

Facile Fabrication of Nickel/Zinc Oxide Hollow Spheres Nanostructure and Photodegradation of Congo Red

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Abstract : In this work, Nickel/Zinc Oxide hollow spherical structures with high surface area using the template Fructose was prepared by the hydrothermal method using a ultrasonic bath at room temperature was produced and were identified by FTIR, XRD, FE-SEM. The photocatalytic activity of synthesized hollow spherical Nickel/Zinc Oxide was studied in the destruction of Congo red as Azo dye. The results showed that the photocatalytic activity of Nickel/ Zinc Oxide hollow spherical nanostructures is improved compared with zinc oxide hollow sphere and other morphologies.

Keywords : azo dye, hollow spheres, photocatalyst, nickel/zinc oxide

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