

Modified-Clay as Functional Material in Green Applications: Review

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Abstract

Clay mineral modification is known as one of interesting research field in material chemistry. One of important and widely investigated within this scheme is chemical modification of smectite clay minerals as chemical filter that lessens the impact of organic chemicals on the environments through various processes. The 2:1 layer silicates structure are important properties in the preparation of metal oxide immobilized clays, ion exchanged-clay and organo-clays. Natural clay mineral of montmorillonite for example, with its porous structure and modifiabe character is abundant clay minerals in Indonesia. Refer to these backgrounds, this paper aimed to present some functional materials for green chemistry applications.

Keywords: clay, montmorillonite, catalysis, clay modification .