



### Job advertisement P-CAMPUS 2019

In the Phosphorus Graduate School of the "Leibniz ScienceCampus Phosphorus Research Rostock" (P-Campus) 14 vacancies are offered, subjected to resource allocation for three years. Vacancy can be filled earliest to April 2019 or to the next possible time:

## 14 Doctoral students (\*gn) (EG 13 TV-L, half-time employment, temporary)

#### Task areas:

The P-Campus is a regional partnership of five Leibniz Institutes [Leibniz Institute for Catalysis e.V. (LIKAT); Leibniz Institute for Farm Animal Biology (FBN), Dummerstorf; Leibniz Institute for Baltic Sea Research Warnemünde (IOW); Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Groß Lüsewitz; Leibniz Institute for Plasma Science and Technology (INP), Greifswald] and the University of Rostock. Overarching goal of the interdisciplinary cooperation is the sustainable management of the essential, but limited resource phosphorus. In the frame of the graduate school five research clusters will be addressed:

- P-Cluster I. Phosphorus in the environment
- P-Cluster II. Sufficiency and efficiency phosphorus utilisation, P-recycling
- P-Cluster III. Phosphorus in synthesis and catalysis
- P-Cluster IV. Molecular biology of phosphorus
- P-Cluster V. Phosphorus-Governance

Each doctoral student will contribute and participate in the structured graduate education of the Phosphorus Graduate School, in which all doctoral students acquire a broad interdisciplinary knowledge about different forms of phosphorus, P-related problems and usage of phosphorus. Each doctoral student will be tutored by a scientist of at least one Leibniz Institute and the University of Rostock.

#### The following topics for PhD-projects are offered:

P-I.1 Risks and benefits of rewetting coastal wetlands after agricultural use

- Deadline for applying has passed
- P-I.2 P Pools and mobilization potential in lowlands and coastal regions
  - Deadline for applying has passed

P-I.3 Analysis of glyphosate and glufosinate in sea water and as indicator compounds for industrial cropping

- Deadline for applying has passed
- P-II.1 P recycling in animal husbandry
  - Deadline for applying has passed
- P-II.2 Efficiency of recovered Phosphorous for monogastric animals
  - Deadline for applying has passed
- P-II.3 P efficiency of forage legumes and their capacity to utilize P from recycling products
  - Deadline for applying has passed

















P-III.1 Synthesis of novel P-based ligands for complexes to activate small molecules

Deadline for applying has passed

P-III.2 Application of P-based organocatalysts and biocatalysts for the resolution of racemic carbonates

▶ Deadline for applying has passed

P-III.3 Synthesis of potential anti-tumor and adhesion-promoting agents by P-based organocatalysis for oncology and biomedical engineering

Deadline for applying has passed

P-IV.1 Gene expression in biogeochemical cycling of phosphorus in biological soil crusts of sand dunes of the Baltic Sea

Deadline for applying has passed

P-IV.3 The role of inorganic phosphate supply on the development of cyanobacterial summer blooms in the Baltic Sea

Deadline for applying has passed

P-IV.4 Phosphorus as a metabolic regulator during environmental stress in animals

Deadline for applying has passed

# P-IV.5 Molecular mechanisms of phosphate homeostasis and osteoimmunological processes and their consequence for health and welfare

Time of job posting: 2020

P-V. Governance options for closed P cycles - the GAP 2020 revision Deadline for applying has passed

For further information such as deadlines for application, address for application and contact persons please follow the links to the individual job advertisements on the P-Campus website.

#### General preconditions for employment:

- excellent completed scientific university degree (State Examination, Diploma, Master or analogous degree) in one of the following disciplines: agricultural science, Biology, Chemistry, Geochemistry, Law or similar disciplines
- o good to very good knowledge of English language
- $\circ~$  Interest in interdisciplinary cooperation beyond the own discipline and active work in the P-Campus
- o A structured and engaged working method for the own scientific qualification is expected

For the preconditions of the individual projects you are referred to the specific job advertisements.

Applicants are invited to submit their application, indicating the code for the individual project, to the address in the individual job postings. All details for application can be found in the individual job postings. Application costs cannot be compensated.

Further information about the P-Campus can be found on: <u>www.sciencecampus-rostock.de</u> or contact Dr. Dana Zimmer (info@wissenschaftscampus-rostock.de).











