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Ph.D. position in algal biotechnology

The Plant Physiology group at the Institute of Biology, Leipzig University, offers a Ph.D. position starting from 1 July 2024, subject to formal funding approval.

Activities and responsibilities

The unicellular alga *Chlamydomonas reinhardtii* secretes substantial amounts of glycolate under photorespiratory conditions (Taubert et al., *Plant Biotechnol. J.* 17, 1538-1546 (2019)). As glycolate is an important industrial chemical, its production in a photosynthetic microorganism opens up the long-term potential to establish a biotechnological industry based on renewable resources. The aim of a new third-party-funded project is to improve glycolate secretion. For this purpose, we want to use physical mutagenesis (e.g. irradiation with UV light) to create a library of random algal mutants. This library will be screened for mutants that secrete increased amounts of glycolate, and promising mutants will be analyzed using physiological methods. The project will be carried out in collaboration with partners at Chemnitz University of Technology and the Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology (FEP) in Dresden.

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 with methods from molecular biology, plant physiology and biochemistry are desirable. Very good English language skills are a must. If you are invited for a job interview, we expect you to come to Leipzig so that we can meet in person.

We offer

We offer an exciting and interdisciplinary working environment in an international research group addressing a broad range of questions in plant biology. Close interactions with the partner institutions in Chemnitz and Dresden will be a central part of the project. The position is funded for three years. For more information, please visit: <https://www.uni-leipzig.de/universitaet/arbeiten-an-der-universitaet-leipzig/stellenausschreibungen> (in German).

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 7 May 2024.