

**One-step hydroxylation of benzene to phenol over Schiff base complexes incorporated onto
the mesoporous organosilica in the presence of different axial ligands**

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Supporting Information

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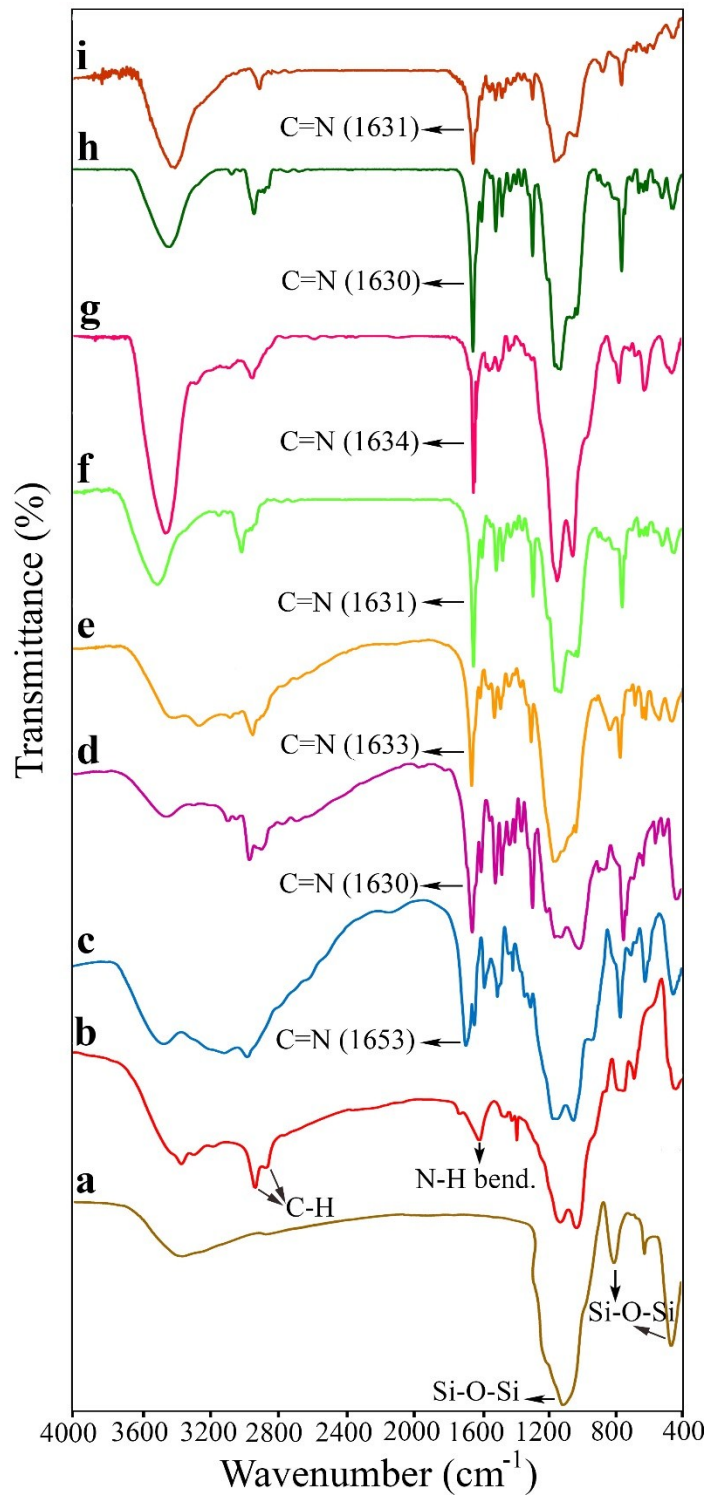


Fig. 1S. Fourier-transform infrared spectra of SiO_2 (a), $\text{SiO}_2\text{-NH}_2$ (b), $\text{SiO}_2\text{-Pro-Sal}$ (c), $\text{SiO}_2\text{-Pro-Sal-VO}$ (d), $\text{SiO}_2\text{-Pro-Sal-Co}$ (e), $\text{SiO}_2\text{-Pro-Sal-Cu}$ (f), $\text{SiO}_2\text{-Pro-Sal-Fe}$ (g), $\text{SiO}_2\text{-Pro-Sal-Zn}$ (h), $\text{SiO}_2\text{-Pro-Sal-Mn}$ (i)

