



MAX PLANCK INSTITUTE
FOR CHEMICAL ECOLOGY

Postdoctoral position on ant chemical ecology

Applications are invited for a 2-year postdoctoral position in the [Social Behavior](#) group headed by Yuko Ulrich. The group's current work is centered on social behavior and social immunity. We seek to understand how individual traits and the social context shape behavior and immune defences using experimental, computational, chemical, and molecular approaches in the clonal raider ant (*Ooceraea biroi*), a uniquely accessible social insect for which modern computational (e.g., automated tracking) and genetic tools (e.g., CRISPR-Cas9-based mutagenesis) are available.

Job Description

The project aims to elucidate the origins and function of a social organ of ants, the postpharyngeal gland. This head gland plays a key role in nestmate discrimination by mixing and exchanging cuticular hydrocarbons between members of a colony. Additional roles in the social exchange of nutrients and other molecules have been suggested, but not confirmed. The gland is also the specific target of parasitic nematodes, with effects of infections on behavior. The project will develop based on your interests and skills to include diverse approaches (e.g., comparative, behavioural, and/or chemical analyses, metabolomics, transcriptomics), capitalizing on the clonal raider ant as an experimental system.

We seek

A creative and collaborative scientist to join a dynamic, international, and interdisciplinary team.

Your Profile

Candidates must have a PhD in biology or related fields, excellent verbal and written communication skills, and a published track record of addressing scientific questions innovatively and rigorously. Experience working with social insects is a plus but not necessary. Whatever your scientific background, a keen interest in the research topic and a positive mindset are necessary.

We offer

The Max Planck Institute for Chemical Ecology provides an international, multidisciplinary and highly collaborative research environment. The working language of the institute is English. The project will benefit from state-of-the-art facilities and equipment, access to expert service groups for [mass spectrometry](#) and [microscopy](#), and world-class colleagues in insect chemical ecology, neuroethology, and evolutionary biology. We offer a competitive salary, career development training, and a generous holiday entitlement and pension scheme. We are committed to [equal opportunities and diversity](#) and encourage qualified applicants from all backgrounds to apply.

The review of applications will start on April 8, 2024, and will continue until the position is filled.

To apply, please upload your CV and a cover letter (≤ 2 pages) stating why you are applying for this position along with the names and contacts of 2-3 references as a single PDF. The starting date is as early as May but flexible.

The Max Planck Society is one of Europe's leading research organizations and conducts basic research in the natural sciences, life sciences, and humanities. The Max Planck Institute for Chemical Ecology in Jena carries out fundamental research on how organisms communicate with each other via chemical signals. We analyze ecological interactions with molecular, chemical and neurobiological techniques. In the Institute, organic chemists, biochemists, ecologists, entomologists, behavioral scientists, insect geneticists and physiologists work in collaboration to unravel the complexity of chemical communication that occurs in nature.

The Max Planck Society is committed to gender equality and diversity and actively supports the reconciliation of work and family life. We want to increase the proportion of women in areas where they are underrepresented. The Max Planck Society has also set itself the goal of employing more persons with severe disabilities. We therefore encourage them to apply. We also welcome applications from all backgrounds.

Have we sparked your interest? Please apply. We are looking forward to getting your complete application documents.

Website: www.ice.mpg.de

