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Preparation, Characterization and Lead Biosorption Performance of Immobilized *Cystoseira* Collected from Jazan Coasts

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Abstract: Immobilized *Cystoseira* showed increasing intraparticle diffusion of lead, stability of the metal binding and affinity for lead. Equilibrium lead concentration was attained after 10 h. The maximum lead uptake was 1.43 mmol/g. Scanning electron microscopy (SEM) and energy dispersive X-ray (EDX) microanalysis showed a uniform distribution of lead on the immobilized biomass. Immobilized *Cystoseira* could be repeatedly used with high efficiency.

Keywords: *Cystoseira*, Immobilization, Lead, Biosorption.

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