

DEGRADASI SENYAWA RHODAMIN B SECARA SONOLISIS DENGAN PENAMBAHAN TiO₂ HASIL SINTESA MELALUI PROSES SOL-GEL

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ABSTRACT

Degradation of rhodamine B had been done by sonolysis method. Optimum temperature sonolysis were found of 41-50 °C. In this condition, rhodamine B 2 mg/L could be degraded around 64.04% during 6 hours sonolysis. Percentage degradation of rhodamine B enhanced by addition of TiO₂ in solution. TiO₂ was prepared with sol-gel process using titanium isopropoxide (TIP), isopropanol and diethanolamine (DEA) as precursor. It was heated on 500 °C and 700 °C in order to get TiO₂-anatase and TiO₂-rutile. Rhodamine B 2 mg/L could be degraded around 68.48 and 90.00 % during 6 hours sonolysis on optimum temperature with addition of 0.1 g TiO₂-rutile and TiO₂-anatase, respectively.

Keyword: *rhodamine B, sonolysis, sol-gel*

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