

Supporting Information for

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

*Zhangwei Wang and Peiyi Wu**

The State Key Laboratory of Molecular Engineering of Polymers and Department of Macromolecular
Science and Laboratory of Advanced Materials, Fudan University, Shanghai 200433, People's Republic
of China

* corresponding author, email: peiyiwu@fudan.edu.cn

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 ($T_m = 156.60$ °C and $= 28.45$ 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.