



## Postdoctoral position in Organic Chemistry (12 months)

Starting September-November 2017

Institut de Chimie Organique et Analytique - UMR 7311 CNRS, Orléans, FRANCE.

### *Enamide/onium salts: Highly Efficient Electron Donor Acceptor Complexes for Mild Generation of Synthetically Useful Radicals*

#### Location:

Orléans ICOA <http://www.icoa.fr/en>

Caen LCMT <https://www.lcmt.ensicaen.fr/>

#### Position:

12 months post-doctoral contract

Start period: October-December 2017 (Labex Synorg grant)

Salary: 2031 à 2356 €/month (depending on the applicant's experience)

**Project leaders:** Professor Isabelle Gillaizeau (<http://www.icoa.fr/en/gillaizeau>) and Dr. Sami Lakhdar (<https://www.lcmt.ensicaen.fr/groupe-annie-claude-gaumont/>)

#### Proposal:

This project aims at exploring the electron donating ability of enamides for the generation of synthetically useful radicals through the formation of electron donor acceptor complexes (EDA) with onium salts. This methodology, which has recently been developed by the Caen team (S. Lakhdar & AC Gaumont), will allow functionalization of enamides (I. Gillaizeau) under mild reaction conditions. Synthetic and mechanistic aspects of this mode of activation will be explored to gain information about factors controlling this reaction type.

#### References:

1. a) N. Gigant, L. Chausset-Boissarie, I. Gillaizeau, *Chem. Eur. J.* 2014, 20, 7548. b) G. Caillot, J. Dufour, M.-C. Belhomme, T. Poisson, L. Grimaud, X. Pannecoucke, I. Gillaizeau, *Chem. Commun.* 2014, 50, 5887. c) R. Rey-Rodriguez, P. Retailleau, P. Bonnet, I. Gillaizeau, *Chem. Eur. J.* 2015, 21, 3572.
2. a) L. Noël-Duchesneau, E. Lagadic, F. Morlet-Savary, J-F. Lohier, I. Chataigner, M. Breugst, J. Lalevée, A-C. Gaumont, S. Lakhdar, *Org. Lett.* 2016, 18, 5900–5903. b) V. Quint, F. Morlet-Savary, J-F. Lohier, J. Lalevée, A-C. Gaumont, S. Lakhdar, *J. Am. Chem. Soc.* 2016, 138, 7436–7441. c) For a recent review, see : V. Quint, L. Noël-Duchesneau, E. Lagadic, F. Morlet-Savary, J. Lalevée, A-C. Gaumont, S. Lakhdar, *Synthesis*, 2017, 49, 3444–3452.

#### Candidate:

**Education:** PhD in organic chemistry.

**Profile:** The recruited person will have to synthesize organic substrates, characterize the reaction products with standard techniques (including IR, UV-Vis, multinuclear NMR, GC and MS spectroscopies). A strong background in synthetic organic chemistry is therefore indispensable. Knowledge of physical organic chemistry is a plus, but is not mandatory.

#### Application:

Send your CV and a motivation letter by email to: [Isabelle.gillaizeau@univ-orleans.fr](mailto:Isabelle.gillaizeau@univ-orleans.fr) and [sami.lakhdar@ensicaen.fr](mailto:sami.lakhdar@ensicaen.fr)