

Press Release, April 9, 2019

Another four years funding for the Leibniz Science Campus Phosphorus Research Rostock



At the beginning of April, the Leibniz Association decided to support the Leibniz Science Campus Phosphorus Research Rostock (P Campus) for another four years with a good 1.13 million euros. The P Campus, which was founded in 2015 and brings together five Leibniz institutes from the region and the University of Rostock, will thus be able to continue and expand its successful interdisciplinary research into the essential element phosphorus and its role in the environment and in economy. The Rostock P Campus is one of a total of 22 science campi with a focal theme that serve the strategic networking of Leibniz institutes with universities and other regional partners.



"In the face of strong competition, the funding of a second phase of the P Campus underscores the high quality of the research carried so far as well as the worldwide outstanding position of phosphorus research in the Rostock area and, as a result, further strengthens the excellence profile of the university and the Leibniz institutes in Mecklenburg-Western Pomerania," comments Prof. Ulrich Bathmann, speaker of the P Campus, the renewed funding commitment of the Leibniz Association. "The state government supports this with additional funding from the ministries for agriculture, the environment and consumer protection as well as for education, science and culture," Bathmann continues.



Phosphorus (P) plays an important role in the environment as an essential element for all living organisms and is also of central importance in numerous agricultural and industrial production processes. The availability of this natural resource, which only exists in finite deposits and cannot be replaced by other substances, will soon be drastically restricted unless there are radical changes globally in its use towards greater sustainability and efficiency. The consequences of the current misuse: In the long run, the food supply of the growing world population will be endangered and the economies will suffer because industrial demand can no longer be met. Inefficient use of P in agriculture, on the other hand, is often the cause of major environmental problems, as ecosystems with too much unused P are thrown off balance by severe eutrophication.



This is where the P Campus in Rostock comes in, in which the Leibniz Institute for Baltic Sea Research Warnemünde (IOW), the Leibniz Institute for Catalysis (LIKAT), the Leibniz Institute for Farm Animal Biology (FBN), the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK) and the Leibniz Institute for Plasma Science and Technology (INP) have joined forces with five faculties of the University of Rostock (Agriculture, Maritime Systems, Mathematics-Natural Sciences, Medicine, Law). Through compre-



hensive basic and applied research, they are working together to find strategies for solving these challenges.

In the four years of the first funding phase, four main research foci were established: Cluster I investigates, how P and its various chemical compounds behave in the environment. Cluster II is devoted to research questions on how the raw material can be used more efficiently and yet sufficiently in agriculture. This also includes the development of recycling strategies and technologies. How P compounds can be used in industrial catalysis for more efficient chemical reactions is the focus of Cluster III. Methodological aspects are further developed in Cluster IV. For the new funding phase, a biologically oriented cluster has been added in which the role of P in the metabolism and as a cellular signalling substance in various organisms is to be investigated. Furthermore, a new research focus on phosphorus governance has been added. Here, the scientific findings of the P Campus will be synthesised and subsequently investigated to what extent environmental and other relevant legislation already comply with these findings and which legal adjustments are still necessary.

In addition to its interdisciplinarity, a particular strength of the P Campus is its graduate school, in which 11 doctoral students have been pursuing individual questions from the main research areas. During their doctoral studies, the young scientists undergo a structured, interdisciplinary education in order to provide them with the best possible opportunities on the labour market. In this way, the societal implementation of the P Campus findings is also supported. The continuation of P-Campus funding will enable 14 further doctoral theses to be launched between May 2019 and May 2020, each of which will be supported for three years.

Contact:

Prof. Dr. Ulrich Bathmann | P Campus Speaker

Director Leibniz Institute for Baltic Sea Research Warnemünde (IOW)

Phone: +49 (0)381 – 5197 100 | Mail: ulrich.bathmann@io-warnemuende.de

Further P Campus information: wissenschaftscampus-rostock.de

The Leibniz Science Campi

With the model of the Leibniz Science Campi, the Leibniz Association aims at strengthening the synergies between university and non-university research in Germany and thus work against mere coexistence. The science campi enable Leibniz institutions and universities to cooperate thematically focused as equal, complementary regional partners. The aim is to create networks that further develop the respective research field: They conduct strategic research, promote interdisciplinarity in topics, projects and methods, and thus make the respective location more visible through a strengthened research profile.