



Asymmetric Palladium-Catalyzed Cycloadditions of Zwitterionic Dipoles

– Master 2 Internship 2023 –

Funding: ANR CYCADA project

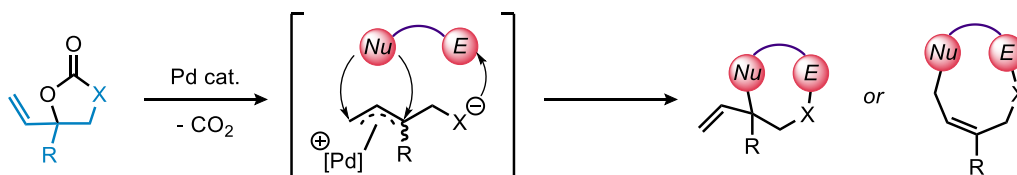
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Keywords: Organometallic catalysis, Asymmetric Catalysis, Nitrogen Heterocycles

Due to their ability to engage in both hydrogen-bond donation and acceptance, nitrogen-containing heterocycles display better interactions with biological targets and therefore are prone to be effective pharmacological agents.¹ In our research group, we focus on the development of original transformations relying on cycloaddition strategies towards the rapid construction of azacycles² and recently turned our attention on palladium-catalyzed cycloadditions involving zwitterionic π -allylpalladium(II) intermediates.³



We are currently pursuing our endeavours towards the development of original transition-metal catalyzed cycloadditions involving pi-allylpalladium zwitterionic intermediates and are looking for a motivated M2 student to tackle an asymmetric catalysis project using chiral metal ligands. The project will also focus on the development of new precursors and original dual catalysis strategies.

The applicant must have a strong background in the field of organic chemistry and knowledge of good laboratory practice. This project has been funded by ANR (CYCADA Project) in collaboration with Pr. Xavier Moreau (ILV - Versailles). Funding will be available in each lab for a M2 internship and for a PhD starting in Fall 2023. To apply, please send an email with a resume, a motivation letter and academic records (L3, M1).



¹ Njardarson *et al.* *J. Chem. Ed.* **2010**, *87*, 1348.

² Scuiller, A.; Karnat, A.; Casaretto, N.; Archambeau, A. *Org. Lett.* **2021**, *23*, 2332-2336. b) Scuiller, A.; Liu, X.; Cordier, M.; Garrec, J. *Synlett* **2021**, *32*, 981-986.

³ For a recent review, see: Niu, B.; Wei, Y.; Shi, M. *Org. Chem. Front.* **2021**, *8*, 3475-3501.