



# ***X CONGRESSO NAZIONALE DI CHIMICA SUPRAMOLECOLARE***

*Perugia 25-28 settembre 2011*



## ***PROCEEDINGS***



*Università degli  
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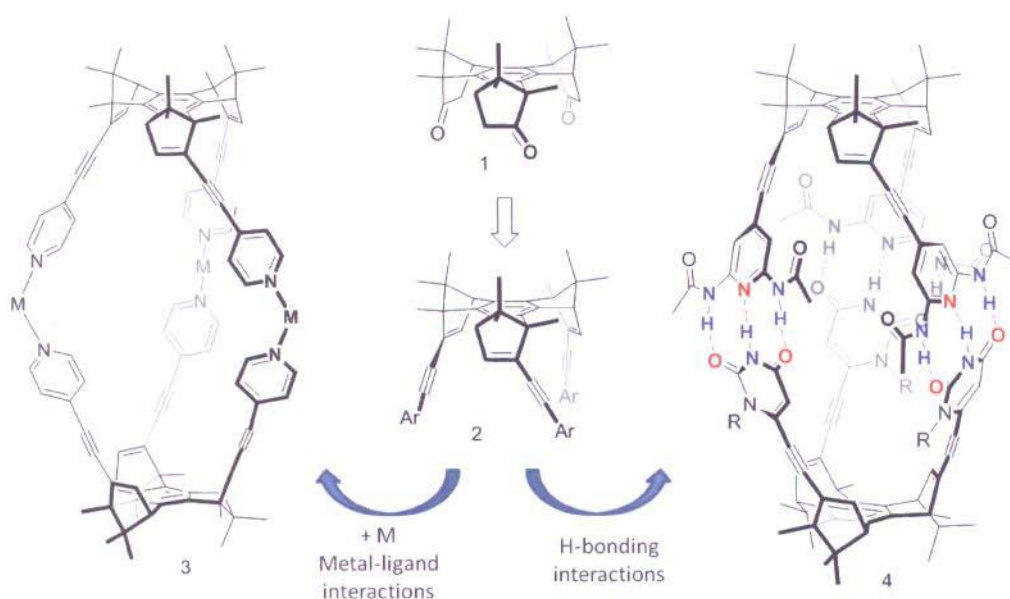
## Supramolecular Capsules Based on Metal Coordination or Hydrogen Bonding from Enantiopure Benzocyclotrimers

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*Syn*-benzocyclotrimers are  $C_3$ -symmetric compounds characterized by a cup-shaped structure, which are well suited scaffolds for the building of supramolecular hosts. We have previously described the preparation of capsules and cages from condensation of benzotricamphor **1** with hydroxylamine<sup>1</sup> and aliphatic diamines,<sup>2</sup> which are able to host gases (argon, nitrogen, oxygen and C1-C2 hydrocarbons). Herein we report further functionalizations of (+)-benzotricamphor by the introduction of different functional groups at the rim of the bornene skeleton and the study of self-assembling properties of derivatives **2**. Terminal pyridine allowed the preparation of coordination cages **3** with transition metals. The dimeric capsule **4** held together by an extended H-bond network was observed when trimers bearing uracil-derivative and bis(acetamido)pyridine were mixed together.



1. A. Scarso, L. Pellizzaro, O. De Lucchi, A. Linden, F. Fabris, *Angew. Chem. Int. Ed.* **2007**, *46*, 4972-4975.

2. S. Tartaggia, A. Scarso, P. Padovan, O. De Lucchi, F. Fabris, *Org. Lett.* **2009**, *11*, 3926-3929.