

# Synthesis of ZnS microspheres and their photocatalytic property

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## Abstract

The Zinc sulfide (ZnS) sample was synthesized using Zinc acetate dihydrate, and thiourea as ingredients by the hydrothermal reaction without using any dispersants and surfactants were used in the reaction process. The product composition and morphology were confirmed by XRD and SEM. The experimental results showed that after hydrothermal reaction at 150 for 8 h, the as-obtained ZnS microspheres diameter was about 3 $\mu$ m. Then, ZnS microspheres were used as photocatalyst, and the photocatalytic degradation rate of methylene blue solution reached 91.1% after ultraviolet light irradiation for 150 min.

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