

**Type d'offre :** Laboratory offer

**Post date :** 24.10.24

**CEA Paris-Saclay**

# **Master 2 internship - High-throughput technologies for the carboxylation of new chemical structures**

## **Informations générales**

**Contract type :** Stage

**Contact :**

[Emmanuel Nicolas/Eugénie Romero-Laboureur](#)

**Starting date :** Sun 01/12/2024 - 12:00

**Trade :** Technicien

**Topic :** Représentation données et connaissances

## CEA Paris-Saclay :

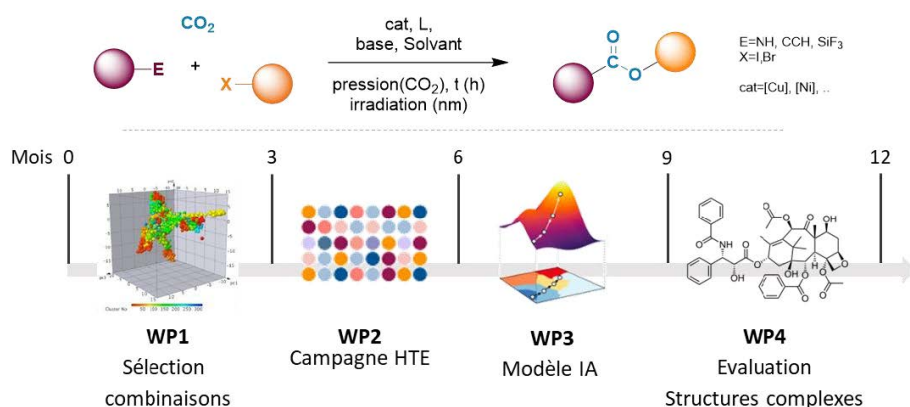
### CEA Paris-Saclay, a major center for scientific research and innovation

At the heart of the Université Paris-Saclay, CEA Paris-Saclay is one of Europe's largest scientific research centers, with over 7,000 people working on themes of major societal importance: low-carbon energies, climate and environment, exploration of matter, health and new technologies.

### Détail de l'offre (poste, mission, profil) :

The development of new synthetic methods for chemical compounds traditionally relies on series of trial and errors. Recently, high-throughput methods, have been introduced in the chemist toolbox, thus transforming the discovery and optimization of reactions, through their miniaturization and parallelization, saving considerable resources and time. This enables to generate results by plates of 96 reactions at a time, in a very reliable manner, enabling a thorough exploration of the many possible conditions.

To go one step further, we wish to couple such data generation with AI techniques, in order to create a model that will enable the discovery of new reaction conditions (catalytic system, temperature, pressure, additives, etc.) for several reactions. The HTE platform at SCBM will allow the generation of data to train a model, that will be evaluated.



During this internship, the candidate will gain knowledge in applied AI techniques, and work closely with chemists to develop a model for real life applications. Multiple

profiles can be considered: from data scientist to computational chemist.

*Stipend for a M2 intern: 1400 € gross.*

**Lien vers l'offre sur le site dataia.eu :**<https://da-cor-dev.peppercube.org/node/1145>