

Esters of malonic acid on the platform *p*-*tert*-butylthiacalix[4]arene: synthesis and structure

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Keywords: thiacalixarenes, 1,3-alternate configuration, esters of malonic acid, synthesis, structure, chelating ligands.

Abstract

The synthesis of new thiacalix[4]arenes with chelating moieties on the lower rim – *omega*-diethyl-(2-alkoxy) malonate groups with different number of methylene units in the spacer alkoxy groups – was carried out by reaction of *omega*-bromalkoxythiacalix[4]arenes with sodium malonic ester derivatives. The resulting macrocycles are in the *1,3-alternate* configuration. The structure of the synthesized compounds was established by the set of physical methods, including NMR, IR spectroscopy and mass spectrometry.