

## PhD Position in Chemistry:

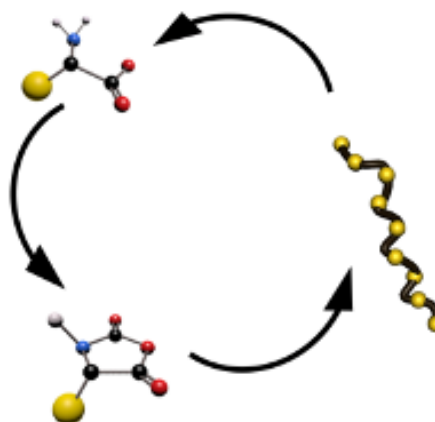
### Prebiotic polymers towards the origin of Life

(<https://emploi.cnrs.fr/Offres/Doctorant/UMR5629-COLBON-007/Default.aspx?lang=EN>)

Bordeaux, France (starting October 1<sup>st</sup>)

#### Project description:

Efficiently forming peptide bonds in aqueous media is still a challenge whereas in living organism, protein translation is a highly efficient process. To tackle this challenge, this PhD project aims at developing new approaches at the frontier of prebiotic chemistry, peptide synthesis and green catalysis. The PhD project will establish new route towards aqueous polypeptide formation by implementing a methodology drawing on prebiotic precursors of proteins, the *N*-carboxyanhydrides. The PhD project will explore new hypotheses in the chemical origin of Life showing that polymer chemistry can be used to design systems chemistry processes. This original combination will enable green access to bioinspired polymers with biomimetic properties (self-sorting, dynamic recycling, etc.).



**Location:** The PhD candidate will work in two places: the team “Polymer self-assembly and life sciences” of the LCPO (Laboratory of Organic Polymer Chemistry, <https://www.lcpo.fr/>) in Pessac, France, under the supervision of Colin BONDUELLE (<https://www.lcpo.fr/people/faculties/colin-bonduelle>) and the “BioPhysicalChemistry” team of the CRPP (Centre de Recherche Paul Pascal, <https://www.crpp.cnrs.fr/>) in Pessac, France, under the supervision of Nicolas MARTIN (<https://www.crpp.cnrs.fr/nicolas-martin/>).

**Candidate profile:** The candidate recruited for this project will have a solid background in organic chemistry. Skills in polymer chemistry or peptide chemistry would be appreciated.

**Starting date:** October 2025 (3 years)

**Allowance:** 2200 euros gross/month (PhD fellowship from ANR)

**Application:** Interested applicants should send a **Cover Letter** and a **detailed resume** (CV) to Colin BONDUELLE ([colin.bonduelle@enscbp.fr](mailto:colin.bonduelle@enscbp.fr)) and Nicolas MARTIN ([nicolas.martin@crpp.cnrs.fr](mailto:nicolas.martin@crpp.cnrs.fr)).

**References:** a) C. Bonduelle *et al.*, *Angew. Chem. Int. Ed.* **2020**, 59, 2, 622-626 ; b) C. Bonduelle *et al.*, *Angew. Chem. Int. Ed.* **2022**, 61, e202209530 ; c) C. Bonduelle *et al.*, *ChemPlusChem* **2024**, e202300492 ; d) N. Martin *et al.*, *Small Methods*, **2023**, 7, 12, 2300496 ; e) N. Martin *et al.*, *Nat. Commun.*, **2023**, 14, 2606.