– PhD Studentship –

Organic Chemistry and Catalysis – Le Havre University (France)

Sustainable route to amino-polyols and iminosugars from unprotected sugars

Position: PhD studentship
Funding: RIN Label XL-Chem (50%) / Le Havre University (50%)
Salary : *ca* .1400 € net/month
Organisation : Université Le Havre Normandie
Workplace: Le Havre (France) & University College London (UK) (6 months)
Skill area: Chemistry – Organic chemistry - Catalysis
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Position: A PhD studentship is available for 36-months funded by the 'RIN Label – XL-Chem' and Normandy Le Havre University (ULHN) from September/October 2022. The successful candidate will be registered as a PhD student in Le Havre.

Ph-D project: This project focuses on the development of sustainable routes to prepare key synthons for cosmetics (amino-polyols) and medicinal chemistry (iminosugars, lactams) from sugars. Relying on preliminary results obtained in the URCOM lab, innovative sugar transformations will be designed without the need of any protecting group in contrast to common methodologies exploiting sugars.

This project is a collaboration between Le Havre University (France) and University College London (UCL, Profs. Hailes, Sheppard) at the interface of organic chemistry, catalysis and biocatalysis. The PhD candidate will spend 6 months at UCL gaining experience in enzyme expression and biocatalysis. The applicant must have or be in the process to get a Master degree (Master 2, MSc or MChem) in Chemistry or related area as well as knowledge of modern research techniques in Organic Chemistry. Basic chemical biology or biocatalytic knowledge are not expected but the willingness to learn and work on a multi-disciplinary project will be essential.

Keywords: iminosugar, aminopolyols, sugar chemistry, biocatalysis, organometallic catalysis, hybrid cascade