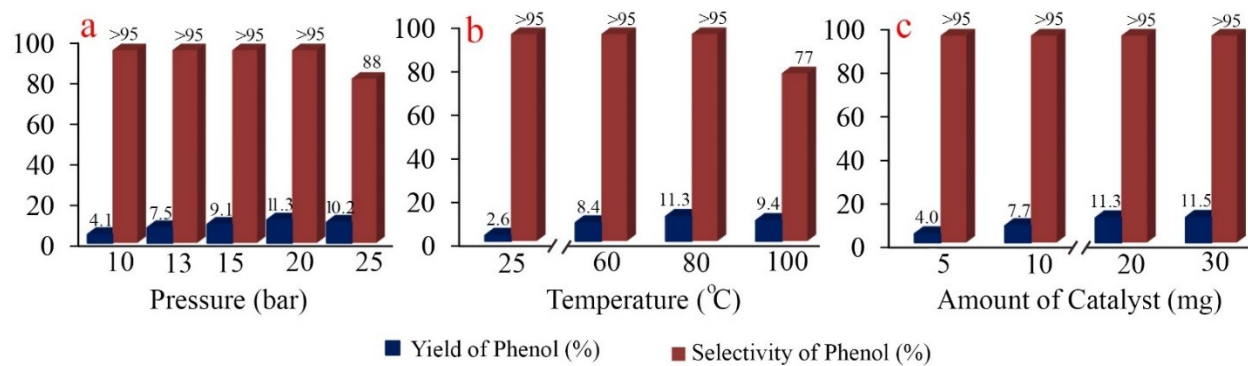


Fig. 2S. Effect of pressure of oxygen (a), temperature of reaction (b), and amount of catalyst (c) on the yield of phenol

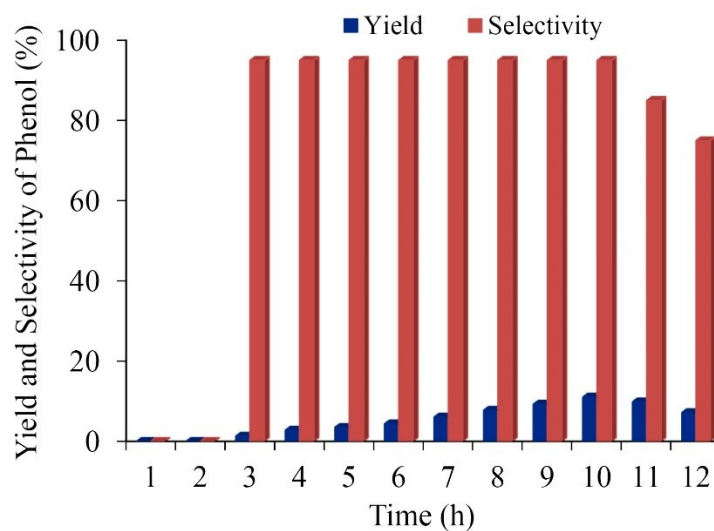


Fig. 3S. Diagram of the yield and selectivity of phenol over increasing time of reaction under optimized conditions

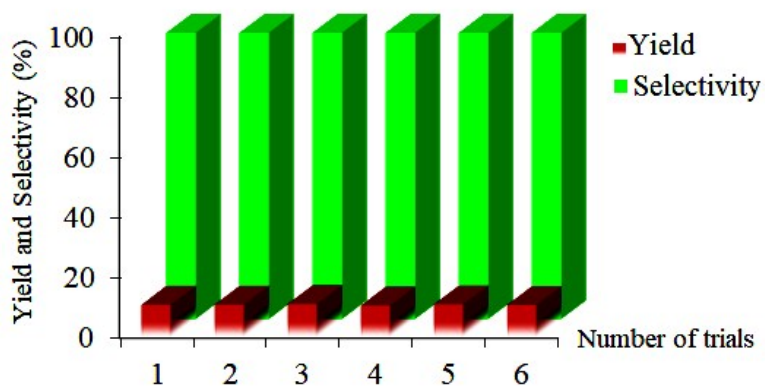


Fig. 4S. Diagram of the reusability of the SiO₂-Pro-Sal-VO catalyst

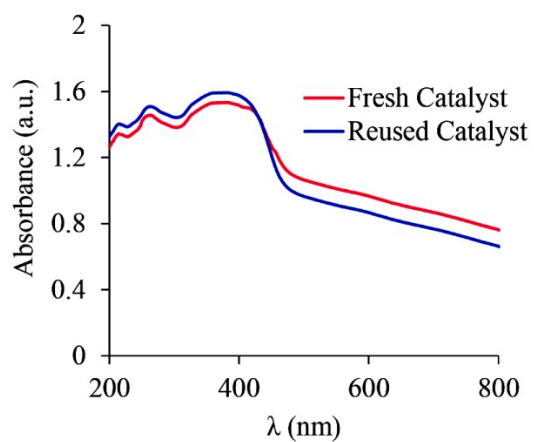


Fig. 5S. DRS patterns of fresh and reused catalysts