

Synthesis of novel macrocyclic ligands containing phosphoryl and aminoacetal fragments

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Abstract

A method for the synthesis of novel phosphorylated aminoacetals was developed. The latter are involved in Mannich reaction as amine component with calix[4]resorcinol and formaldehyde to form tetrasubstituted macrocycles containing four acetal groups and four phosphonate (phosphine oxide) fragments on the "upper" rim of molecule with high yields. © 2013 Copyright Taylor and Francis Group, LLC.

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Keywords

aminophosphine oxide, Aminophosphonate, calix[4]resorcinol, Mannich reaction