





National Conservatory of Arts and Crafts <u>Molecular Chemistry group, GBCM Lab</u> In collaboration with <u>Chimie ParisTech</u> and <u>PILI</u>

FULLY FUNDED 3 YEAR PHD STUDENTSHIP IN SYNTHETIC ORGANIC CHEMISTRY, CATALYSIS AND PHOTOCHEMISTRY

Ecofriendly functionalization of biobased dyes Fonctionnalisations écocompatibles de colorants biosourcés

Opportunity: Applications are invited for a fully funded 3 years PhD studentship in synthetic organic chemistry and catalysis under the supervisions of Dr. Zacharias Amara, in the team of Molecular Chemistry at the National Conservatory of Arts and Crafts (CNAM) in Paris, in collaboration with a startup company PILI and with the modelling group of i-CLeHS at Chimie ParisTech. The studentship will commence on September 2022 and is open to applications from UK/EU students without further restrictions.

Project: The central goal of this PhD project is to develop novel cost-competitive synthetic methodologies in organic chemistry that enable the functionalization of platform dyes produced by fermentation. This work is under collaboration with the French startup company PILI and will have a strong focus on the development of cost-competitive routes. Redox processes will be employed, allowing access to the diverse reactivity of anthraquinone compounds, resulting in the production of high-performance dyes and pigments for the textile industry. The focus of this project will be to develop greener, intensified functionalization strategies using recyclable catalysts and photochemical activation in continuous flow. This is a research area of great interest in academia and industry and truly represents a great opportunity for highly motivated graduate students.



Candidate: Eligible candidates should have a Master degree in organic chemistry with an experience in catalysis. First-hand experience in flow and/or photochemistry is highly desirable. A highly motivated and dedicated student will gain a thorough training in synthetic organic chemistry and be rewarded with a highly stimulating project that will shape the future of a potential industrial route for the production of bio-based dyes and beyond.

Application; Interested applicants should send a brief covering letter outlining their motivation and experience for the position, as well as their *curriculum vitae* (including Master courses grades to date) and the contact details of at least 2 academic referees to Dr. Zacharias Amara (Zacharias.amara@lecnam.net). Applications will be evaluated on an ongoing basis until the position is filled, therefore applicants should apply as soon as possible. For more information and informal inquiries, please contact Dr. Zacharias Amara with the subject heading "PhD in Synthetic Organic Chemistry".