

## Cycloaddition of CO<sub>2</sub> to Epoxides Catalyzed by Imidazolium-Based Polymeric Ionic Liquids

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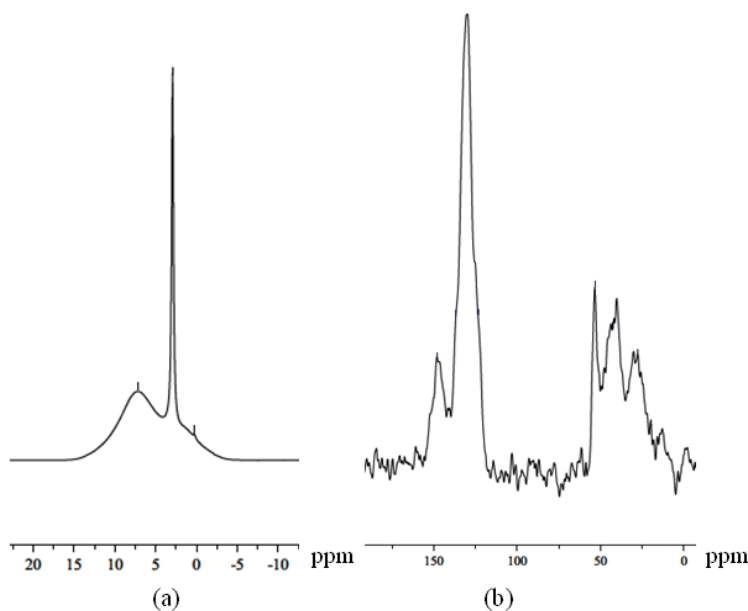
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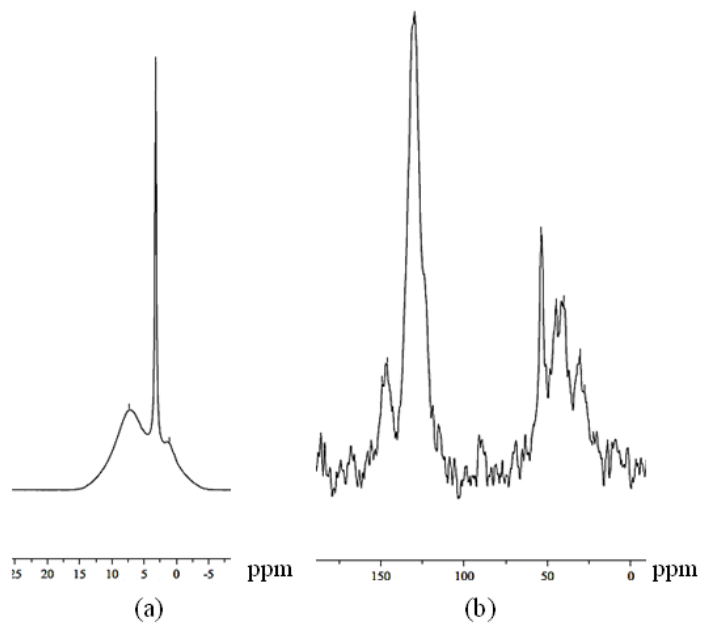
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### Supporting information:

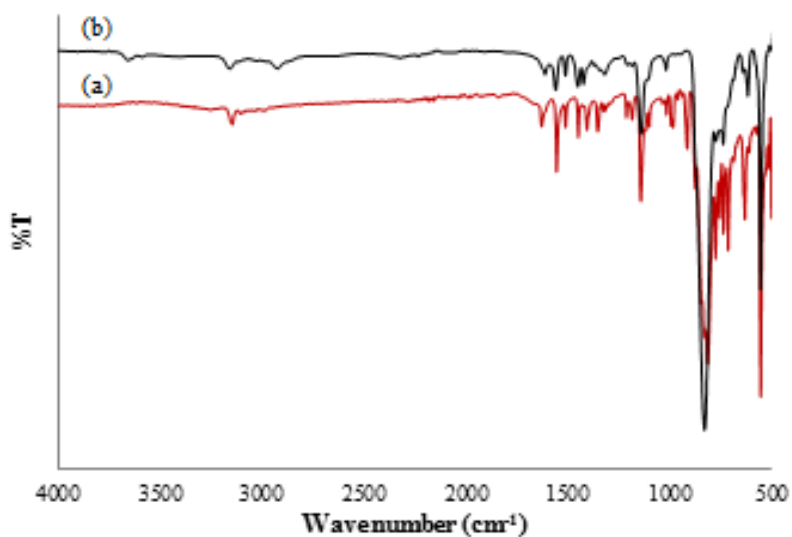
**Figure S1:** (a) <sup>1</sup>H MAS NMR spectrum and (b) <sup>13</sup>C MAS NMR spectrum of poly[bvbim][PF<sub>6</sub>].



