

## **Job Details ANR 3155**

(translation of <https://jobs.ruhr-uni-bochum.de/jobposting/67c3368fae512513023b07a6a9e03e7c0c4b81a80>)

The **Chair of Molecular Genetics and Physiology of Plants** in the **Faculty of Biology and Biotechnology**, Ruhr University Bochum, is inviting applications for the position of

## **Researcher in Molecular Plant Sciences**

(3 years, PostDoc or PhD Student, salary dependent on prior qualification and based on TVL E13)

Our research addresses the molecular-functional networks that maintain plant metal balance and plant interactions with soil composition, biotic environmental factors and internal processes of growth, metabolism and development in the model systems *Arabidopsis halleri* and *Arabidopsis thaliana*. Part of our research aims to uncover the molecular mechanisms underlying the metal-related extreme traits of heavy metal hyperaccumulation and hypertolerance, as well as local adaptation in *A. halleri* (ERC Advanced Grant LEAP-EXTREME). In our work on *A. thaliana*, we aim to gain new insights into iron, zinc and copper homeostasis as well as the integration of metal homeostasis or the functions of central metal-dependent proteins in metabolism, growth and development. We bring together a variety of state-of-the-art methodological approaches, particularly from the areas of molecular biology, cell biology, biochemistry, genetics, plant physiology and genomics. Our work is in fundamental research, but they can be applied in phytoremediation, phytomining, biofortification and improving the quality of crop products.

The successful applicant will conduct research on characterizing the function(s) of individual genes/proteins that underlie the growth and survival of plants in a demanding dynamic environment. A contribution to teaching and self-administration in our Faculty of Biology and Biotechnology is expected, as is commensurate with the academic degree achieved so far. The successful applicant will be part of a highly supportive interdisciplinary and international research group (<http://www.rub.de/mgpp/kraemer.html>) and will have access to an outstanding research infrastructure.

The PI, **Prof. Dr. Ute Krämer**, ranks among the **top researchers in Molecular Plant Physiology worldwide**.

**Google Scholar:** <https://scholar.google.de/citations?user=EAeobDEAAAAJ&hl=de>

**Researchgate:** <https://www.researchgate.net/profile/Ute-Kraemer>

**ORCID:** 0000-0001-7870-4508

### **Your tasks:**

- Combination of molecular biological, physiological, cell biological, biochemical and genomic work to investigate plant metal balance
- Particularly central: localization of proteins in plant cells and plants using various state-of-the-art microscopic methods and investigation of dynamics, molecular biological production of constructs for the transient and stable transformation of plants, plant transformation, heterologous expression of plant cDNAs for the functional characterization of the encoded proteins, genome editing in plants (CRISPR/Cas)
- Conducting controlled experiments
- Experimental research, documentation, conference papers
- Preparation of original publications, with data analysis, data and figure/table preparation and partial or complete writing of the first English version in coordination with the co-authors
- Teaching and supervision
- Contributions to the organization/infrastructure of the chair and to the self-administration of the faculty, see above.

- The scope of the tasks, the degree of expected independence and the type and extent of supervision by superiors will correspond to the academic qualifications achieved so far

**The call for applications is open to scientists at various career levels with the appropriate requirements.**

**Your profile:**

- For the Postdoc position: completed doctorate in plant molecular biology or a similar subject
- For a Doctoral student position: MSc or a very good BSc degree or an equivalent degree in biology or a similar subject
- Very good suitability for a scientific career and a great interest in pursuing scientific questions
- For applications with a completed doctorate, at least one first authorship in an original publication is expected from the doctorate (correspondingly more as time goes on after the doctorate)
- All applications require practical experience and comprehensive theoretical knowledge in at least three of the above-mentioned (tasks) methodological areas of modern plant research
- Depending on your career level, existing or extensive experience in the fields of molecular cloning and of generating as well as characterizing transgenic plants
- Depending on your career level, practice, extensive knowledge and methodological expertise in the field of plant cell biology and/or molecular biology; Specific previous knowledge in the area of metal homeostasis is welcome and beneficial, but not mandatory
- Experience in microscopic imaging (particularly confocal laser scanning microscopy) and related techniques
- Knowledge and experience in statistics
- Creating diagrams and mastering the required software

**We offer:**

- Team-oriented collaboration in a committed, international and appreciative team
- a modernly equipped workplace
- Development opportunities: If the intended qualification goals are achieved and scientific success (publication performance), increasing independence and extension of the position are possible in principle, depending on the career stage.

**Further information:**

Doctoral students are employed for 19,915 hours per week (50% TvL-E13)

Postdocs are employed for 39.83 hours per week (100% TvL-E13)

At the request of the applicant (m/f/d), the staff council can be involved in selection interviews. <https://www.wpr.ruhr-uni-bochum.de/>

The scope of the teaching obligation is based on Section 3 of the NRW Teaching Obligation Ordinance.

Information about the TvL can be found at: <https://oeffentlicher-dienst.info/>

The Ruhr University Bochum (RUB) is one of the leading research universities in Germany. As a reform-oriented campus university, it uniquely combines the entire range of major scientific areas in one place. The dynamic coexistence of subjects and subject cultures offers researchers and students alike special opportunities for interdisciplinary collaboration.

The RUB stands for diversity and equal opportunities. We therefore promote the collaboration of heterogeneous teams and the career path of people who are underrepresented in the respective work areas. The RUB expressly encourages applications from women. In areas where they are underrepresented, they will be given preferential consideration if they have the same qualifications. We also very much welcome applications from people with disabilities.

Contact person for further information:

Ute Kraemer, Tel.: +49234 32 28004, [MGPP@rub.de](mailto:MGPP@rub.de)

Unfortunately, travel costs, accommodation costs and loss of earnings or other application costs for interviews cannot be reimbursed.

We are looking forward to receiving your application including a cover letter, a CV with publication list, and degree certificates, by email to [mgpp@rub.de](mailto:mgpp@rub.de). Please specify in your cover letter the job id. ANR 3155, and whether you are applying at the Postdoc (holding PhD degree in plant molecular biology, or comparable) or at the PhD student (holding MSc or a very good BSc degree in plant molecular biology, or comparable) level. Deadline for applications is May 24, 2024 (expected starting date is 1<sup>st</sup> October to 1<sup>st</sup> November 2024).