

Postdoctoral Fellowships

Marie Skłodowska-Curie Actions Developing talents, advancing research



CALL FOR APPLICATIONS 2025 – FELLOWS

Supervisor Alexandre Pradal

Supervisor page <a href="https://ipcm.fr/recherche/presentation-equipe-casch/composition-equipe-

casch/alexandre-pradal/

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 Catalysis and Sustainable Chemistry

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

Project Title

Total synthesis of cannabidiol

Project Description

Cannabidiol (CBD) is a natural molecule found in the Cannabis sativa hemp species. It has been approved by the EMA in 2020 as an anticonvulsant in the Dravet and Lennox-Gastaut syndromes. This natural molecule got huge attention with a market size reaching \$6.4 bn in 2022. With our interest in the valorization of terpenes and terpenoids as waste material from the food industry, we wish to develop a more sustainable total synthesis of CBD from carvone or limonene using C-H activation reactions.

Keywords

total synthesis, cannabidiol, 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.