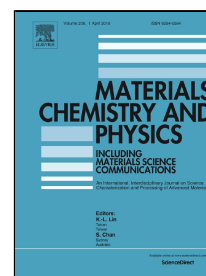


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Competitive Adsorption Analyses of a Pure Magadiite and a New Silylated Magadiite on Methylene Blue and Phenol from Related Aqueous Solution

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Abstract

Organic contaminants have a destructive influence on the environment. Industrial emissions are the main source of such contaminants and simultaneously contain numerous **and** diverse **types**. These contaminants interact and influence each other when eliminated by sorbents. **The aim of this research study was to explore the competitive adsorption of methylene blue and phenol on magadiite.** In this research work, competitive adsorption properties of a new silylated magadiite--which is Na-magadiite-cetyltrimethylammonium-3-Aminopropyltriethoxysilane (Na-MAG-CTAB-KH550) -- on methylene blue and phenol, were investigated. The prepared **pure** Na-magadiite (Na-MAG) and Na-MAG-CTAB-KH550 adsorbents were

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