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## Immobilization of Zn<sub>4</sub> complex on functionalized Layered HUS-7: Synthesis, Structural Investigation and Catalytic Activity

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**Figure S1. Figure S1.** N<sub>2</sub> adsorption/desorption isotherm with pore size distribution curve of HUS-7-SO<sub>3</sub>H and HUS-7-SO<sub>3</sub>-Zn<sub>4</sub> samples.



Figure S2. TGA profile of HUS-7-SO<sub>3</sub>-Zn<sub>4</sub> and pure Zn<sub>4</sub> complex.



**Figure S3.** SEM image of spent HUS-7-SO<sub>3</sub>-Zn<sub>4</sub> catalyst in (A) morpholine system and (B) piperidine system.