

عنوان مقاله:

Poly (vinyl alcohol)/ Chitosan metal adsorbents: preparation and properties

محل انتشار:

ششمین کنگره بین المللی مهندسی شیمی (سال: 1388)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Poly (vinyl alcohol) (PVA)/chitosan blend films were prepared by casting the respective polymer solutions. The glutaraldehyde with sulfuric acid was used as crosslinking agent. A series of PVA/Chitosan blends were prepared by varying the ratios of two components. Gel content and water uptake of blends were measured. The adsorption of Ni (II) ions onto PVA/Chitosan blends was investigated. Batch adsorption experiments were carried out as a function of pH media and concentration of Ni(II) ions. The optimum pH media for Ni adsorption was found to be 7.0 for all adsorbents. The experimental adsorption data were fitted to the langmuir adsorption model. The results showed that a .blend ratio of 50/50 of PVA/Chitosan is the best Nickel adsorbent

کلمات کلیدی:

crosslinking, Poly (vinyl alcohol)/chitosan blend films, metal adsorption, glutaraldehyde, water uptake

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