





Postdoctoral Research Fellow - Rennes (24 months)

Organic synthesis – Organometallic catalysis

Supervisors: Yann Trolez and Marc Mauduit Laboratory: Institut des Sciences Chimiques de Rennes (CNRS), France Institution: École Nationale Supérieure de Chimie de Rennes, France

Although several methods have been developed to access 1,3,5-triynes in the past, their syntheses in high yields still remain a challenge. In 2020, we showed it was possible to synthesize this kind of compounds by alkyne metathesis.¹ Since then, we set up a collaboration with the group of Matthias Tamm (Braunschweig, Germany) in order to increase the efficiency and the scope of this reaction. Some promising results have recently been published (scheme 1).²



Scheme 1. Synthesis of 1,3,5-triynes by alkyne metathesis.

The aim of this project is to use alkyne metathesis to synthesize 1,3,5-triynes that will be transformed into valuable products afterwards. The consortium of this project includes the groups of **Matthias Tamm** (Braunschweig, Germany) and **Rik Tykwinski** (Edmonton, Canada).

Profile of the candidate: He/she will be in charge of the synthesis and the characterization of the 1,3diynes substrates as well as their reaction in alkyne metathesis. He/she will be motivated by **organic synthesis** and **organometallic catalysis**. A background in both these fields will be greatly appreciated. Reporting about the development of the project will be regularly asked to the two supervisors as well as to the collaborators in the frame of this project. *The funding requires that the candidate <u>should</u> <u>have spent at least 18 months outside France between May 2020 and the beginning of the project</u>.*

Starting date: Beginning of 2024

Funding: ANR – Brittany Region (monthly gross salary: approx. 2700 €).

Interested? Please send your CV (including the email address of two persons who would be able to support your application) as well as a motivation letter to Yann Trolez (<u>yann.trolez@ensc-rennes.fr</u>) **and** Marc Mauduit (<u>marc.mauduit@ensc-rennes.fr</u>).

End of the applications: 24th of November 2023

¹ I. Curbet, S. Colombel-Rouen, R. Manguin, A. Clermont, A. Quelhas, D. S. Müller, T. Roisnel, O. Baslé, Y. Trolez, M. Mauduit, *Chem. Sci.* **2020**, *11*, 4934

² M. L. Zier, S. Colombel-Rouen, H. Ehrhorn, D. Bockfeld, Y. Trolez, M. Mauduit, M. Tamm, *Organometallics* **2021**, *40*, 2008