

# Synthesis and Characterization of New Organophilic Clays. Preparation of Polystyrene/Clay Nanocomposites

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**Abstract.** The aim of this work is the synthesis of new organo-clays using montmorillonite (MMT) and two different molecules (**A-017** and **Phos**). The modified MMT was then used for the preparation of polystyrene/clay nanocomposites. Different methods were used for the characterization of the synthesized materials.