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Oxidative Desulfurization of Diesel Fuel Catalyzed by Polyoxometalate Immobilized on Phosphazene-Functionalized Silica

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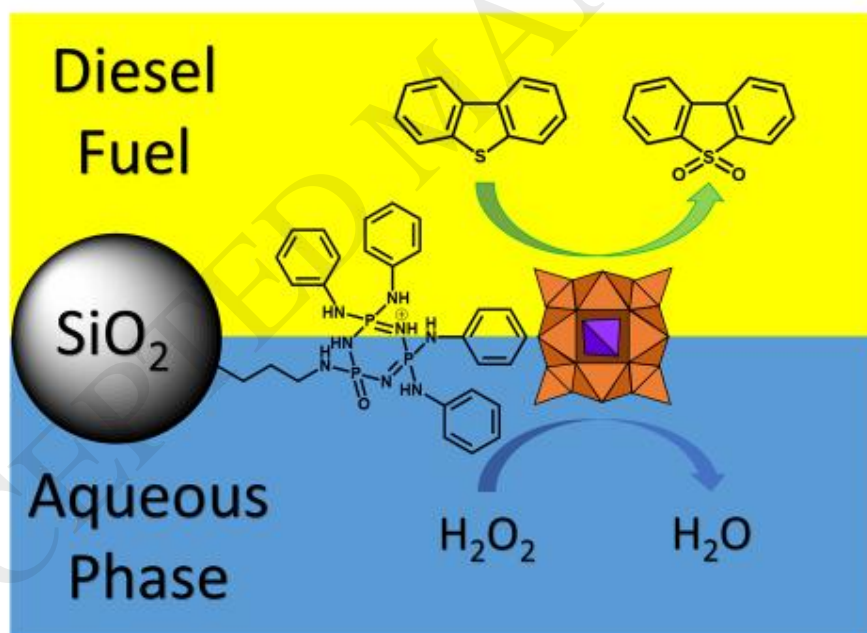
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Highlights

- Catalytic activity increases with size of phosphazene R group (iPr < iBu < Bz).
- Catalyst activity decreases PMo > PW > SiW with increasing stability of POM.
- 100% DBT and DMDBT conversion observed with most active catalyst PMo/BzPN-SiO₂.
- Easy catalyst/product separation enables catalyst reuse.
- A reaction scheme proposed for the system.

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Graphical abstract



Abstract

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