

## Electronic Supplementary Information (ESI)

### Redox-active polyimide-polyether block copolymers as electrode materials for lithium batteries

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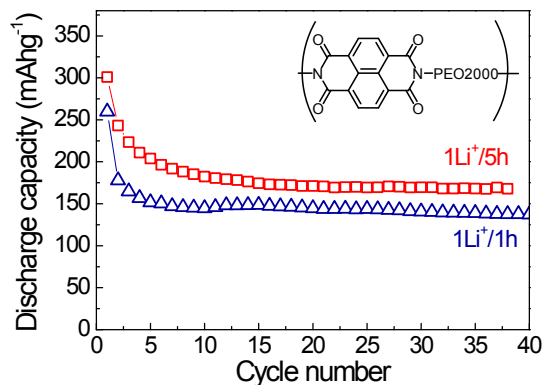
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#### Experimental

##### Rate performance of Naphthalene polyimide-b-PEO2000.

Rate performance of polyimide Naphthalene polyimide-b-PEO2000 was tested under current rates of 1Li<sup>+</sup>/5h and 1Li<sup>+</sup>/1h (Fig. S1). Discharge capacity at 1Li<sup>+</sup>/5h was 170 mAh·g<sup>-1</sup> whereas at 1Li<sup>+</sup>/1h it was 138 mAh·g<sup>-1</sup>, capacity remained 81% at higher rates showing a good rate performance for the polyimide with higher PEO molecular weight.



**Fig. S1** Discharge capacities of Naphthalene polyimide-b-PEO2000 under 1Li<sup>+</sup>/5h (□) and 1Li<sup>+</sup>/1h (Δ) current rates versus cycle number.