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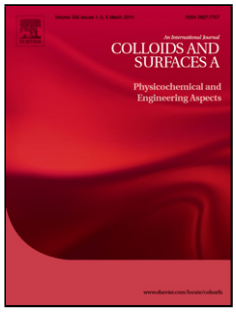

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Stability, adsorption and electrokinetic properties of the chitosan/silica system

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Graphical Abstract

Abstract

The aim of this paper was to analyze stability, adsorption and the electrokinetic properties of suspensions containing chitosan and silica. Chitosan (Ch), the second most abundant natural polysaccharide, biodegradable and relatively cheap can be very good alternative for artificial polymers used in the stabilization of metal oxide suspensions. The results obtained from spectrophotometric and turbidimetric stability measurements proved that the higher concentrations of chitosan the more stabile the silica suspensions. The mechanism of the stabilization is the