm contracts).

The Thünen Institute of Climate-Smart Agriculture compiles the inventories on emissions of greenhouse gases and air pollutants from agriculture for the national reporting system. The project aims at improving this reporting by developing and integrating new methods that allow better stratification and regionalization and can thus better represent mitigation measures. The project's focus is nitrous oxide and ammonia emissions after spreading of organic fertilizers and application of synthetic fertilizers. The position is within the working group that compiles the emission inventories as well as projections and develops the models used for this purpose.

Project tasks:

- Conduct literature studies and meta-analyses to derive refined emission factors for calculation of nitrous oxide and ammonia emissions from agricultural soils
- Acquire and model necessary regionalized activity data, in particular regarding nitrogen fertilization in agriculture
- Create regional nitrogen balances and harmonize greenhouse gas reporting with reporting under the European Nitrates Directive
- Create projections and evaluate mitigation options based on regionalized emission factors
- Scientific peer-reviewed publications
- Implement the new model approaches in the national inventory

Requirements:

- M.Sc. in applied statistics, geoecology, agriculture, environmental or soil sciences, meteorology or related subjects. The degree must fulfill requirements for PhD candidates set by German universities (see www.research-in-germany.org/en/jobs-and-careers/info-for-phdstudents/language-requirements.html). A master's thesis with an above-average grade is expected.
- Excellent knowledge and experiences in statistics and empiric modelling
- Good knowledge of biogeochemistry and soil science is desired
- Basic familiarity with agriculture is desired
- Candidates need to be proficient with R and Excel, basic knowledge of python would be an advantage
- 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, willingness to learn German

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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. Roland Fuß (roland.fuss@thuenen.de, +49-531-596-2627).

Applications with the usual documentation (CV, cover letter, certificates) including the keyword 'Emissionsinventare' shall be sent (preferably by email as one pdf file) until 5th July 2019 to

> ak@thuenen.de Johann Heinrich von Thünen-Institut Institut für Agrarklimaschutz Bundesallee 65 38116 Braunschweig

Information on Artikel 13 DSGVO: www.thuenen.de/datenschutzhinweis-bewerbungen.

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