



**PhD student position available in LCMT (Caen)
Financial support of LABEX Synorg/Normandy Region**

A PhD position (starting 1st October 2020, for 36 months) is available at the LCMT (University of Caen Normandy/ENSICAEN, France). The project will be conducted by **Dr. Stéphane Perrio**, within the group of Pr. Annie-Claude Gaumont (Caen, France), in close collaboration with **Dr. Sylvain Oudeyer** and **Dr. Jean-François Brière** (Laboratory COBRA, University of Rouen Normandy, France).

The development of catalytic reaction, especially making use of new environmentally benign organocatalysts, is of current interest in sustainable chemistry. Moreover, the construction of chiral molecules remains an important current synthetic approach to provide new 3D-molecules to medicinal chemists. Accordingly, the proposed project deals with novel synthetic methodologies in organic chemistry. It aims at developing new selective organocatalytic transformations (including asymmetric versions), based on the activation of electron deficient allenes with anionic sulfur nucleophiles and by implementing unprecedented cooperative catalytic ion-pairing approaches with ammonium cations. The search for novel reactivities in organic synthesis to access chiral scaffolds will be the main purpose of this project.

For recent references of the current joint results of the partners, see:

- (1) T. Martzel, J.-F. Lohier, A.-C. Gaumont, J.-F. Brière, S. Perrio, *Adv. Synth. Catal.* **2017**, 359, 96–106.
- (2) Martzel, T.; Lohier, J.-F.; Gaumont, A.-C.; Brière, J.-F. and Perrio, S. *Adv. Synth. Catal.* **2018**, 360, 2696–2706.
- (3) Martzel, T.; Lohier, J.-F.; Gaumont, A.-C.; Brière, J.-F. and Perrio, S. *Eur. J. Org. Chem.* **2018**, 5069–5073.

Key words : organocatalysis, asymmetric synthesis, sulfur chemistry, heterocycles, allenes, ion-pairing catalysis

The applicants should have a strong background in organic synthesis, and skills in standard characterization tools (multinuclear NMR, IR and MS spectrometry). Candidates showing a real interest in synthetic methodology will also be distinctly appreciated.

For additional information, please contact:

Dr Stéphane Perrio

Phone : +33 (0)2 31 45 28 84

Mail : stephane.perrio@ensicaen.fr

Interested and qualified candidates should send their application as PDF files to Dr Stéphane Perrio to the following e-mail address stephane.perrio@ensicaen.fr:

- a detailed CV with 2 contacts for recommendations,
- a brief motivation letter (in the e-mail will be OK),
- a transcript of final marks for Master 1 (or final marks of the 2nd year of Engineer School) and, if possible, a transcript of the marks for the 1st semester of M2.

An interview is also planned in the recruitment process.

The evaluation of the candidates will start immediately.