Supporting Information for

The Influence of ionic liquid on Phase Separation of Poly(N-isopropylacrylamide) Aqueous Solution

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**DSC measurement**

The 5% (W/V) PNIPAM aqueous solutions with 0, 0.1, 0.4, 0.8, 1.0, 1.5, 2.0 mol/L [Bmim][BF₄] were prepared before DSC measurement, respectively. The DSC was used to analyze the thermal properties of samples. Calibration for the temperature scale was performed using indium ($T_m = 156.60 \, ^\circ\text{C}$ and $\Delta H = 28.45 \, \text{J/g}$) as standard to ensure reliability of the data obtained, with an accuracy of 0.05 °C. All the experiments were performed in a nitrogen atmosphere. Each sample weighted about 10-15 mg and was sealed in aluminum pan. The measurement was carried out as following procedures: every sample was maintained at 20 °C for 5 min to ensure thermal equilibrium at the beginning, and then was heated to 45 °C at a rate of 10 °C/min.