



# Ph.D. position on algal-bacterial interactions

The Sasso lab at Leipzig University in Germany offers a Ph.D. position starting from 1 September 2022.

## **Activities and responsibilities**

While microalgae are key contributors to global carbon fixation, their molecular interactions with other microbes in various ecosystems are poorly understood. In the framework of the Collaborative Research Centre ChemBioSys (www.chembiosys.de), we have discovered that the bacterium *Pseudomonas protegens* strongly arrests the growth of the unicellular green alga *Chlamydomonas reinhardtii*, deflagellates it and alters its morphology. We have characterized the roles of several bacterial natural products in this biotic interaction (e.g., Rose et al., Environ. Microbiol. 23, 5525-5540 (2021); Hotter et al., Proc. Natl. Acad. Sci. USA 118, e2107695118 (2021)). We now want to explore the physiological response of the microalgae to bacterial toxins in depth, together with the influence of different environmental conditions on bacterial virulence and toxin biosynthesis.

#### **Qualification profile**

We are seeking a talented, highly motivated candidate with a Master's degree in biochemistry, biology or a related area. Experience in the handling of microorganisms and methods from molecular biology, plant physiology and biochemistry are desirable. Very good English language skills are expected.

#### We offer

We offer an exciting and interdisciplinary working environment in a research group addressing fundamental questions in plant biology. Close interactions with the involved institutions of the Collaborative Research Centre (www.chembiosys.de) will be a central part of the project. The position is funded by the German Research Foundation (DFG) and will be financially supported for four years. More information will be available shortly at Leipzig University's employment website: https://www.uni-leipzig.de/universitaet/arbeiten-an-der-universitaet-leipzig/stellenausschreibungen.

### Send application to

Please send your application (cover letter, CV, all certificates and credentials, contact details of two academic references) to severin.sasso@uni-leipzig.de or Prof. Severin Sasso, Universität Leipzig, Institut für Biologie, Johannisallee 21-23, 04103 Leipzig. Electronic applications (as a single PDF file) are preferred. The application deadline is 30 June 2022.