



PhD position at the University of Liège (Belgium)

Title

ReACTs: Organellar Redox Signaling in Plants (Retrograde Arabidopsis Chlamydomonas Thiol Signaling)

A 4-year PhD position is available for the project described below in the laboratory of Genetics and Physiology of Microalgae (ULiege, Belgium). The position is open from 1st January 2018.

People interested should send their CV and motivation letter to Claire Remacle, email: c.remacle@uliege.be

Project

Biological systems must respond rapidly to both external and internal stimuli to maintain homeostasis, and repair damage. Rapid responses often relies on post-translational modifications of specific proteins to effect changes in activity, function, localization, or stability of pre-existing proteins. Retrograde signals are generated in the mitochondria and chloroplasts, finally leading to changes in gene expression. To tackle retrograde signaling, the successful PhD candidate will investigate the site-specific and quantitative sulfenylation events during organellar stresses in *Chlamydomonas* using chemical probes and transgenic lines expressing sensors of redox signaling. The research is interdisciplinary and will comprise interactions with plant physiologists, and (bio)chemists for the identification/quantification of the sulfenylation sites. The target proteins will then be studied using loss of function mutants.

Environment

The PhD candidate will work in a multidisciplinary and international environment composed of 4 Belgian teams (Ghent University, Vrije University Brussel, Université catholique de Louvain, and Liege University) and one US team (Scripps Research Institute, FL).

Profile

Candidates should hold a Master degree (or equivalent) and have experience in biochemistry, microbiology, plant molecular biology, redox signaling. The candidates should be fluent in English, have good ability to work in an interdisciplinary and international environment.