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The syntheses and binding properties of the novel organophosphorus calixarenes

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Abstract

Phosphorylation of bromo, dialkylaminomethyl calix[4]resorcinarenes with various long chain aliphatic radicals with a number of P(III) derivatives i.e. triamido- and diamidophosphites, and polyhalogenides of P(III), P(IV) is described. A series of phosphoamide cavitands were obtained. Structures and properties of synthesized compounds were discussed on the basis of physical and quantum chemical methods.

Keywords

Calix[4]resorcinarenes, Carceplex, Cavitands, Phosphorylation