



Adsorption of Th (IV) by peat moss

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ABSTRACT

The peat moss has been characterized and used for the removal of Th (IV) from aqueous solutions using batch adsorption experiments. Effects of factors such as pH, ionic strength, contact time, peat moss dosage and initial thorium concentration on thorium adsorption were studied. The results demonstrated that adsorption of Th (IV) on peat moss increase with increasing pH from 1 to 12 and with decreasing ionic strength. The kinetic process of adsorption can be described by the pseudo-second-order kinetics equation satisfactory. The adsorption isotherm was fitted reasonably well by Langmuir adsorption model.

Keywords: Adsorption; Peat moss; Thorium

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