Postdoctoral position offer: biogenesis of metalloproteins and metabolic engineering of algal hydrogen production

A post-doctoral position is available for a period of 2 years between two laboratories: Genetics and Physiology of Microalgae (Pr Claire Remacle, http://labos.ulg.ac.be/genetique-physiologie-microalgues/homepage/, University of Liege, Belgium) and Tree-Microbe Interactions (IAM) (Pr Nicolas Rouhier, https://mycor.nancy.inra.fr/IAM/, University of Lorraine, France). The general topic is about the metabolic engineering of algal hydrogen production. This project is part of a larger interdisciplinary consortium with Japanese (Pr Genji Kurisu) and German (Pr Thomas Happe and Dr Anja Hemschemeier, Bochum; Pr Marc Nowaczyk, Rostock) partners. It is funded by both the Japanese and European sides for three years in the frame of a joint call on “Sustainable Hydrogen Technology as Affordable and Clean Energy.”

In this project, we intend to use synthetic biology tools to achieve and optimize the production of an active hydrogenase in the green microalga Chlamydomonas reinhardtii. This project combines expertise in molecular biology, protein biochemistry for the in vitro characterization of the hydrogenase and its associated maturation factors and physiology for the analysis of the engineered strains.

For these reasons, the applicants should have expertise in biochemistry and cell biology techniques. An experience in the area of biogenesis of metallocofactors, microalgal physiology and/or synthetic biology would be an advantage. Moreover, applicants should have a high motivation, good communication skills, and the ability to work independently.

The successful candidate will share his/her time between the two laboratories and will have to interact on a regular basis with the other members of the Japanese/European consortium.

Please send your application as one file to Pr Nicolas Rouhier (nicolas.rouhier@univ-lorraine.fr) and Claire Remacle (c.remacle@uliege.be) including (i) a letter summarizing your past research experience and your motivations to work on this project, (ii) a CV comprising a publication list, and (iii) the names and contact details of at least two referees. The deadline for application is February 15, 2023. The successful candidate will start in the spring of 2023.