IMPRS INTERNATIONAL MAX PLANCK RESEARCH SCHOOL CHEMICAL COMMUNICATION IN ECOLOGICAL SYSTEMS

2 PhD positions in Molecular and Chemical Ecology and Evolution

International Max Planck Research School "Chemical Communication in Ecological Systems"

The International Max Planck Research School (IMPRS) "Chemical Communication in Ecological Systems" in Jena, Germany, invites applications for **2 PhD positions** beginning in March – July 2027. The overarching research topic is the use of molecular, chemical and neurobiological techniques to experimentally explore ecological interactions under natural conditions. The main focus is on the relationship between plants, microbes and herbivores, and their environment, as well as the evolutionary and behavioral consequences of these interactions. We offer 5 **exciting projects** focusing on different organisms and approaches. The complete list of projects offered including project descriptions is available on our website (https://www.ice.mpg.de/296576/advertised-projects).

We are looking for enthusiastic PhD students with strong interests in the above-described central topic. Applicants should have or be about to obtain a Masters or equivalent degree in one of the following fields: entomology, neurobiology, molecular biology, biochemistry, analytical chemistry, plant physiology, genetics, ecology, evolutionary biology, bioinformatics, and mathematics and computer science. 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 and the Friedrich Schiller University. 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 and outreach skills and participation in research symposia. Successful candidates will receive a Max Planck support contract. There are no tuition fees and the working language is English.

Application deadline is November 30, 2026.

For detailed information on the IMPRS, projects offered and application requirements, please visit our website: https://www.ice.mpg.de/296548/current-call

Please apply online from October 20, 2026, at:
https://jobs.ice.mpg.de/en/jobposting/c450d87a166fc2e60ff9daebf5f3fc1b851e2ec44/apply

Projects offered in 2026/27

Please find below a list of projects we offer for this year's recruitment. All projects are highly integrative and require the collaboration between different research groups. Applicants can identify up to three projects of interest.

Project 1: From sequence to fitness: A multiscale experimental approach to understanding cardiotonic steroid resistance
Supervisor: Dr. Shabnam Mohammadi

Project 2: Bringing light into the dark – function of genetic dark matter in insect symbioses
Supervisors: Dr. Tobias Engl, Prof. Dr. Martin Kaltenpoth

Project 3: Small RNA landscape of insect symbioses: Convergence and divergence across hosts and symbionts
Supervisors: Dr. Mariana Ferrarini, Prof. Dr. Martin Kaltenpoth

Project 4: Decoding the chemical signals behind conflict in a clonal ant society
Supervisors: Dr. Yuko Ulrich, Dr. Markus Knaden

Project 5: Temperature adaptation of di- and monoxenic trypanosomatids
Supervisors: Prof. Dr. Ute Hellmich, Dr. Martha Bogacz, Dr. Tobias Engl, Prof. Dr. Martin Kaltenpoth