

Synthesis of differently substituted at the lower rim thiacalix[4]arenes containing *N,N*-diethylacetamide, (ethoxycarbonyl)methoxy and *N*-(2-hydroxyethyl)acetamide fragments

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Abstract

New monosubstituted at the lower rim *p*-*tert*-butylthiacalix[4]arene containing *N,N*-diethylacetamide fragment was synthesized. The interaction of the resulting macrocycle with ethyl bromoacetate was studied and showed that, depending on the alkali metal carbonate (M_2CO_3 , $M = Na^+$, K^+ , Cs^+) *cone* and *partial cone* stereoisomers are formed. By aminolysis of the ester groups of the compounds obtained with 2-aminoethanol differently substituted at the lower rim *p*-*tert*-butylthiacalix[4]arenes containing *N,N*-diethylacetamide and *N*-(2-hydroxyethyl)acetamide fragments in *cone* and *partial cone* conformations were synthesized.