Organo-Clay Derivatives in the Synthesis of Macrocycles

Vasilios Georgakilas, Dimitrios Gournis, and Dimitrios Petridis*

The FTIR spectra of the cyclic tetramide (1530 and 1635 cm\(^{-1}\)) and the diamine dication (3000 cm\(^{-1}\)) in the interlayer space of the clay.
The mass spectra of the tetramide macrocycle.
The $^1$H NMR spectra of the tetramide macrocycle in [D6] DMSO.
The XRD pattern of the products: a) the pattern of the pillared clay (product a) b) the pattern of the product b obtained after the addition of a water solution of the p-xyylene diamine (2 times the cation exchange capacity) to a suspension of the pillared clay c) the pattern of the product b after washing with water.
The $^1$H-NMR (200MHz, [D$_6$]DMSO) spectra of the cyclic tetramide and the diamine dication in the interlayer space using the synthetic clay laponite before the extraction with the DMSO.