

Effect of Photoetching Process onto Immobilized PANI/TiO₂ Films towards Photocatalytic Degradation of RR2 dye

Abstract

Polyaniline (PANI) and P-25 Titanium dioxide (TiO₂) was fabricated as immobilized P-25TiO₂/PANI/ENR/PVC film and reported on the photocatalytic study. PANI and TiO₂ was immersed into the organic solvent and being coated onto glass plates under influenced of ENR/PVC polymeric binder by using a dip-coating method. It was found that, the removal of RR2 dye nearly good as suspension system after the pre-irradiation process. Based on COD and BET results, it showed that the optimum time of etching process was 7 hours irradiation time. This pre-irradiation process enhanced the removal of dye due to leached out of excessive binder and also exhibit visible light active after insertion of PANI into the immobilized system.