Surface Organization, Light Driven Surface Changes and Stability of Semifluorinated Azobenzene Polymers

Supporting Information

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Differential scanning calorimetry was done using the Perkin-Elmer DCS-7 Series instrument to characterize the thermal properties of the polymers synthesized and mentioned in the paper. Atomic force microscopy images were taken using the DI-3100 AFM from Digital instruments under tapping mode. Amplitude setpoints ranging from 40-60% were used (hard tapping) to obtain images with the best phase contrast.

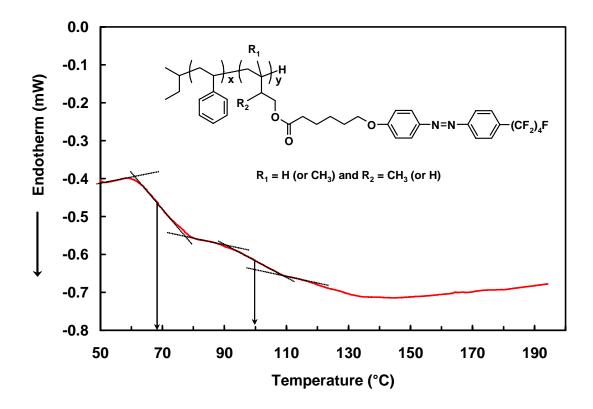


Figure 1. Differential scanning calorimetry (DSC) trace of PSPI-F4. The sample was heated under nitrogen to 200 °C at 20 °C/min. The transitions centered near 70 °C and 100 °C correspond to glass transition of the PI-F4 and PS blocks, respectively.

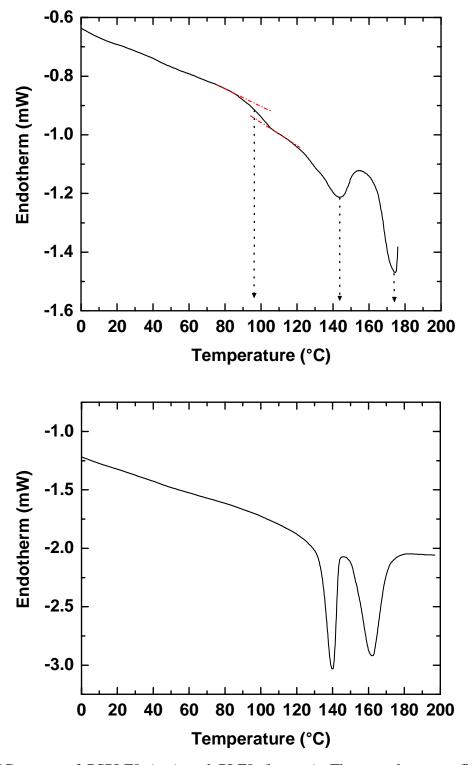


Figure 2. DSC traces of PSPI-F8 (top) and PI-F8 (bottom). The samples were first heated under nitrogen to 200 $^{\circ}$ C at 10 $^{\circ}$ C/min, annealed at 200 $^{\circ}$ C for 1 min and cooled to -50 $^{\circ}$ C at 10 $^{\circ}$ C /min. The data shown correspond to the second heating step.

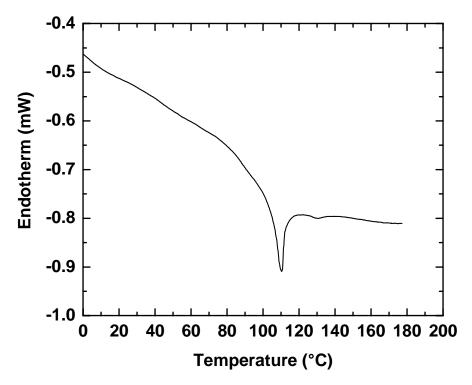


Figure 3. DSC trace of PSPI-F6, obtained as stated in caption to Fig 2.

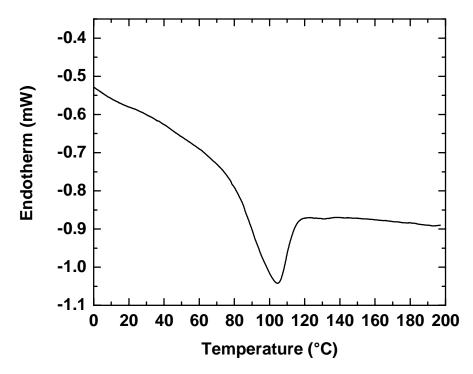


Figure 4. DSC trace of PSPI-F6_{0.5}, obtained as stated in caption to Fig 2.

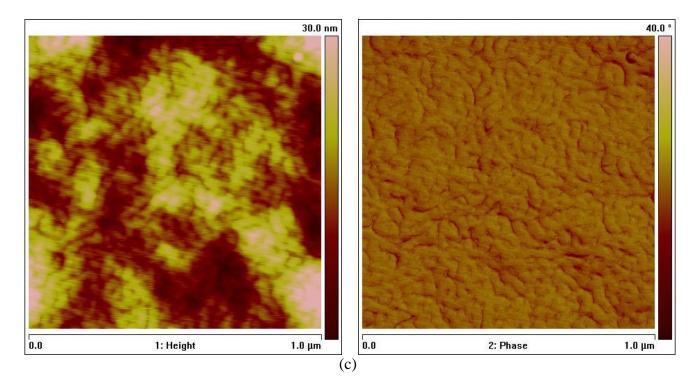


Figure 5. Atomic force microscopy (AFM) height and phase images of PSPI-F8.