

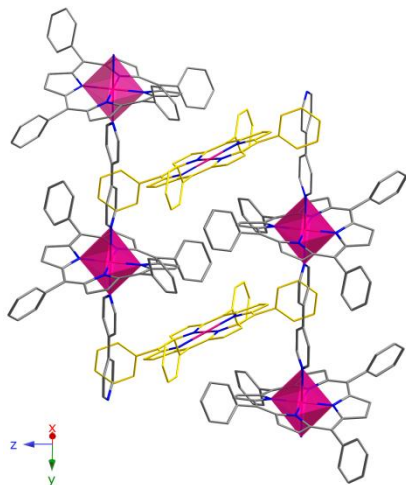
Metalloporphyrin-based MOFs: new strategies for catalyst immobilization

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Metalloporphyrin systems are one of the cornerstones on which the existence of life is based, as major biochemical, enzymatic and photochemical functions depend on the special properties of the tetrapyrrolic macrocycle [1]. Thus, porphyrin catalysts are well-known to be highly efficient in many catalytic reactions and, during the last years, a great effort has been devoted to the immobilization of distinct types of catalysts on solids [2].

In this sense, recent strategy consists of the immobilization of catalysts in MOFs (metal-organic frameworks) [3]. In our group we have started exploring the possibility of using metalloporphyrins both as structural units in MOFs and catalyst [4], in the same compound.

Our preliminary results consist of a series of M-porphyrin-bipy compounds (M= Fe, Co; bipy= 4,4'-bipyridine) that have been structurally characterised. Catalytic activity has also been studied.



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