Job posting

Type of position
☒ scientific
☐ administrative

Target group
☒ graduates
☒ post docs
☐ other

Title
Scientist (Post Doc) (m/f/d)
for the analysis of volatile organic compounds emitted from fungal-diseased cereals

Institution
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.

Position
For the sub-project of the BMBF-funded research project ‘Electronic noses for monitoring agricultural fields based on miniaturised arrays of affinity sensors (AgriNose)”, we are looking for a Scientist (Post Doc) (m/f/d) for the analysis of volatile organic compounds emitted from fungal-diseased cereals.

Plants under fungal disease stress emit specific volatile organic compounds (VOCs) even before visible symptoms occur on plant parts. The aim of this project is the development of electronic noses that are able to qualitatively and quantitatively detect and analyse VOCs in infected and healthy crop canopies. For this purpose, field and laboratory analyses will be conducted with winter rye.

This full-time position (100%) is limited and in accordance with the project duration is expected to be employed until 31.12.2024. The salary is based on your qualification and professional experience according to TV-L up to salary group 13.
Responsibilities

- Responsibility for scientific managing the ATB sub-project
- Organisation and implementation of experiments in climate chambers, laboratories and field experiments with the cereal variety winter rye
- Air gas analyses, especially the analysis of volatile organic compounds emitted by the plants
- Documentation, analysis and evaluation of research results
- Communication of results to the project partners to support the development of the electronic nose
- Organisation of project meetings with the project partners
- Presentation of research results on scientific conferences
- Preparation of project reports and peer-reviewed publications

Requirements

- Excellent university degree (PhD mandatory) related to the analysis of ambient volatile organic compounds ideally with the degree in chemistry, biology, physics, agricultural engineering or in a related field (e.g., process engineering).
- Profound knowledge and experience in the analysis of volatile organic compounds (GC-MS).
- Experience in statistical data analysis including chemometrics.
- Strong team work skills and ability to cooperate, reliability, flexibility, commitment and independence, self-responsible, experience in research transfer and interdisciplinary cooperation.
- Fluent English proficiency and proven ability to write scientific publications.
- Command of German language is most welcome, interest in learning German is required.
- Willingness to travel according to project progress and requirements.

We offer

- The opportunity to contribute your own ideas to a large extent to the thematic development of scientific issues.
- The possibility to submit your own project proposals with the support of an interdisciplinary research team.
- Attractive, interdisciplinary working environment and very good conditions for developing your scientific career.
- Family-friendly working conditions that promote the compatibility of work and family life.

Application procedure (deadline etc.)

If you would like to participate in our interdisciplinary research, please apply by the following deadline 16.01.2022 using ATB’s online application form for the job advertisement, code 2021-4-4, 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/services/data-protection-declaration-for-the-application-process.

**Contact**

Further information regarding tasks can be obtained from Dr. Michael Schirrmann (Tel. 0331/5699-417, Email: mschirrmann@atb-potsdam.de) or PD Dr. Karl-Heinz Dammer (Tel. 0331/5699-418, Email: kdammer@atb-potsdam.de) as well as online under www.atb-potsdam.de.