

Synthesis, Characterization And Application AF Nano Sized Barium Chromate For Photocatalytic Degradation Of An Organic Pollutant

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ABSTRACT

In the present investigation, nano-sized barium chromate semiconducting powder has been used as a photocatalyst for the degradation of an organic dye. The semiconductor was prepared by precipitation method and it was characterized by different analytical techniques like XRD, SEM-EDS and FT-IR. Barium chromate absorbs major portion of visible light due to its yellow color and acts as an efficient photocatalyst. The effects of various operating parameters were studied to obtain optimum conditions for dye degradation. Physico-chemical parameters of the dye (before and after photocatalytic treatment) have also been reported to show the degradation of dye molecules.