



### **PhD position in Plant Biochemistry/Biomineralization**

The „Algal Biomineralization“ lab at the Max Planck Institute of Molecular Plant Physiology (Germany) invites applications for a PhD student position to study the formation of the mineralized scales that cover the cells of coccolithophorid algae. These cell coverings are called coccoliths and they are paradigms for complex-shaped bioCaCO<sub>3</sub>. Coccolith formation is of great importance in the context of marine ecosystem ecology and climate regulation as well as in context of bioinspired materials synthesis. The project aims for the identification of macromolecules involved in coccolith formation and at an understanding of their roles in the process.

The project includes aspects of:

- Isolation and characterization (using biochemical, spectroscopy and imaging techniques) of macromolecules (polysaccharides and proteins) involved in coccolith biogenesis
- Functional analysis of the isolated macromolecules using *in vitro* mineralization assays and state-of-the-art analytical techniques
- Identification and cloning of genes involved in coccolith biogenesis
- Genetic engineering of coccolithophorid algae

Applicants with excellent Master/Diploma degree in chemistry, biology, biotechnology or biochemistry and genuine interest in research and experimental enthusiasm are strongly encouraged to apply. Experience with molecular biology and biochemical techniques is an asset.

For further information please visit the labs website ([www.mpimp-golm.mpg.de/15419/2scheffel](http://www.mpimp-golm.mpg.de/15419/2scheffel)) or contact Dr. Scheffel.

Interested candidates should send a single PDF file including curriculum vitae, motivation letter, copies of most recent diplomas, and contact details of minimum two referees by e-mail to Dr. André Scheffel ([Scheffel@mpimp-golm.mpg.de](mailto:Scheffel@mpimp-golm.mpg.de)). The starting date is negotiable but the position is available from January 2018 for three years. Applications will be considered until the position is filled.

Potsdam, 19 October 2017