



at the Max-Planck Institute for Molecular Plant Physiology, Germany. The postdoctoral position is offered in the framework of a DFG funded research project, which aims to uncover novel aspects of membrane biogenesis in the chloroplast. The project operates at the interface between the research areas of: Biophysics, Protein Biochemistry, Lipid Signaling and Cell Biology and is hosted in the department of Organelle Biology, Biotechnology and Molecular Ecophysiology.

Background

While the molecular composition of the chloroplast endomembrane system, the thylakoids, has been widely characterized, the mechanistic framework for its bilayer deposition remains unclear. This research project aims to characterize these mechanisms on a molecular level. Of central interest is the identification of novel factors for membrane remodeling, transport and bilayer deposition with a particular emphasis on the necessary lipid transport/signaling mechanisms. As a whole, we will deploy a variety of experimental approaches ranging from molecular/biochemical techniques, confocal and electron microscopic imaging as well as mass spectrometry to characterize the molecular machineries that ultimately drive *de novo* bilayer deposition and differentiation.

What you will do

- Identification and characterization of new candidate proteins involved in thylakoid biogenesis
- Development and application of new molecular tools to study fluctuations in the composition and dynamics of chloroplast membranes
- Performing mass spectrometric analyses in close collaboration with experimental scientists
- Establish a mass spectrometric platform for chloroplast lipidome analysis
- Prepare scientific publications

What we offer

- an interdisciplinary and collaborative campus with world-class scientific institutions comprising three Max-Planck Institutes, two Fraunhofer Institutes and the University of Potsdam
- an excellent location for research in the fields of life sciences, chemistry, physics, polymer research and analytics located in the science park Potsdam
- state-of-the-art research infrastructure and an inspiring campus life with international scientists
- opportunity to participate in many interdisciplinary courses and workshops about networking, scientific writing, acquisition of research funding, mentoring programs and more
- a family friendly working environment

What we expect

- a PhD degree in biology or (bio)-chemistry, preferably with a specialization in plant cell biology, protein biochemistry and/or lipidomics
- experience in standard molecular biology, genetics and biochemistry
- good oral and writing skills in English
- scientific excellence, “can-do-attitude”, proficiency in molecular biology of organelles and a desire to succeed with the project
- good organizational skills
- previous experience in microscopy or mass spectrometry are desirable but not mandatory

Application

The position is available from September 2021.

Applications must be submitted via e-mail no later than **August 31, 2021** to: hertle@mpimp-golm.mpg.de

Please include the following documents in your application:

1. A personal letter that describes qualifications, research interests, and motivation for application,
2. CV with full publication list,
3. Copies of doctoral degree certificate and other relevant degree certificates and grades,
4. Contact information of two referees,
5. Other documents wished to be claimed.

Further information can be obtained from Dr. Alexander Hertle, hertle@mpimp-golm.mpg.de

I look forward to receiving your application!