

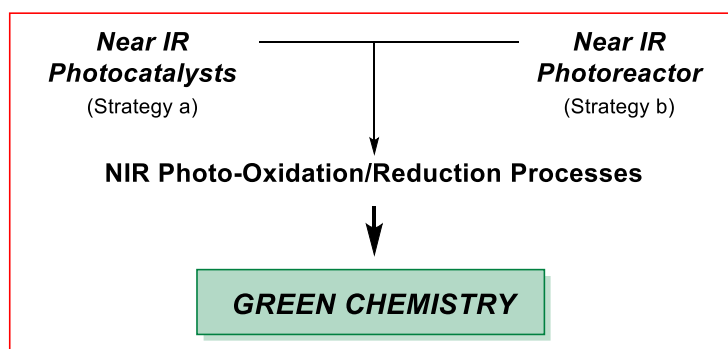
National Conservatory of Arts and Crafts
[Molecular Chemistry group, GBCM Lab](#)

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

*Ecofriendly photochemical processes using near infrared light
Développements de procédés éocompatibles dans le proche infrarouge*

Opportunity: Applications are invited for a fully funded 3 years PhD studentship in synthetic organic chemistry and (photo)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, funded by the ANR project Red2Green. The studentship will commence on september 2022 and is open to applications from UK/EU students without further restrictions.

Project: Photochemistry is booming in organic chemistry, however its industrial use remains limited. One of the major limitations of this type of transformation is the energy cost of the process. Infrared radiation is lower in energy than UV/Visible light and has therefore the ability to solve this problem. In addition, these radiations are less energetic and should offer better chemo-compatibility, which opens the way to new applications in organic chemistry, particularly in green chemistry. However, because of their very low energy, infrared radiation is particularly difficult to exploit from a synthetic point of view and the few examples described to date use complex, toxic and expensive molecular systems. This thesis will therefore focus on developing simpler and more efficient solutions for using infrared energy in synthesis such as new organic (recyclable) photocatalysts and model photochemical reactors. This is a research area of great interest in academia and industry and truly represents an 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 desirable but not mandatory. A highly motivated and dedicated student will gain a thorough training in synthetic organic chemistry and be rewarded with a highly stimulating project that take part in the advancement of photochemistry.

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 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 Photo Chemistry".