

## Synthesis of *p*-*tert*-butylthiacalix[4]arene derivatives functionalized in the lower rim with *N*-(2-hydroxyethyl)ethylenediamine fragments in the *cone* and *1,3-alternate* conformation, and their interaction with DNA

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### Abstract

For the first time *p*-*tert*-Butylthiacalix[4]arene derivatives functionalized in the lower rim with *N*-(2-hydroxyethyl)ethylenediamine fragments in the *cone* and *1,3-alternate* conformations have been synthesized. The structure and composition of the new derivatives have been characterized by physico-chemical methods. The ability of the synthesized macrocycles to interact with calf thymus DNA, and the formation of "macrocycle/DNA" aggregates have been demonstrated. It has been shown that the formation of monodisperse systems occurs only at specific stoichiometric ratios of "macrocycle / DNA".