The Leibniz Institute for Agricultural Engineering and Bioeconomy is a pioneer and a driver of bioeconomy research. We create the scientific foundation to transform agricultural, food, industrial and energy systems into a comprehensive bio-based circular economy. We develop and integrate techniques, processes and management strategies, effectively converging technologies to intelligently crosslink highly diverse bioeconomic production systems and to control them in a knowledge-based, adaptive and largely automated manner. We conduct research in dialogue with society - knowledge-motivated and application-inspired.

To support the DFG-funded project **'Modelling of ventilation rate and airflow patterns of naturally ventilated pig barns with outdoor exercise yards (MNVBOYs)'**, we are looking for

Student Assistant (m/f/d)

The ventilation rate and airflow pattern in naturally ventilated pig barns with outdoor exercise yards (NVPBOYs) are dependent on the barn design, outdoor climate conditions, animal behaviour, and the interaction between them. The aims of the MNVBOYs research project are to quantitatively determine the interacting influences of different factors on indoor airflows, as well as to develop a mathematical model of the ventilation rate of a NVPBOY. The three-pillar model method that consists of physical modelling (with scaled-down building models) in an atmospheric boundary layer wind tunnel, on-farm measurements and computational fluid dynamics is used in this project. The impact of different parameters on the indoor climate, including temperature and airflow characteristics, as well as on the ventilation rate of the NVPBOY shall be analysed.

Your responsibilities

- Processing and statistical evaluation of meteorological data and barn climate data (including air velocity and temperature)
- Mathematical modelling and programming
- Support of airflow and gas concentration measurements in an atmospheric boundary layer wind tunnel
- Support in procurement of measurement devices and lab consumables
- Support in preparation of publications and presentations

Your qualifications

- Very good knowledge in data science (Machine Learning) and statistics
- Very good programming skills (R, Python or similar)
- Knowledge of agricultural science and/or fluid dynamics
- Willingness to work in the laboratory, ability to work in a team, reliability, personal commitment and ability to work independently
- EU driving license class B is desired
- Very good knowledge of English, knowledge of German is beneficial

We offer

- Attractive, interdisciplinary working environment in an international team of experienced scientists and technicians
- Excellent infrastructure for carrying out scientific work
- Family-friendly working conditions that promote the compatibility of work and family life
- Company-owned electric bicycles and business cars for work trips
- Participation in the VBB company ticket or Deutschland-Ticket
- A work place located on the edge of a picturesque landscape and easily accessible by public transportation or bicycle

This position consists of working time of 10 hours per week and is limited until **31.12.2024**, with the possibility of extension. The remuneration is 13,25 € / hour or 13,83 € / hour with a Bachelor degree.

For further information please contact **Dr. Qianying Yi** (E-Mail: qyi@atb-potsdam.de) or visit our website www.atb-potsdam.de.

If you would like to contribute your expertise to our interdisciplinary research, we look forward to receiving your detailed application documents. Please apply by **02.08.2024,** using the online application form for the job advertisement, **reference code 2024-5-3** at https://www.atb-potsdam.de/en/career/vacancies. Applications received after the application deadline cannot be considered.

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

By submitting an application, you agree that your job application documents will be stored for a period of six months, even in the case of an unsuccessful application. Further information on the processing, storage and protection of your personal data can be found at https://www.atb-potsdam.de/en/data-protection-declaration-for-the-application-process.

Published on July 01, 2024