



REMOVAL OF CADMIUM (II) FROM AQUEOUS SOLUTIONS BY SPHAGNUM MOSS PEAT: EQUILIBRIUM STUDY

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Abstract

Cadmium is listed by US-EPA as one of priority pollutant and as a known carcinogen, and therefore its removal from wastewaters of various industrial processes is a very important environmental problem. The paper analyzes the effectiveness of a Romanian sphagnum moss peat as available and cheaper sorbent in removal of Cd (II) from aqueous solutions. Batch sorption experiments were carried out in order to establish the influence of solution pH, peat dose, contact time and initial cadmium concentration on the sorption of the pollutant cation onto the sphagnum moss peat. The sorption equilibrium data were analysed by using the Freundlich and Langmuir isotherms.

Key words: cadmium, sphagnum moss peat, sorption, isotherms

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