ISSN: 2437-1114 www.aljest.webs.com



Photodegradation of C.I. Acid Yellow 23 Using Immobilized ZnO under Sunlight Irradiation

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ARTICLE INFO

Article History:

Received : 02/01/2017 Accepted : 03/03/2017

Key Words:

Photodegradation; Immobilization; ZnO;

C.I. Acid Yellow 23.

ABSTRACT/RESUME

Abstract: The present study explored the possibility of using immobilized ZnO to photodegradation C.I. Acid Yellow 23 (tartrazine) Through this immobilization method, the separation process of fine zinc oxide (ZnO) photocatalyst at the end of the treatment can be avoided. The photocatalytic degradation of both dyes was investigated under sunlight irradiation. The results showed that the percentage of dye removal increased with decreasing initial dye concentration and increasing irradiation time. For the dye solution studied, higher removal efficiency was obtained under acidic solution medium. The findings have shown the potential of this application in dye removal from aqueous solution.