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Ph.D. Thesis Offer

Title: “New electrochemical transformations to synthesize organoboron species and mechanism understanding”

Position: Full Doctorate (number of position available: 1)

Keyword: Organoboron Chemistry; Synthetic methodology; Electrochemistry; Reaction Mechanism

Nowadays, the quest for new methodologies and reagents to efficiently synthesize valuable boron- and silicon containing building block is very important and very appealing for scientists. In addition, the understanding of these transformations is still important to push the contemporary boundaries of knowledge.

Besides, electrochemistry, although known for years is a powerful tool to develop new transformations, impossible so far. Thanks to the newly developed commercially available set-up, which are worldwide supplied, electrochemistry is in its renewal.

Aiming at taking benefit from our home expertise and willing to push beyond the boundaries of knowledge in organoboron chemistry, we intend to develop new electrochemical transformations to develop more efficient transformations in terms of yield and environmental footprint. The addition of boryl radical, a species which has been largely ignored for decades, on cyclic, aromatic, and original scaffold will be achieved. A strong emphasis will be devoted to the fundamental understanding of the reaction mechanisms to share with the whole community these new insights.

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 chemistry.

Laboratory: INSA Rouen, UMR 6014, C.O.B.R.A.

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

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