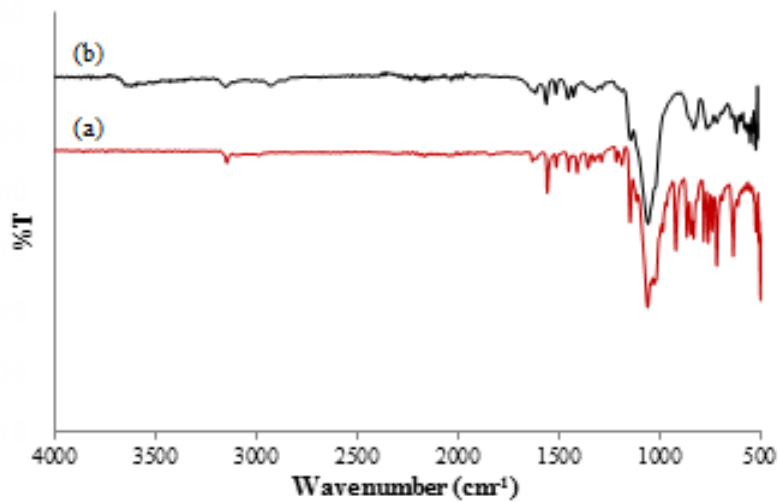
**Figure S2:** (a)  $^1\text{H}$  MAS NMR spectrum and (b)  $^{13}\text{C}$  MAS NMR spectrum of poly[bvbim][BF<sub>4</sub>].



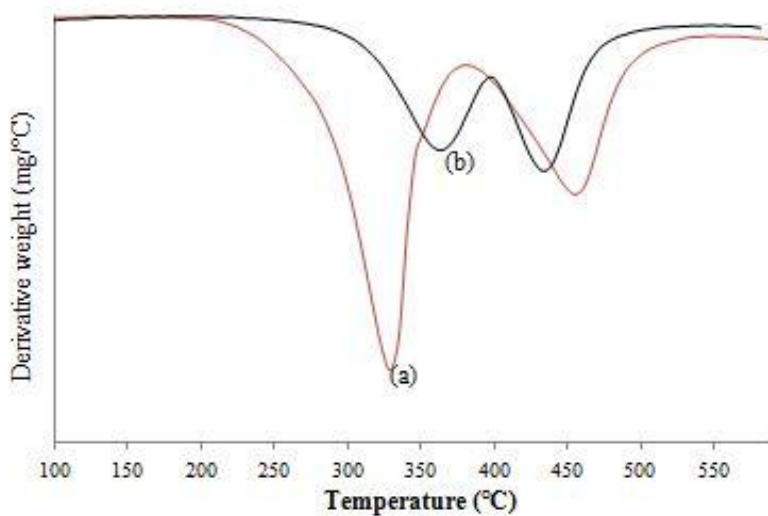
**Figure S3:** IR spectra of (a) [bvbim][PF<sub>6</sub>] and (b) poly[bvbim][PF<sub>6</sub>].



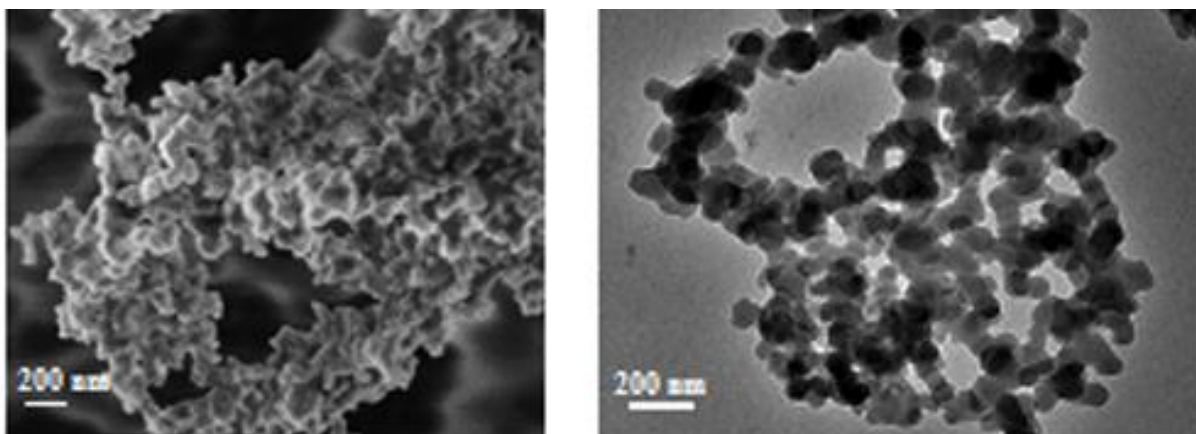
**Figure S4:** IR spectra of (a) [bvbim][BF<sub>4</sub>] and (b) poly[bvbim][BF<sub>4</sub>].



**Figure S5:** TGA curves of (a) poly[bvbim][PF<sub>6</sub>] and (b) poly[bvbim][BF<sub>4</sub>].



**Figure S6:** (left) SEM image and (right) TEM image of poly[bvbim][PF<sub>6</sub>]



**Figure S7:** (left) SEM image and (right) TEM image of poly[bvbim][BF<sub>4</sub>].

