

Thiacalix[4]arene's lower rim derivatives: Synthesis and supramolecular properties

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Abstract

© ISUCT Publishing. A consolidated review on the synthesis of lower rim tetrasubstituted thiacalixarenes and their self-assembly on the soft surfaces contributed from our group is presented. The approaches for the synthesis of different types of tetra-O-substituted thiacalixarenes from the last 10 years are discussed. In addition, amphiphilic macrocycles in 1,3-alternate conformation form monolayers at the interface and are effectively embedded into the vesicles. Decorated by thiacalixarenes nanolayers and vesicles demonstrate a high selectivity towards specific analytes.

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Keywords

Amphiphile, Molecular recognition, Synthetic methods, Thiacalix[4]arene

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