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.

In our competence area **"Microbiome Biotechnology"** we are seeking for a

Working group lead (m/w/d) (100 %)
in the research area „Bioconversion" with focus on biomaterials

Processes for the conversion of biomass by microorganisms are the basis of a great number of biotechnological processes for the provision of materials, such as biobased chemicals, microorganisms, enzymes and energy carriers. Within the program areas "Multifunctional Biomaterials" and "Integrated Residue Management", production-relevant parameters for the precise control of bioprocess engineering are determined and translated into corresponding fermentation plant concepts as well as measurement and control systems. This includes the measurement of substrate composition as well as product formation, the modeling of interactions in the fermenters, and the development of adaptive control of processes to optimize process and product quality. After process optimisation, a scale-up of the process in conjunction with downstream processing is required to meet standards for commercial products.

The Bioconversion group with focus on biomaterials researches, develops and tests various fermentation and sensor technologies, and assesses their suitability for recording physical and chemical conditions in the fermenter. Based on this, it develops predictive adaptive control systems with the aim to develop efficient processing technologies at varying substrate composition. This includes substrate pre-treatment as well as separation and purification of the products, and a continuous expansion of product utilisation. Interdisciplinary collaboration with the working groups of the department Microbiome Biotechnology is desired. The pilot plant "Biobased chemicals" is used and further developed as infrastructure for research work on a laboratory to pilot scale.

Your responsibilities

- Independent and autonomous research in the field of bioprocess engineering, in particular process development and optimisation of bioconversion processes with focus on biomaterials production
- Establishment and management of an interdisciplinary research group
- Publication of scientific results in internationally renowned journals and their presentation at national and international conferences
- Conception and coordination of own scientific projects in basic and applied research
- Acquisition of third-party funding projects
- Participation in teaching tasks as well as development and independent implementation of teaching courses
- Promotion of young scientists, in particular supervision of bachelor, master and doctoral theses
- Establishing and maintaining of international scientific cooperation
- Participation in relevant national and international committees

Leibniz-Institut für Agrartechnik und Bioökonomie e.V. (ATB)
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- Active participation in scientific issues and strategic developments of ATB

Your qualifications

- University degree (diploma/master's degree) and doctorate in the field of bioprocess engineering, chemical engineering, biotechnology or comparable
- Very good knowledge and successful scientific activity in the fields of fermentation and microbial conversion of biomasses (focus on residues and waste biomasses) to biobased products
- In-depth expertise in sensor-based process analyses and modelling of biotechnological conversion processes
- Practical experiences in process development, process optimisation, fermentation, downstream processing and product purification, and in the upscaling of laboratory processes
- Excellent publication record and proven success in attracting third-party funding
- Relevant scientific experience abroad
- Experience in serving on committees is desired
- Experience in leading project teams and in project management
- Very good written and spoken English skills (business fluent); German skills are desired
- Independent work ability, personal commitment, reliability, flexibility and the ability to work in a team and willingness to cooperate are required
- EU driving license class B desirable

We offer

- The opportunity to work in a particularly innovative area (smart processing in the field of biomaterials and residue management)
- Working in an interdisciplinary team in an attractive working environment
- Access to national and international networks for your scientific advancement
- Family-friendly working conditions that foster the compatibility of work and family life
- Participation on the VBB company ticket or Deutschland-Ticket
- Company-owned electric bicycles for business trips
- An easy to reach work place (bike, public transport) on the edge of a park-like landscape

This full-time position (100 %) is initially limited for 5 years. An evaluation of the working group will take place at the end of the 4th year. The remuneration is dependent on your qualifications and professional experience up to pay group 14 TV-L.

For further information, please contact **Prof. Dr. Gabriele Berg** (E-Mail: gberg@atb-potsdam.de) and 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 application documents consisting of a CV without picture, track record and a concept for the establishment and medium-term development of your working group and its integration into the work of the ATB and the Leibniz Innovation Farm for Sustainable Bioeconomy. You are welcome to provide contact details of at least one recommender.

Please apply by the following deadline **May 22, 2024** using ATB's online application form for the job advertisement, code **2024-1-2**, at https://www.atb-potsdam.de/en/career/vacancies . Applications received after the application deadline cannot be considered.

Interviews will be held on **June 13-14, 2024**.

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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/de/special/datenschutzerklaerung-fuer-den-bewerbungsprozess.

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