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Supramolecules for Catalysis

Guest Editor:

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Deadline for manuscript submissions:
closed (15 June 2020)

Message from the Guest Editor

Supramolecules are a wide range of host compounds including very different families of molecules like cyclodextrins, crown ethers, calixarene derivatives, cucurbiturils, etc. These molecules possess unique capabilities such as selective substrate encapsulation or metal chelation, making these supramolecules prime candidates for homogeneous, heterogeneous, multiphasic, or biomimetic catalysis. The aim of using these supramolecules is mainly to improve catalytic performance while providing safer and sustainable processes as well as providing a better understanding of natural transformations.

Manuscript submissions are welcomed for all aspects of the use of supramolecules in catalysis, particularly (but not only) in the following areas:

- Fundamental aspects of supramolecules in catalysis

- The design of new supramolecules holding catalytic metal/substrate with catalytic activities

- Biomimetic supramolecules

- The use of supramolecules in phase transfer catalysis

- Supramolecular catalysis in aqueous environment

- Applications of supramolecules in catalytic processes

- Applications of supramolecules in sustainable chemistry