



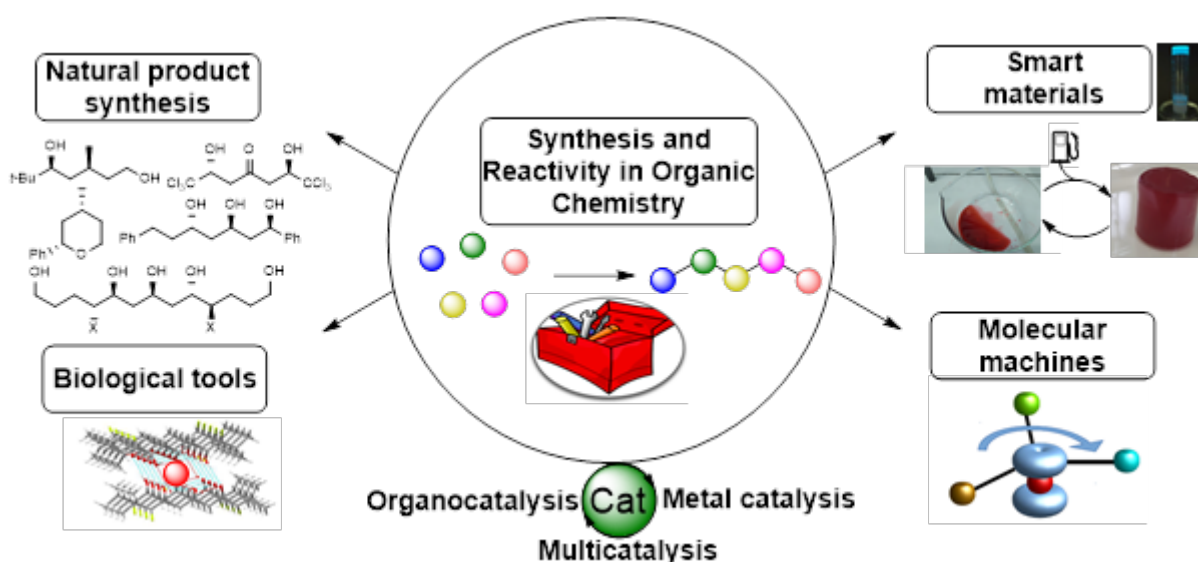
## From greener synthetic methodologies to chemically fueled supramolecular systems

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The presentation will highlight our recent success in the development of multi-catalytic transformations.<sup>1,2</sup> Based on the combinations between inexpensive iron or copper complexes with organocatalysts, they enable the rapid preparation of a broad range of molecules of interest. This was demonstrated in the context of natural products synthesis but also recently in the elaboration of new type of supramolecular objects.<sup>3</sup> Finally, transposition of the catalytic principles recently found implication in the design of smart materials or molecular machines.<sup>4</sup>



### References

1. For selected examples, see : a) A. Quintard, T. Constantieux, J. Rodriguez, *Angew. Chem. Int. Ed.* **2013**, *52*, 12883 ; b) A. Quintard, J. Rodriguez, *Chem. Commun.* **2015**, *51*, 9523; c) M. Roudier, T. Constantieux, A. Quintard, J. Rodriguez, *ACS Catal.* **2016**, *6*, 5236 ; d) A. Quintard, J. Rodriguez, *ACS Catal.* **2017**, *7*, 5513 ; e) N. Shao, J. Rodriguez, A. Quintard, *Org. Lett.* **2022**, *24*, 6537.
2. For recent personal accounts-reviews, see: a) A. Quintard, *Chem. Rec.* **2021**, *21*, 3382; b) A. Quintard, *Chem. Eur. J.* **2021**, *27*, 89; c) A. Quintard, *Isr. J. Chem.* **2021**, *61*, 278.
3. See for example: a) A. Quintard, C. Sperandio, J. Rodriguez, *Org. Lett.* **2018**, *20*, 5274; b) C. Sperandio, G. Quintard, J.-V. Naubron, M. Giorgi, M. Yemloul, J.-L. Parrain, J. Rodriguez, A. Quintard, *Chem. Eur. J.* **2019**, *25*, 15098; c) C. Sperandio, J. Rodriguez, A. Quintard, *Chemical Science.* **2020**, *11*, 1629; d) C. Sperandio, J. Rodriguez, A. Quintard, *Eur. J. Org. Chem.* **2020**, 2493.
4. a) E. Olivieri, N. Shao, R. Rosas, J.-V. Naubron, A. Quintard, *Angew. Chem. Int. Ed.* **2022**, *61*, e202214763; b) E. Olivieri, B. Gasch, G. Quintard, J.-V. Naubron, A. Quintard, *ACS Appl. Mater. Interfaces* **2022**, *14*, 24720; c) E. Olivieri, G. Quintard, J.-V. Naubron, A. Quintard, *J. Am. Chem. Soc.* **2021**, *143*, 12650.