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Title: “Development of new access to fluorinated alkenes by catalysis, mechanochemistry and/or photochemistry”. **Position:** Full Doctorate

Keywords: Organofluorine Chemistry; Catalysis; Asymmetric Synthesis; Mechanochemistry; Photochemistry

Organofluorine chemistry is an area in tremendous expansion and the market of organofluorine fine chemicals still keeps growing up every year. Fluorinated molecules have applications in almost all areas of science (medicinal chemistry, agrochemistry...). Of particular relevance is the emergence of fluorinated alkenes, versatile compounds that have found many applications as, for examples, peptidomimetics, drugs and materials. Despite interesting application in biological/structural study or in medicine, the synthesis of these fluorinated alkenes is however still very challenging and classical methods for their preparation suffer from major limitations, which clearly disallow their full development. There is therefore a strong need for new processes that would tackle this major challenge in chemical synthesis. In this proposal, we aim at developing new relevant pathways towards fluorinated alkenes via catalysis, metathesis, photocatalysis or mechanochemistry. These novel methodologies will allow the development of new fine fluoroalkene chemicals which could have many applications such as fluoroanalogues of biorelevant molecules. To support this research program we are looking for an outstanding and highly motivated candidate to pursue his PhD within our group.

Requirement for the position: a Master degree in organic chemistry

URL: <http://www.lab-cobra.fr/?equipe=synthese-de-biomolecules-fluorees>

Laboratory: UMR 6064 CNRS- CARMEN Institute, Université et INSA Rouen Normandie
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