

عنوان مقاله:

Adsorption of Polyethylene glycol with Various Molecular Weight on the Zinc Oxide Nanoparticle

محل انتشار:

پنجمین کنگره بین المللی مهندسی شیمی (سال: 1386)

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خلاصه مقاله:

Adsorption of polyethylene glycol (PEG) with various molecular weight and concentration on the surface of zinc oxide nanoparticle has been investigated. Adsorption of PEG was accomplished on the surface of ZnO particle mainly via – OH group through hydrogen bonding. Using Brookfield rotary viscometer, the thickness of the adsorbed polymer layer on zinc oxide particles was calculated on the basis of suspension viscosity via the extended Einstein equation. Increase in polymer molecular weight and concentration leads to increase in thickness of adsorbed layer on the inorganic particle.

کلمات کلیدی:

Adsorption, Zinc oxide, PEG, nanoparticle, Average molecular weight

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