Lower rim thiacalix[4]arenes derivatives: a technological platform for nanomaterials design by self-assembly method

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Lower rim thiacalix[4]arenes derivatives in *cone* and *1,3-alternate* conformations have many advantages to create a wide range of precursors for the design of very sophisticated supramolecular architectures.



These compounds can be considered as technological platform for nanomaterials design by self-assembly method. Particular attention will be paid to the application of calixarene derivatives for the construction of various supramolecular and nanosystems, devices and "smart" materials: nanoparticles, metal-coordinated networks, Langmuir-Blodgett nanolayers, molecular magnets etc.