The Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB) researches at the interface of biological and technical systems at national and international level. ATB research spans from basic research to application and is aimed at sustainable intensification. Research activities include conceptualising, analysing, modelling and evaluation of bio-economic production systems. ATB develops and integrates new technologies and management strategies for a knowledge-based, site-specific production of biomass, and its use for food, feed and as raw materials and bio-fuels. ATB contributes to food security, animal welfare, the holistic use of biomass, and to the protection of climate and environment.

We are seeking - subject to final budget approval for a granted project - for a

**PhD candidate (m/f/d) (65%)**

for the topic

**Mitigating greenhouse gas emissions from livestock systems**

for three years, starting in January 2020

With ten international partners, the project funded under the EraNet Joint Call 2018 will build on a previous international project on estimation of livestock emissions and will improve existing farm-scale GHG decision support systems (DSS). Available as well as cutting-edge mitigation technologies in livestock systems will be assessed regarding costs and mitigation efficiency. The project will generate functional relationships between emissions and activity variables, enabling a refinement of national inventories and better assessment of the cost-effectiveness of a range of mitigation measures. The results being included in a prototype farm-scale DSS. On a national level, methods to calculate direct and indirect emissions from livestock systems shall be improved in close collaboration with the respective UN bodies.

**Your tasks**

- Assess GHG and nitrogen mitigation strategies from livestock systems on the farm level, including current DSS and options for their improvement
- Collate German and Austrian data for the establishment of functional relationships of livestock emissions
- Establish functional relationships and analyse the effectiveness of mitigation options (e.g. feeding, manure storage/treatment, manure application)
- Analyse and process data, including statistical analysis, research data management
- Translate results into suggestions for emission inventory improvement
- Publish results in peer-reviewed journals
- Contribute to overall project activities
  - Collaborate with European, NZ and CHL partners
  - Support project management tasks
  - Support project dissemination activities

**Our expectations**

- **Your professional qualification profile:**
  - University Master degree in natural sciences or related engineering disciplines
  - Knowledge in livestock systems
  - Data collection, data management, data exchange
  - National emission inventory preparation (focus on agriculture welcome)
  - Computer applications: proven knowledge of modelling and analytical software packages, of model verification, sensitivity analyses and parameter studies, MS Office applications
  - Experiences in project management and writing scientific publications are welcome
  - Fluent in written and spoken English

- **Personal qualification:**
  - Independent, self-responsible, reliable and result-oriented way of working
  - Ability to analyse complex data and situations
  - Strong communication and teamwork skills, ability to cooperate, flexibility, commitment, ability to work under pressure, reliability
  - Willingness to travel, valid driving license for use in Europe (min. category B)
  - Crosscultural competence
  - Willingness to do a PhD
We offer

- Your participation in a transnational, excellent project consortium
- Excellent infrastructure for carrying out scientific work
- Attractive, interdisciplinary working environment and very good conditions to develop your own scientific career and your network
- Experienced supervisory team for your PhD studies, and close collaboration with universities in the metropolitan area of Berlin/Potsdam
- Family-friendly working conditions that foster the compatibility of work and family life

The salary is based on your qualification and professional experience according to German public service salary scale (TV-L E13). This part-time position (65%) is limited to three years, based on the duration of the project, and supposed to start in January 2020. Please indicate your earliest availability. PostDocs who are interested in the topic might check online for an accompanied PostDoc job announcement https://www.atb-potsdam.de/en/meta/career/job-offers.html.

Further information regarding tasks can be obtained from Prof. UZ, PD Dr. Barbara Amon (e-Mail: bamon@atb-potsdam.de).

If you would like to participate in our interdisciplinary research, please apply until November 17th, 2019 by e-mail to karriere@atb-potsdam.de quoting the reference number 2019-2-8 (in English; one single PDF document; max. 6 MB; containing a detailed CV, including personal contact information and three references, only relevant certificates, as well as a two-page research statement addressing your specific interest, motivation and qualifications for the position (please address what skills and abilities would you bring to the team and what would you hope to gain from working on this position)).

Due to the tight time frame, interviews might be scheduled already in November, video interviews are possible.

Equality of opportunity is part of our personnel policy. Disabled applicants with adequate qualification will be preferentially considered.

With your application for employment you declare your agreement to store your application documents for at least three months even in case of an unsuccessful candidacy.

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