Cédric Schneider

Maître de Conférences IUT de Rouen
COBRA – UMR 6014, Hétérocycles team
☎ (+33) 02 35 52 29 00
✉ cedric.schneider@univ-rouen.fr
https://www.lab-cobra.fr/annuaire/schneider-cedric/
https://orcid.org/0000-0002-5128-5646

Thomas Boddaert

Maître de Conférences Université Paris-Saclay
ICMMO - UMR 8182, CP³A group
☎ (+33) 1 69 15 32 37
✉ thomas.boddaert@universite-paris-saclay.fr
https://www.icmmo.u-psud.fr/fr/perso/thomas-boddaert/
https://orcid.org/0000-0002-3939-4700

Postdoctoral Position in Organic Synthesis (18 – 24 months)

Last-stage Pd-catalyzed C(sp^3)−H functionalization of β-peptidic foldamers

Work place: *ICMMO, Université Paris-Saclay; CP^{3}A group*.

(*Short periods in Rouen (C*OBRA Laboratory, University of Rouen-Normandie*) will be also required during the program*).

Expected starting date: October 2023 – January 2024

Contract Period: 18 – 24 months

Gross Salary: 2700 – 3000 € / month

Funding: ANR program

Scientific Supervisors: Dr. Thomas Boddaert & Dr. Cédric Schneider

Keywords: Cyclic β-amino acid, C−H Activation, Foldamer Science

In the area of foldamer Science, cyclic β-amino acid derivatives are building blocks particularly attractive as monomer units for the preparation of peptidomimetic architectures due to their resistance to proteolysis and displaying structural mimicry. In parallel, directed Pd-catalyzed functionalization inactivated C(sp^3)−H bonds of amino acid has emerged as a practical, powerful, and atom- and step economical tool in order to extend the range of non-proteinogenic AAs available. In this domain, recent innovations within transition-metal-catalyzed C−H bond functionalization have met the challenge of late stage functionalization of complex molecules (such as oligosaccharide substrates, peptide, natural product). In this project, the emphasis will be on examples where β-amino acid units in oligopeptides are selectively functionalized via late stage regio- and stereoselective Pd-catalyzed C(sp^3)−H functionalization. Finally, designed targeted foldamer architectures will be subsequently functionalized for the synthesis of peptidomimetics, which will participate in future innovations in the field of foldamer-based drug molecules.

The candidate could participate in the teaching of organic chemistry at undergraduate level (in French)

- **Candidate profile:**
  - PhD in organic chemistry (Synthetic methodology, Organometallic of Peptide chemistry)
  - Strong skills (theoretical & experimental) in Organic Chemistry
  - Knowledge in Foldamer Sciences would be a significant advantage
  - Strong communication & leadership skills
  - Motivated, curious, autonomous

- **Application procedure:** *(the review of applications will continue until the position is filled)*
  - Cover letter
  - Detailed Curriculum Vitae
  - Short research summary
  - Contact detail of 2 references able to provide recommendation letters

Please send all documents to: Thomas Boddaert (thomas.boddaert@universite-paris-saclay.fr) and Cédric Schneider (cedric.schneider@univ-rouen.fr)