Max-Planck-Institut für chemische Ökologie
Max Planck Institute for Chemical Ecology

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The department of Natural Product Biosynthesis (Prof. Dr. Sarah E. O'Connor) at the Max Planck Institute for Chemical Ecology invites talented and highly motivated candidates to apply for a

3-year PhD position to study the formation of defense metabolites in wheat

Project description: Natural products, or specialized metabolites, allow plants to interact with the environment using the language of chemistry. Benzoxazinoids are important plant defense compounds that are well known in the grasses. As part of a joint research project with two partner groups in Israel (Dr. Vered Tzin at Ben Gurion University and Prof. Assaf Distelfeld at Haifa University), we will investigate the formation and regulation of benzoxazinoids in wheat. The PhD candidate will combine state-of-the-art transcriptomics and metabolomics approaches with genetic mapping techniques to identify biosynthetic enzymes and transcription factors, which will then be characterized *in vitro* and *in planta.* The expected results may promote future efforts to improve wheat resistance to insect herbivores and pathogens.

Candidate requirements: We are looking for a highly motivated candidate trained in biochemistry and molecular biology. Experiences and good experimental skills in molecular techniques and LC-MS/MS as well as knowledge about plant specialized metabolism are an advantage. A Master's degree in Biology, Biochemistry or related disciplines is required for this position.

We are offering a 3-year PhD position funded by the German Science Foundation (DFG). 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 Natural Product Biosynthesis at the Max Planck Institute for Chemical Ecology in Jena, Germany. The PhD student will be associated with the International Max Planck Research School (IMPRS).

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 and research interests, CV, relevant certificates (degree certificates etc.) and the name and address of at least one referee to Dr. Tobias Köllner: phd-bxd@ice.mpg.de

The deadline for applications is **October 15**, 2021.

The position is available from November 1, 2021.