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Benzocyclotrimers: Scaffolds for Supramolecular Chemistry

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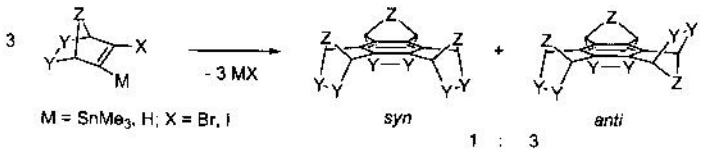
Benzocyclotrimers are rigid, cup-shaped and in case enantiopure molecules obtained from the condensation of bicyclic olefins bearing anionic (Br, I) and cationic (Me_3Sn, H) leaving groups (Scheme 1).



Scheme 1

Recent methodologies consent highly *syn*-diastereoselective synthesis of functionalized benzocyclotrimers, suitable for applications in supramolecular chemistry, such as nanocapsule,[1] nanocages[2] and metal organic-frameworks able to include suitable guests (Figure 1).

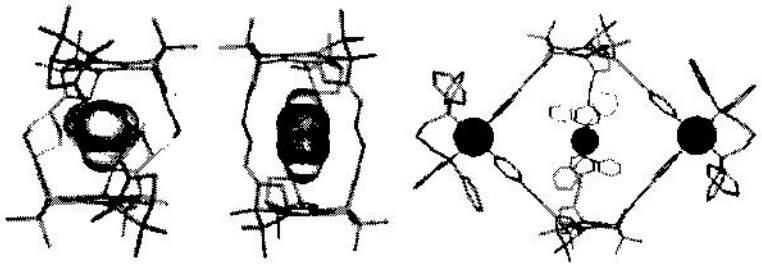


Figure 1

References

1. Scarso, A. Pellizzaro, L. De Lucchi, O. Linden, A. Fabris, F. *Angew. Chem. Int. Ed.* **2007**, *46*, 4972-4975.
2. Tartaggia, S.; Scarso, A.; Padovan, P.; De Lucchi, O.; Fabris, F. *Org. Lett.* **2009**, *11*, 3926-3929.

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