



Study of hydrated Na and Ca-Montmorillonite by thermally stimulated currents technique

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The dielectric relaxation of the two montmorillonites exchanged by Na and Ca as a function of their hydration state, has been studied. The technique of thermally stimulated current technique (TSDC) has been used. It gives access to the values of ΔE_{act} , the potential barrier for the cation hopping process measured in the studied montmorillonites. These values depend strongly on the hydration state. The influence of the water molecules on the movement of the cations in the adsorption sites was explained.

Key words: Montmorillonite – TSDC – Potential barrier - Hydration