

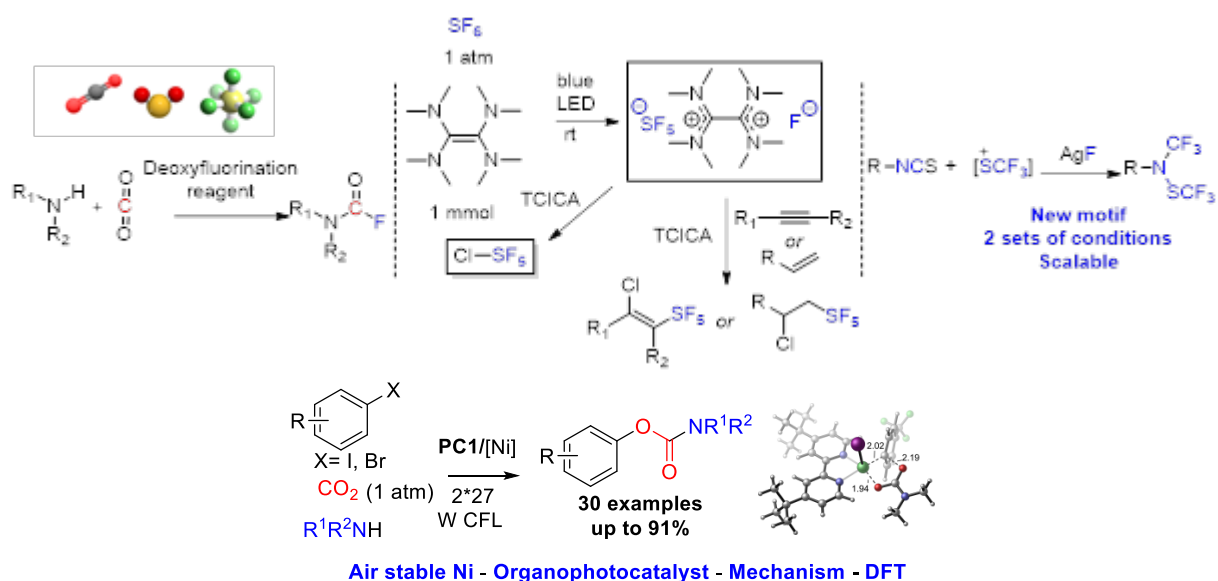
# Catalyzed and non-Catalyzed Strategies for the Synthesis of Emerging Fluorinated Motifs and Valorisation of Greenhouse Gases

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Our group is focusing on the developments of new methodologies or catalysts for the activation and valorisation of small molecules.<sup>[1]</sup> In this context, the lecture will be dedicated to show the recent advances made in our laboratory. A new concept to access fluorinated compounds using CO<sub>2</sub> as a C1 source and deoxyfluorination reagents.<sup>[2]</sup> Afterwards, the activation of the most greenhouse gas will be presented. Herein, a new reagent was designed able to perform deoxyfluorination reactions as well as C-SF<sub>5</sub> bond formation.<sup>[3]</sup> Moreover, the development of new methodologies to access unprecedented N(SCF<sub>3</sub>)CF<sub>3</sub> motif and their subsequent uses will be also presented.<sup>[4]</sup> Finally, the last part of the talk will be dedicated to the development of new carboxylative cross coupling process under transition metal catalysis/photocatalysis.<sup>[5]</sup>



Scheme 1.

## References

- [1] For selected contribution from our group please see: *Angew. Chem. Int. Ed.* **2018**, *57*, 11781 ; *Angew. Chem. Int. Ed.* **2020**, *59*, 18948; *ACS Catal.* **2023**, *13*, 12553
- [2] *Angew. Chem. Int. Ed.* **2019**, *58*, 12545.
- [3] *Angew. Chem. Int. Ed.* **2022**, *61*, e202204623
- [4] *Chem. Sci.* **2023**, *14*, 3893.
- [5] *Chem. Eur. J.* **2023**, *29*, e202301271