

## **Séminaire**

## Mardi 11 mars 2025 à 10h30 Amphithéâtre Henri Benoît

## **Mathieu Pucheault**

ISM - UMR 5255 - Bordeaux et Synboli

## Boron-nitrogen compounds and polymers

Organoaminoboranes are essential compounds in modern chemistry, serving as versatile building blocks with remarkable reactivity. Their significance lies in their ability to facilitate innovative synthetic routes, promote diverse reactions, and contribute to the development of novel materials. This conference will highlight the crucial role of organoaminoboranes in the chemist's toolbox, emphasizing their application in radical polymerization using amine-borane complexes. We will explore how these complexes act as radical initiators, enabling precise control over polymer structures and properties. Additionally, the polymerization of siloxane via photoreleased boron derivatives will be discussed, showcasing the potential of light-induced boron chemistry to achieve well-defined polymer architectures. Finally, the conference will provide a brief introduction to the integration of artificial intelligence in polymer chemistry, illustrating how Al-driven strategies can accelerate material design, optimize synthetic pathways, and enhance predictive capabilities.

Les personnes souhaitant rencontrer M. Pucheault sont priées de prendre contact avec Emilie Moulin.







