ATB
Leibniz-Institut für
Agrartechnik und Bioökonomie

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.

As part of the BMEL/ FNR-funded project **"Increasing efficiency, minimizing emissions and reducing complexity of biogas plants through innovative gas separation processes (Bio4Value)"** the following position is to be filled as soon as possible

Scientist (m/f/d) (100 %)

for the research field

„Coupling of a novel membrane technology for biogas upgrading with the biogas production process; process evaluation“

The objective of the collaborative project is to develop innovative gas separation membranes and membrane modules for efficient and flexible biogas upgrading. This is intended to achieve a high quality of the separated material flows and the applicability of the gas separation process even for small treatment plants. In collaboration with the external partners Fraunhofer Institute for Applied Polymer Research (IAP) and KS Kunststoffbau GmbH, new types of gas separation membranes are produced and used in modules that can be specifically adapted to different separation tasks and enable the membranes to be recycled. At the ATB, the gas treatment is coupled with biogas production and the developed module is subjected to a long-term test on a laboratory scale. Based on this, a technical, economic and ecological evaluation of the process will be carried out.

Your responsibilities

- Planning, organising, executing and evaluating tests for the continuous anaerobic digestion with treatment of the biogases produced using the developed membrane separation module
- Data acquisition and evaluation, including statistical analysis of measurement results
- Technical and methodological guidance for technical staff
- Development of utilisation concepts for gases after biogas upgrading according to the separation performance of the membrane system
- Economic efficiency analysis, assessment of environmental impact and technical risk for the developed membrane separation system
- Presentation of project results at project meetings and scientific conferences
- Writing project reports and scientific publications

Your qualifications

- Excellent university degree in the field of engineering, natural or environmental science (Diploma or Master of Science) or related subjects
- Scientific expertise and experience in anaerobic digestion and biogas production, in particular biogas upgrading and utilisation, are desired
- Knowledge and experience in the economic and ecological analysis and evaluation of technologies and processes
- Great interest in interdisciplinary cooperation at the interface of bioprocess engineering, agronomy and ecology
- Experience in scientific publishing
- Very good written and spoken English skills, German skills are beneficial

Leibniz-Institut für Agrartechnik und Bioökonomie e.V. (ATB)
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- Ability to work in a team and willingness to cooperate, reliability, flexibility, personal commitment and ability to work independently
- EU-driving license class B is beneficial

We offer you

- An attractive interdisciplinary working environment in an experienced and committed team
- Excellent infrastructure for carrying out scientific work
- Access to national and international networks for your scientific career
- Family-friendly working conditions that foster the compatibility of work and family life
- Company-owned electric bicycles for business trips
- Participation on the VBB company ticket or the Deutschland ticket
- An easily accessible work place (bike, public transport) on the edge of a picturesque park-like landscape

The position is full-time (100 %) and limited to June 30th, 2025. Remuneration depends on your qualifications and professional experience up to EG 13 TV-L.

For further information please contact **Dr. Christiane Herrmann** (E-Mail: cherrmann@atb-potsdam.de) and visit our website **www.atb-potsdam.de**.

If you like to participate in our interdisciplinary research, please apply by **June 19, 2024** using ATB's online application form for the job advertisement, code **2024-1-3**, at https://www.atb-potsdam.de/en/career/vacancies.

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/services/data-protection-declaration-for-the-application-process

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