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## Biopolymer chitosan/montmorillonite/nano y-Al2O3 nanocomposites: Preparation and characterization

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Chitosan is the N-deacetylated form of chitin that can be extracted from crustaceans. Chitosan has been extensively investigated for several decades for food packaging, water engineering and so on, owing to its good mechanical properties, biodegradability, biocompatibility, as well as solubility in aqueous medium. Montmorillonite is a kind of natural clay mineral with high cation exchange capacity, high surface area and swelling ability. In recent years, the use of nano- $\gamma$ -alumina has attracted considerable interest in chemistry due to their eco-friendliness, easy reusability and low cost. Wang et al. prepared chitosan/montmorillonite (CTS/MMT) nanocomposites. Teimouri et al. prepared Chitosan/montmorillonite/ZrO<sub>2</sub> nanocomposites for water treatment. In this study, we are focusing on the preparation, and characterization, of chitosan/montmorillonite/nano  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> nanocomposites in detail.

## **Biography**

Nahid Shajari has completed her PhD from Zanjan University, Zanjan, Iran. She is the Assistant Professor of Organic Chemistry in Department of Chemistry, Zanjan Branch, Islamic Azad University, Iran. She has published more than 17 papers in reputed journals.

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