

International Conference on

Pollution Control & Sustainable Environment

April 25-26, 2016 Dubai, UAE

ETL dye uptake from aqueous solution by low cost sorbent

F Ouazani, A Iddou and A Aziz
University of Mostaganem, Algeria

The present study investigates the batch ETL dye sorption by Arundo-donax. The sorbent was synthesized and characterized by scanning electron microscope (SEM) and Fourier transform infrared spectroscopy (FTIR). The effects of pH, initial dye concentration, contact time and mass sorbent in the efficiency of ETL sorption were investigated. Furthermore, pseudo-first and second-order kinetic models were also used to analyze sorption kinetics. The equilibrium adsorption results were fitted by the Langmuir and Freundlich isotherms. Maximum amount of ETL removal 56.49 mg/g was observed at pH 2, sorbent weight 50 mg and contact time 60 min. The Langmuir model fitted well with the experiments data.

Biography

F Ouazani has completed her engineering studies at the age of 24 years and magister from Oran University, she is PhD student at Mostaganem University, and she has participated in many national and international conferences.

Ouazanifouzia@yahoo.fr

Notes: