## **Supplementary Information**

## Application of Metal Organic Frameworks M(bdc)(ted)<sub>0.5</sub> (M = Co,

## Zn, Ni, Cu) in oxidation of benzyl alcohol

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Fig. S1. TG curve of Co(bdc)(ted)<sub>0.5.</sub>



Fig. S2. FT-IR spectra of (a)  $Cu(bdc)(ted_{)0.5}$ , (b)  $Zn(bdc)(ted)_{0.5}$ , (c)  $Co(bdc)(ted)_{0.5}$  and (d)  $Ni(bdc)(ted)_{0.5}$ .



Fig. S3. Raman spectra of (a)  $Cu(bdc)(ted)_{0.5}$ , (b)  $Co(bdc)(ted)_{0.5}$ , (c)  $Zn(bdc)(ted)_{0.5}$  and (d)  $Ni(bdc)(ted)_{0.5}$ .



Fig. S4. IR spectra of the fresh (a) and reused (b)  $Co(bdc)(ted)_{0.5}$  catalyst.



Fig. S5. XRD spectra of the fresh (a) and reused (b) Co(bdc)(ted)<sub>0.5</sub> catalyst.



Fig. S6. Leaching experiment of Co(bdc)(ted)<sub>0.5</sub> catalyst.