

The Leibniz Institute of Plant Biochemistry (IPB) in Halle (Saale), Germany, offers a three-year position at the Independent Research Group “Receptor Biochemistry”.

PhD student (m/f/d) in Plant Biochemistry

(Pay group E13 TV-L, working time 65 %, limited for three years)

Who we are:

The IPB is a non-university research institution of the Leibniz Association on the Weinberg Campus of the Martin Luther University Halle-Wittenberg. As a foundation under public law, the IPB is under the supervision of the state of Saxony-Anhalt.

The institute is an internationally recognized research institution and consists of four scientific departments, independent junior research groups, and the Administration and Infrastructure Department (about 200 employees, including about 40 PhD students). Research of the scientific departments/junior research groups (ca. 200 employees, including about 40 PhD students) aims to understand the bio/chemical basis of plant resilience and performance in challenging environments. The IPB offers excellent research facilities and state-of-the-art infrastructure to investigate the chemical diversity, biochemical interactions, and biological roles of plant and fungal natural products, with an emphasis on specialized metabolites, signalling molecules and relevant molecular networks of functional gene and protein regulation.

The Independent Research Group “Receptor Biochemistry” studies the regulation of plant physiology at the level of the plant plasma membrane and offers a multinational, interdisciplinary, and highly stimulating scientific environment. Information about the research group and the IPB can be found on the homepage: www.ipb-halle.de

Research topic:

Plant receptor-like kinases (RLKs) are the main players of cell-to-cell communication in plants and many of them constitute key immune receptors. Understanding function and regulation of these receptors therefore promises to reveal new opportunities for plant breeding (plant physiology) and crop protection (plant immunity). Proteolytic processing, particularly ectodomain shedding (shedding) regulates membrane-bound receptors and it refers to the excision of the extracellular portion of a membrane-anchored protein. Shedding is therefore an immediate mechanism to i) inactivate the receptor, ii) activate signaling or iii) to release an active ectodomain. We have recently reported widespread receptor shedding in plants, see (Zheng et al. 2023, bioRxiv). This project will build on those results and study the effects of proteolytic cleavage on the function of immune plant receptors using state of the art methods of molecular biology, biochemistry, and proteomics.

Your tasks:

We are looking for a creative, curious, and enthusiastic candidate to join our team and contribute to the study of proteolytic processing of immune receptors in plants.

The successful candidate must hold a Diploma, Master's degree or equivalent in biology, biochemistry or a closely related field and is expected to have a solid command of English communications skills (both spoken and written). Applicants should have a strong background in one of the following fields: molecular biology, biochemistry, plant-microbe interactions, proteomics, or cell biology. Basic knowledge in plant biochemistry would be highly appreciated.

Our benefits:

- Interesting, varied, and challenging tasks and family-friendly working conditions
- An excellent infrastructure with state-of-the-art technology
- Payment according to TV-L (including annual special payment)
- flexible working hours and the opportunity to work from home
- extensive offer for health promotion
- Promotion of your company pension scheme (VBL)
- Promotion of your skills through further training measures

How to apply and information:

Please, contact Dr. Mariana Schuster for additional information (mariana.schuster@ipb-halle.de; Phone: +49 (0) 345 5582 1720)

Applications must include a cover letter describing research accomplishments and interests, a CV plus publication list, and contact details of 2 referees. Please send your complete application documents including the reference number 1/2024 exclusively by email to bewerbungen@ipb-halle.de.

Review of applications begins immediately and will continue until the position is filled.

Foreign qualifications must comply with German standards (TV-L-EntgeltO Protokollerklärung Nr. 1 Absatz 4) and be certified (equivalence test in Germany, subject to a fee) and presented to IPB Human Resources at the time of hiring: <https://www.kmk.org/zab/central-office-for-foreign-education>

Diversity, family and equal opportunities:

The Leibniz Institute of Plant Biochemistry has set itself the goal of equal opportunities, diversity and the promotion of work-life balance and was awarded the "Total E-Quality" certificate for this. In addition, the IPB is a member of the nationwide company network "Success Factor Family" and the Diversity Charter (*Charta der Vielfalt*).

Further information can be found at: <https://www.ipb-halle.de/en/institute/>

Data protection:

Please note the data protection information for applicants (m/f/d) according to Article 13 and 14 GDPR on data protection processing during the application process: <https://www.ipb-halle.de/en/career/data-protection-information-for-applicants/>