

## Supporting Information

### Preparation of polycarbonate diols (PCDLs) from dimethyl carbonate (DMC) and diols catalyzed by $\text{KNO}_3/\text{gamma-Al}_2\text{O}_3$

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## 1 Experimental

Differential Scanning Calorimetry (DSC) tests were carried out on a TA Instrument DSC-Q20 thermal analyzer under nitrogen atmosphere. The samples were loaded in aluminum pans, heated to 120 °C and kept for 5min to remove thermal history, then were cooled to -80 °C at a rate of 10 °C min<sup>-1</sup>, and finally were reheated to 120 °C at the same rate. From the second heating run, the glass transition temperature ( $T_g$ ) and melting temperature ( $T_m$ ) of the copolymers of polycarbonate diols was obtained.

## 2 Results

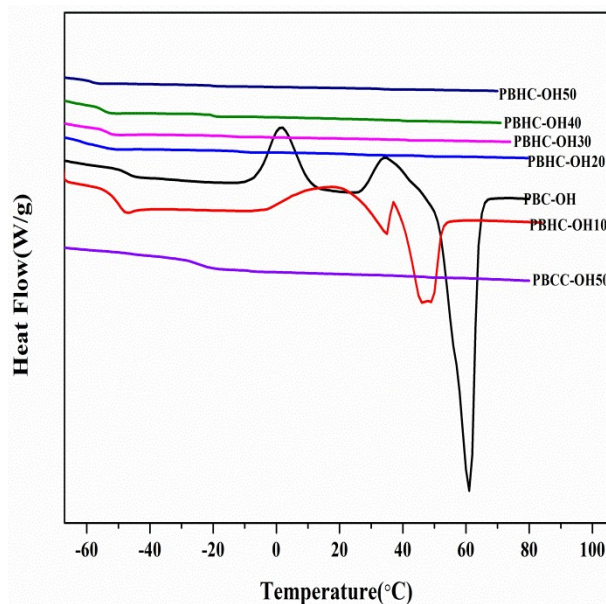


Fig S1 DSC traces of synthesized polycarbonate diols