

عنوان مقاله:

Kinetics of Trihalomethane adsorption from drinking water using Granular Activated Carbon

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 6

نویسندگان:

.Ali E'temadi - Department of Chemical engineering, Mahshahr Branch, Islamic Azad University, Iran

.Iman Mahmoudi - Department of Chemical engineering, Mahshahr Branch, Islamic Azad University, Iran

خلاصه مقاله:

The harmful substances, defined as Trihalomethanes (THMs), were formed during the disinfection of drinking water when chlorine was used as the disinfectant. They formed by the reactions of chlorine and natural organic matter presented in water. In this research, the effectiveness of granular activated carbon (GAC) for the removal of THMs was studied. Based on these results, thermodynamic and kinetic analyses were done. The thermodynamic analysis revealed that the adsorption of THMs onto GACs is exothermic and spontaneous. Also various parameters such as adsorption rate constant were evaluated.

کلمات کلیدی:

Adsorption, Trihalomethanes, Granular activated carbon, Thermodynamic, Kinetics

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