

Photocatalytic properties and activities of  
g-C<sub>3</sub>N<sub>4</sub>/ZnO composite photocatalysts : precursor effect

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In this study, g-C<sub>3</sub>N<sub>4</sub>/ZnO composite photocatalysts were prepared with diverse precursors such as thiourea, urea, melamine and dicyandiamide in the presence of ZnO to investigate the effect of precursor on properties and photocatalytic activity of g-C<sub>3</sub>N<sub>4</sub>/ZnO composite photocatalysts. Composite photocatalysts prepared by thermal polycondensation were analyzed TGA, PL, Uv-vis, TEM and SEM to investigate morphology, optical and physical properties of g-C<sub>3</sub>N<sub>4</sub>/ZnO composite photocatalysts. Additionally, photocatalytic degradation of methylene blue was conducted under visible light irradiation. Based on these results, interaction between g-C<sub>3</sub>N<sub>4</sub> prepared from each precursor and ZnO during thermal polycondensation was described.