Biomimetic catalysts based on metalloporphyrin MOFs

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During the past years, a great effort has been devoted to the anchoring of catalysts into MOFs in order to achieve heterogeneous catalysts [1]. In this sense, an innovative approach consists on using metalloporphyrins as coordination-network synthons mimicking their natural catalytic activity in order to reproduce it in the solid state [2].

The work herein presented explores the activity of μ-O-[FeTCPP]$_2$·nDMF (TCPP= *meso*-tetracarboxyphenylporphyrin; n≈16) and [CoTPPS$_{0.5}$(bipy)(H$_2$O)$_2$]·6H$_2$O [3] (TPPS= *meso*-tetrasulfonatophenylporphyrin, bipy= 4,4´-bipyridine) compounds as heterogeneous catalysts on oxidation and acetylation reactions of different organic substrates [4].

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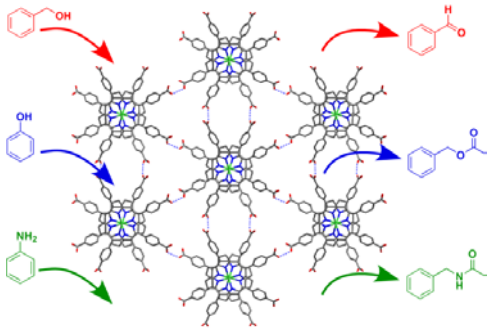

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