

Metals in Biomimetic Cavities.



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The aim of our work is to design supramolecular systems that will mimic both the coordination core and the hydrophobic pocket of a metallo-enzyme active site. Our strategy relies on the synthesis of cavity-based ligands that allow the control of the coordination sphere of the metal ion together with the approach and the binding of an external molecule. Recent developments will be presented, with a particular emphasis on polytopic receptors.



Perspective : "Biomimetic and self-assembled calix[6]arene-based receptors for neutral molecules", D. Coquière, S. Le Gac, U. Darbost, O. Sénèque, I. Jabin, O. Reinaud, *Org. Biomol. Chem.*, **2009**, *7*, 2485-2500.

"Supramolecular Bioinorganic Chemistry", J. N. Rebilly, O. Reinaud, in *Supramolecular Chemistry: From Molecules to Nanomaterials*, 4 (J. W. Steed and P. A. Gale) John Wiley & Sons, Inc., 2012