

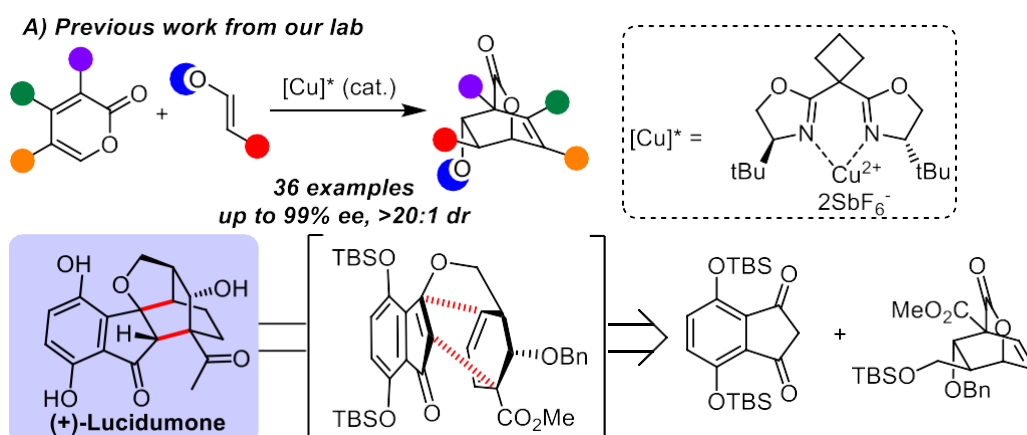


## PhD position

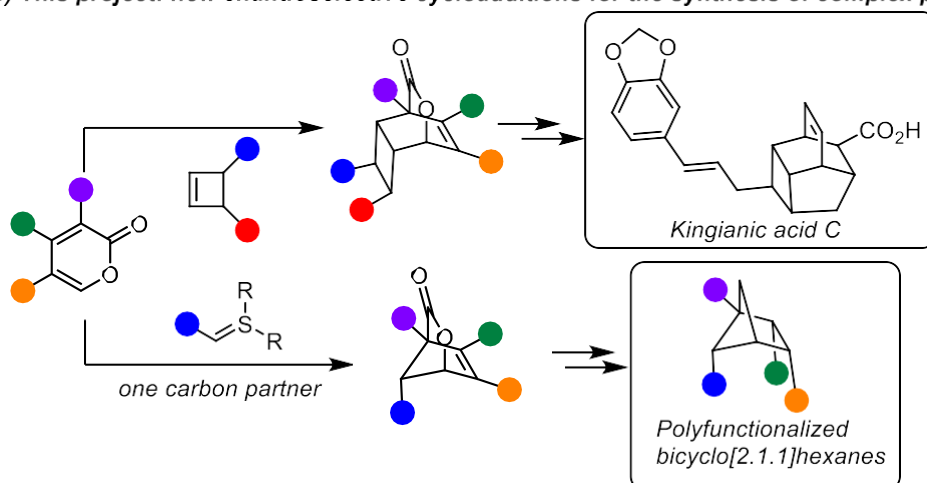
### The project

Cycloadditions are key reactions for the construction of complex molecular structures. 2-pyrones are known to be good partners for [4+2] cycloadditions, more specifically inverse-electron-demand Diels-Alder (IEDDA) reactions.<sup>1</sup> We have recently developed a new method for enantioselective IEDDA reactions involving 2-pyrones and acyclic enol ethers.<sup>2</sup> This method has been applied to the total synthesis of lucidumone.<sup>3</sup>

In this project, we will explore new partners to develop novel cycloaddition reactions involving 2-pyrones. We will also explore the functionalization of cycloadducts resulting from these new transformations to access complex polycyclic structures of interest.



**B) This project: new enantioselective cycloadditions for the synthesis of complex polycyclic structures**



<sup>1</sup> Huang, G.; Kouklovsky, C.; de la Torre, A. *Chem. Eur. J.* **2021**, *27*, 4760–4788.

<sup>2</sup> Huang, G.; Guillot, R.; Kouklovsky, C.; Maryasin, B.; de la Torre, A. *Angew. Chem. Int. Ed.* **2022**, e202208185.

<sup>3</sup> Huang, G.; Kouklovsky, C.; de la Torre, A. *J. Am. Chem. Soc.* **2022**, *144*, 17803–17807.

## The position

PhD position at the Institut de Chimie Moléculaire et des Matériaux d'Orsay (ICMMO) starting in October 2026 (starting date is flexible). The student will join the group of Dr. Aurélien de la Torre (<https://www.icmmo.universite-paris-saclay.fr/fr/perso/aurelien-de-la-torre/>).

The position is fully funded by an ERC grant. The salary will be fixed according to the CNRS salary grids.

## Candidate profile

M. Sc. (or equivalent) in organic chemistry.

Strong motivation for organic synthesis. The candidate must have experience in organic synthesis and/or enantioselective catalysis through internships.

The candidate must be fluent in English.

## How to apply

Send a CV, research summary, cover letter, transcript of grades (B. Sc. and M. Sc.) and contact information for at least 2 references to [aurelien.de-la-torre@universite-paris-saclay.fr](mailto:aurelien.de-la-torre@universite-paris-saclay.fr) and [aurelien.de-la-torre@cns.fr](mailto:aurelien.de-la-torre@cns.fr) **before April 5<sup>th</sup> 2026**.