

Zeolite synthesis from clay and study of the acetic acid adsorption on it

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Abstract

This paper presents the experimental results of the removal of acetic acid from aqueous solutions through adsorption on synthesized zeolite. The montmorillonite clay from Prrenjas area, Albania was used as the primary material for zeolite synthesis. Zeolite was synthesized through alkaline treatment of clay. The influence of temperature, acid concentration, amount of zeolite and contact time were investigated. The obtained results showed that the increase of the temperature, concentration of acetic acid and amount of zeolite lead to the improvement of acetic acid removal efficiency as a water pollutant.

Keywords: *montmorillonite, zeolite, acetic acid removal, water pollution.*

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