



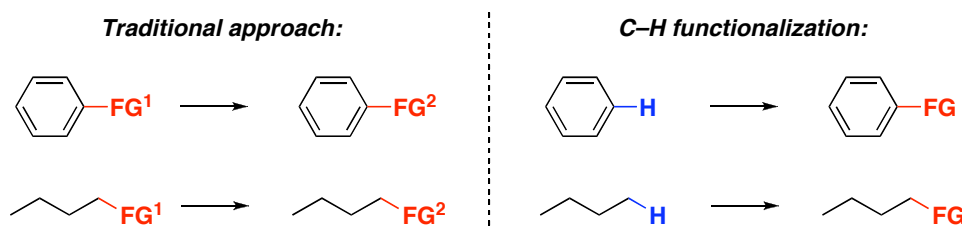
CERC3 YOUNG CHEMISTS' WORKSHOPS

Catalytic C–H functionalization of organic molecules

Organizer : Prof. Olivier Baudoin (ICBMS, University of Lyon, France)

Date and place of the workshop: Saint Germain au Mont d'or (France), April 5-8, 2009

The traditional approach used by organic chemists to functionalize a molecule consists of transforming a preexisting functional group to obtain the desired chemical function (see scheme). However, since unactivated sp^2 and sp^3 C–H bonds are often the most abundant bond types in organic molecules, it is easy to conceive that the direct functionalization of these bonds would constitute a faster and more “atom-economical” synthetic approach.



Despite intrinsic reactivity and selectivity issues, the field of C–H bond functionalization of organic molecules has grown exponentially in the past decade, thanks in particular to the development of homogeneous catalysis. It seems reasonable to predict that it will have a strong impact in organic chemistry, providing chemists of both academic and industrial worlds with new synthetic tools that will allow them to access molecules with original structures and innovative properties in a more simple, efficient and ecological manner.

The majority of research efforts in this field is concentrated in North America and Japan, therefore there is a clear need to support the emergence of a European network. This Young Chemists's Workshop would contribute to this support and would help initiating collaborations between the European participants.

Possible topics included in this workshop:

- Transition metal-catalyzed C–H functionalization by inner-sphere or outer-sphere mechanisms
- Applications in multi-step synthesis and medicinal chemistry
- Mechanistic studies by computational chemistry

Confirmed invited speaker: Prof. Keith Fagnou, University of Ottawa, Canada.

List of possible European participants:

- *Belgium:* Bert Maes, University of Antwerp.
- *Czech Republic:* Michal Hocek, Academy of Sciences Prague.
- *France:* Philippe Dauban, ICSN Gif-sur-Yvette; Sylvain Darses, ENSC Paris.
- *Germany:* Lutz Ackermann, University of Göttingen.
- *Italy:* Elena Motti, University of Parma; Fabio Bellina, University of Pisa.
- *Spain:* Feliu Maseras, ICIQ Tarragona.
- *United Kingdom:* Matthew Gaunt, University of Cambridge; Michael Greaney, University of Edinburgh.

Organizer: Prof. Olivier Baudoin

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