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Development of cellulase-nanoconjugates with enhanced ionic liquid and thermal stability for *in situ* lignocellulose saccharification

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Abstract

The present work aimed to improve catalytic efficiency of *Trichoderma reesei* cellulase for enhanced saccharification. The cellulase was immobilized on two nanomatrices i.e. magnetic and silica nanoparticles with immobilization efficiency of 85% and 76% respectively. The nanobioconjugates exhibited increase in V_{max} , temperature optimum, pH and thermal stability

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