

Adsorption of Congo Red Dye by Using PPHA-Adsorbent

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Abstract: Nowadays water pollution is concerning environmental problem for human health as well aquatic ecosystems. There are many reasons for water pollution mainly industrialization, in which textile industries are causing dye containing water pollution. In this work, it is a attempt to reduce this dye water pollution. A pigeon pea hull which is a agricultural waste is utilized to obtain a adsorbent for removal of dye. Congo red dye was chosen as target dye pollutant in this study. Kinetics and adsorption study was done. The prepared PPHA-adsorbent shows good adsorption capacity towards congo red dye and it is cost-effective.

Keywords: Congo red dye; adsorption; Pigeon pea leaves ash; Adsorbent

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