

## عنوان مقاله:

Carrageenan-alginate nanocomposite hydrogels and cationic dye adsorption: Kinetic and isotherm

## محل انتشار:

همایش ملی نانو فناوری و شیمی سبز (سال: 1391)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

The nanocomposite hydrogels based on kappa-carrageenan (Carra) and sodium alginate (Na-Alg) biopolymers were synthesized from solution polymerization of acrylamide (AAM) monomer and methylenebisacrylamide (MBA) crosslinker using sodium montmorillonite (Na-MMt) nanoclay. The obtained nanocomposites were used to remove the cationic crystal violet dye from water. The effects of Carra and Na-Alg weight ration as well as the Na-MMt content on the dye adsorption capacity of nanocomposites were evaluated. In compared to hydrogel with no-clay, the results showed that the inclusion of Na-MMt nano-clay into hydrogels caused an increase in dye adsorption of hydrogels. Also, the increase in Carra to Na-Alg ration caused an increase in dye adsorption capacity.

## کلمات کلیدی:

Nanocomposite; Hydrogel; Carrageenan; Na-Alginate; Adsorption of Dye

## لینک ثابت مقاله در پایگاه سیویلیکا:

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