

**The International Max Planck Research School (IMPRS) "The Exploration of Ecological Interactions with Molecular and Chemical Techniques" in Jena, Germany, invites applications for 5 PhD fellowships beginning in January 2015.**

Many key ecological interactions between plants, herbivores, bacteria and fungi occur at different surfaces.

These form the boundaries between organisms and their aerial, aquatic, or subterranean environments, as well as the interfaces of organisms interacting with each other. The release or detection of odors and other chemical signals occurs at surfaces; surface biofilms made by bacteria and diatoms create unique environmental niches. Yet very little information is available on compounds and proteins playing a role in the local communication processes at these interfaces. New methods are required to study these interactions at a mechanistic level. Our aim is to develop such methods and apply them to different projects and research questions. Approaches will include mass spectrometry-based techniques and different imaging technologies. The development of new bioinformatics tools for data analysis is also needed. A complete list of projects offered is available on our website. We are looking for enthusiastic PhD students with strong interests in the above-described central topic. Applicants should have a firm background in one of the following fields: bioinformatics, analytical chemistry, entomology, neurobiology, molecular biology, biochemistry, plant physiology and genetics. All our projects are highly integrative and require willingness to closely collaborate with researchers of different backgrounds. The Research School is a joint initiative of the Max Planck Institute for Chemical Ecology, Friedrich Schiller University, Jena, the Leibniz Institute for Natural Product Research and Infection Biology, and the Leibniz Institute of Plant Genetics and Crop Plant Research. We offer state-of-the art equipment, an excellent research environment, supervision by a thesis committee and a structured training program including scientific courses, training in transferable skills and internal conferences. Successful candidates will receive an IMPRS fellowship.

Working language is English. **Application deadline is August 31, 2014.**

For detailed information on the IMPRS, projects offered and application requirements, please visit our website <http://imprs.ice.mpg.de/> .

**Please apply online at:**

<https://imprs-reg.ice.mpg.de/rs/reg/index.php>