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Surface methodological approach of *Pleurotus florida* biowaste towards aspirin drugS Padmavathy¹ and P Pungayee alias Amirtham²¹Bishop Heber College, India²Cauvery College for Women, India

Microbial bioremediation covers a wide range of recalcitrant degradation of pharmaceutical waste. The present study aims to inspect the dried, nonliving *Pleurotus florida* bio-waste efficacy for bioremediation of aspirin in an ecofriendly manner. The equilibrium uptake of aspirin was investigated using batch experiments which were carried out as a function of contact time, initial concentration, pH and biomass dose. The optimal conditions for the highest percentage removal of aspirin was achieved at 2 h contact time, 100 mg/L of aspirin concentration, at pH 5 and 4.0 g/L biomass dose. The best fit was obtained by Langmuir isotherm model with high correlation coefficient ($R^2=0.989$). The *Pleurotus florida* bio-waste was characterized using Fourier transform infrared spectroscopy, X-ray diffraction and thermo-gravimetric analyzer and their interaction between the aspirin was illustrated with Fourier transform infrared spectroscopy and scanning electron microscope..

Biography

S Padmavathy is an Assistant Professor in Bishop Heber College, Department of Chemistry. She has number of publications in national and international journals
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