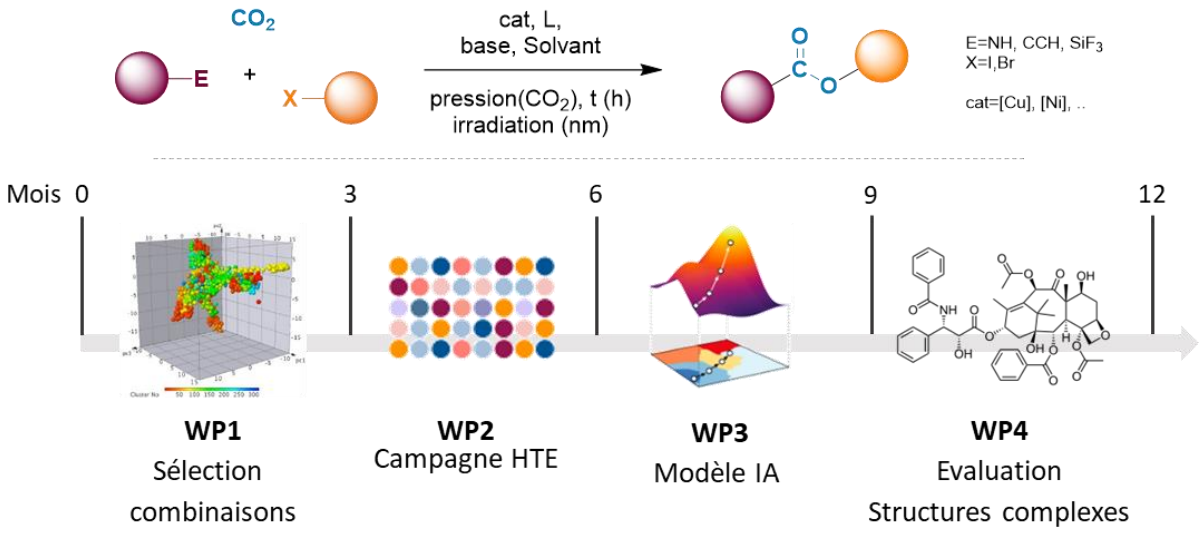
MASTER 2 INTERNSHIP - 2025
University Paris-Saclay / CEA

HIGH-THROUGHPUT TECHNOLOGIES FOR THE CARBOXYLATION OF NEW CHEMICAL STRUCTURES

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.

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