PhD student position in **Heavy Main Group Elements Chemistry for Catalysis**

Location: Laboratoire de Chimie Moléculaire et Thio-organique LCMT, Université Caen Normandie, France

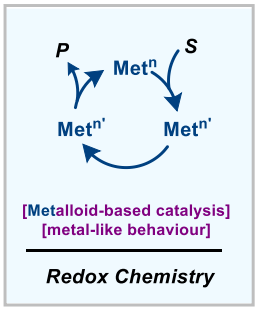
Supervisor: Dr. Robin Weiss

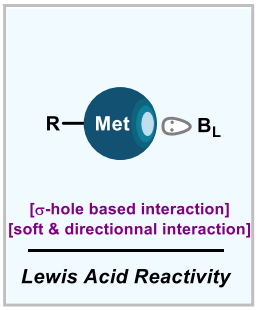
Robin Weiss' group is looking for a highly motivated and enthusiastic candidates that are willing to pursue a fully-funded PhD program (3 years) on the **Development of new organometalloid species for organic synthesis and catalysis based on redox and Lewis acid type chemistry.**

Our group: Our research group, located in the LCMT at Université Caen Normandie, is striving to exploit heavy main group elements (*p*-block) chemistry as a versatile platform for organic synthesis and asymmetric homogeneous catalysis. For this purpose, ability to establish "unconventional" supramolecular interactions based on σ-hole and metalloid metal-like behaviour are harnessed for developing new complementary tools in organic chemistry and unlocking new reactivities. This research project is framed in the project **HeavyPCat** (**Heavy** Main Grou**p** Elements Chemistry for **Cat**alysis), funded by Agence Nationale de Recherche (ANR) and Région Normandie, which aims to enable both unprecedented reactivity modes in heavy main group elements redox catalysis and new asymmetric catalysis methodologies based on supramolecular interactions.

Requirements: Candidates in possession of a (or soon completed) MSc degree are eligible. Skills and interests in organic chemistry, homogenous catalysis, and organometallic chemistry are demanded. In addition, solid experience in reaction optimization and development, inert atmosphere techniques and chemical characterization (XRD, NMR, FT-IR, MS) would be valuable. Dynamism, rigour, independence and good communicating skills in English (spoken and written) are required. French language is a plus, but not mandatory.

Position description: The selected student will conduct research in a well-equipped academic environment under the supervision of Dr. Robin Weiss. The project is at interface with organic chemistry, organometallic chemistry, homogeneous catalysis, and to a lesser extent physical-chemistry. The PhD student will develop experimental work in a synthetic laboratory, involving: the rational design of organometalloid species, mechanistic studies supported by different techniques, preparation and characterization of organic substrates and products, complexes and ligands, development of catalytic methodologies to be applied in organic synthesis and exploring the scope of new discovered reactions.






LCMT research laboratory building at the University Caen Normandie

Interested? The position will be opened until **05th May** or until a selected candidate is found, **starting September 2024 at the earliest**. For applying, an email should be addressed to weiss@unicaen.fr with "**PhD_HeavyPCat_2024**" as the subject, and attached with a single PDF file including: *i)* a detailed CV, *ii)* academic transcripts, *iii)* a short motivation letter, *iv)* the contact of 1/2 references. Successful candidates will be invited to an online interview.