

# **Postdoctoral Fellowships**

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#### **CALL FOR APPLICATIONS 2025 – FELLOWS**

**Supervisor** Matthieu Raynal

Supervisor page https://ipcm.fr/en/en-research/en-presentation-ecp-group/en-ecp-group-

members/en-matthieu-raynal/

Host Institution Sorbonne Université

https://www.sorbonne-universite.fr/en

Research Lab Paris Institute of Molecular Chemistry

https://ipcm.fr/en/en-the-institute/

Research Team Polymer Chemistry

https://ipcm.fr/en/en-research/en-presentation-ecp-group/

### **Project Title**

Unlocking the potential of circularly-polarized light in asymmetric catalysis

### **Project Description**

Circularly-polarized light (CPL) constitutes a cheap and easy-to-handle source of chirality. However, the chiral bias generated by CPL is too small to enable implementation in asymmetric synthesis. The main objective of CPL-Cat is to develop specifically-designed supramolecular helical catalysts that will be optimized in order to reach good activity and selectivity value (≥ 70% ee) in various catalytic reactions thus revealing CPL as a new source of chirality for asymmetric catalysis.

## Keywords

supramolecular chemistry, organic chemistry, homogeneous catalysis

### **Description of the Host Research Lab**

The IPCM (Institut Parisien de Chimie Moléculaire/Parisian Institute for Molecular Chemistry) is a joint research unit between Sorbonne Université and CNRS (Centre National de la Recherche Scientifique). The expertise in molecular chemistry in the broadest sense, the great diversity of the teams and the laboratory's high-performance technical platforms lead to research ranging from the structuring of matter on a molecular scale to materials, involving know-how in inorganic and organic chemistry, polymer science, nanoscience, and even the interfaces with biology. The scientific results of the IPCM, in relation to the major societal challenges, have an impact on fields ranging from health, the environment and new energies to information technologies.