



Max Planck Institute  
for Chemical Ecology

The project group of Dr. Sybille B. Unsicker in the Department of Biochemistry at the Max Planck Institute for Chemical Ecology offers a

## **4-year PhD position to study plant volatiles in the context of biodiversity-ecosystem functioning relationships**

### **Background:**

Plant volatiles are key components of biotic interactions that underpin essential ecosystem functions (plant production, herbivory, predation). Few studies have investigated plant volatile emission in complex natural communities and our knowledge on the importance of plant volatiles in the context of Biodiversity and Ecosystem Functioning (BEF) is scant. How plant history and soil history effects volatile emission is even less well understood.

The aim of this project is to elucidate how plant diversity, soil history and plant history affect the emission of constitutive and herbivore-induced volatiles from selected plant species and experimental plant communities in the Jena Experiment (<http://www.the-jena-experiment.de>). The data that will be acquired within the research of this project will lay the foundation for formulating precise hypotheses on the defensive roles of plant volatiles in the context of biodiversity-ecosystem functioning relationships in grassland ecosystems.

### **We are offering**

a 4-year PhD position (funded by the German Research Foundation DFG) within the research unit FOR 5000 **“Biotic interactions, community assembly, and eco-evolutionary dynamics as drivers of long-term biodiversity–ecosystem functioning relationships”**. The position will ideally start on February 1<sup>st</sup> 2020. Payment will be based on the tariff contracts for the public service (65% E13). We provide an excellent research environment with enthusiastic scientists from different nationalities in the Department of Biochemistry (Prof. Gershenson) at the Max Planck Institute for Chemical Ecology in Jena, Germany (<http://www.ice.mpg.de>). The PhD student will be associated with the International Max Planck Research School (IMPRS <http://imprs.ice.mpg.de>).

### **Candidate requirements:**

- Master degree in Ecology or related disciplines
- Strong interest in Chemical Ecology
- Experience in field work
- Experience in statistical analysis (preferably with R)
- Willingness to work in an interdisciplinary team
- Fluent verbal and written English communication skills
- Excellent organizing skills

### **How to apply:**

The Max-Planck Society is an equal opportunity employer and strives to employ both genders equally, as well as to employ more individuals with disabilities. Therefore, we encourage all applicants, independent of their nationality, gender or disability, to apply for this position. Please send your application as **a single pdf** in English including a letter of motivation, summarizing your experience and future vision, CV of no more than 4 pages, list of publications and relevant certificates (degree certificates, etc.) and the names of two referees (including email address) to Dr. Sybille Unsicker [phdgrassland@ice.mpg.de](mailto:phdgrassland@ice.mpg.de).

**The application deadline is January 21<sup>st</sup> 2020.**

The position is available from February 1<sup>st</sup> 2020