



Postdoctoral Researcher

Plant Molecular Biology

(100% TvL-E, 3 years initially, with possible extension)

at the **Chair of Molecular Genetics and Physiology of Plants**, Ruhr-University Bochum. We are looking for a highly motivated scientist (PhD) dedicated to stringent hypothesis-driven experimental research with a strong background in plant molecular biology. The successful candidate will address the molecular-physiological mechanisms underlying plant growth and survival in a challenging dynamic environment. Our research focuses on plant metal homeostasis networks and their 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 **metal hyperaccumulation** and **hypertolerance (1)** and **local adaptation (2)** in *A. halleri* (**ERC Advanced Grant LEAP-EXTREME**). In our work on *A. thaliana*, we aim for novel insights into iron, zinc and copper homeostasis (**3,4.**) and the integration of how metal homeostasis/key metal-dependent protein functions with metabolism, growth and development (**5.**).

The successful candidate will have excellent **molecular cloning** skills. We expect in-depth **knowledge and methodological expertise** in state-of-the-art **plant molecular biology** techniques. Candidates should have some background and practical experience in plant cultivation, physiology and statistics. Experience in microscopic imaging (in particular confocal laser scanning microscopy) and related techniques (immunolocalization, *in situ* hybridization) as well as genome editing or plant nutrition is welcome. Open and creative scientific interaction across disciplines, for example also with engineers, will be important.

The successful candidate will join a highly supportive interdisciplinary and international research group (<http://www.rub.de/mgpp/kraemer.html>) and have access to an excellent research infrastructure. We foster career development, with intense mentoring within our research group, as well as ample opportunities at the faculty and University levels. A contribution to teaching in our **Faculty of Biology and Biotechnology** is expected. **Ruhr University Bochum (RUB)** is among the **leading research universities** in Germany. As a modern reform-oriented University hosting ca. **40,000 students**, RUB bundles the entire scope of scientific disciplines on a **single campus**. Bochum is a medium-sized city of around 300,000 inhabitants positioned in the **heart of Central Europe**, within the Rhein-Ruhr metropolitan region of more than 5 million inhabitants. Short- and long-distance **public transport** is seamless, with fast access to the neighbouring **countryside** as well as the **cultural programme** in the Rhein-Ruhr area. The University provides outstanding **family support** and **day-care facilities**.

Please send your application, including a **cover letter** summarizing your expertise and research interests, a **CV**, a list of **publications, degree certificates** and the **summary** of your PhD thesis, to Prof. Dr. Ute Krämer (Ute.Kraemer@rub.de, please cc to: mgpp@rub.de) by email, with the subject line "**Application Postdoctoral Researcher MGPP-2022B**". Projected start date is around September 2022. Apply as soon as possible, closing date is 31 July 2022.

References

1. DOI: 10.1038/nature06877; **2. DOI:** 10.1111/nph.14219; **3. DOI:** 10.1111/tpj.15611; **4. DOI:** 10.1105/tpc.18.00207; **5. DOI:** 10.1101/2021.09.17.460807 (in press, *The Plant Cell*).