Environmental Engineering and Management Journal *July/August 2009, Vol.8, No.4, 753-758*
http://omicron.ch.tuiasi.ro/EEMJ/

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WASTEWATER TREATMENT USING OPTIMIZED TiO_2 PHOTOCATALYTIC PROPERTIES

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Abstract

The paper presents a comparative approach concerning the properties of TiO_2 thin layers obtained via spray pyrolysis deposition (SPD) using hydrophilic and hydrophobic polymers as additives. The influences of composition (X-ray diffraction), morphology (Atomic Force Mycroscopy, Contact angle) and optoelectric (electrical conductivity, absorption, band gap and photocurrent) properties on the photocatalytic activity of the layers were studied.

Key words: photocatalysis, polymeric additives, spray pyrolysis deposition, titanium oxide

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