

Breakthrough Concepts for C-C and C-Heteroatom Bond Formation to Support the Relocation of Pharmaceutical Production to Europe

Postdoctoral Position – University of Montpellier (France)

12-month contract, starting January 2026

Context

This project is part of the broader European effort to relocate pharmaceutical production by developing sustainable and economically competitive manufacturing processes. More specifically, it focuses on the synthesis of active pharmaceutical ingredients (APIs) using innovative methods that are low-toxicity, low-pollution, and cost-effective.

Main mission

The goal of the project is to develop new methods for the arylation of various nucleophiles using low-cost, low-toxicity catalysts. Once proof of concept has been established, the targeted APIs from a wide range of therapeutic areas will be synthesized.

Activities

Typical research work in organic and organometallic synthesis, including:

- Synthesis and characterization of organic and organometallic compounds.
- Reactivity and kinetic studies.
- Implementation of organometallic or organic catalysts.
- Product separation and purification.
- Structural and analytical characterization.

Skills & Expertise

Organic synthesis
Organometallic chemistry
Homogeneous catalysis
Enantioselective synthesis
Organocatalysis

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