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New materials based on tubular nanodimensional structures 1. Synthesis, structural studies and determination of interproton distances in solutions of functionalized thiacalix[4]arenes according to NMR spectroscopic data (NOESY)

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Abstract

New derivatives of p-tert-butylthiacalix[4]arene were synthesized. The conformation of the macrocycles and interproton distances in the synthesized thiacalix[4]arenes in solutions were determined by NMR spectroscopy. p-tert-Butylthiacalix[4]arene distally disubstituted at the lower rim adopts the cone conformation, and the tetrasubstituted products are formed in the 1,3-alternate conformation. © 2004 Springer Science+Business Media, Inc.

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Keywords

Alkylation, Nanostructures, NOESY NMR spectroscopy, Stereoisomers, Thiacalix[4]arene