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Synthesis of *p-tert*-butylthiacalix[4]arene modified with glucosamine fragments at the lower rim

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Abstract

Synthesis methods are developed of stereoisomers of *p-tert*-butylthiacalix[4]arenes (*cone* and *1,3-alternate*), containing residues of *D*-glucosamine as sensory and structure-forming groups. Three derivatives of 5,11,17,23-tetra-*tert*-butyl-25,26,27,28-tetrakis-[(*β-D*-glucopyranosylamidocarbonyl)-metoxy]-2,8,14,20-tetrathiacalix[4]arene were synthesized. The synthesized compounds were characterized by a complex of physical methods: ^{1}H and ^{13}C NMR and IR spectroscopy, mass spectrometry, and elemental analysis.