

Supplementary Material for:

**Self-Assembly and Photo-Responsive Behavior of
Novel ABC₂-Type Block Copolymers Containing
Azobenzene Moieties**

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Turbidity Measurements (OD)

Figure S1 shows the turbidity diagrams of UV absorbance versus water content of the solutions at an initial copolymer concentration of 0.05 g/L. The CWC values of ESAz-1, ESAz-2, and ESAz-3 are 16.0 wt%, 14.4wt%, and 11.6%, respectively. The CWC values are larger than those of high initial copolymer concentration (1.0 g/L) shown in Figure 1. This is because that at the higher concentration, the copolymer chains tend to collide, and are easy to aggregate as the solubility of the solvents became worse. Meanwhile as can be seen in Figure S1, further adding the water, the turbidity is kept increasing and then tends to level off. Only one jump of the turbidity can be observed, which suggests that only one single aggregate structure may be formed upon the addition of water.^{1,2}

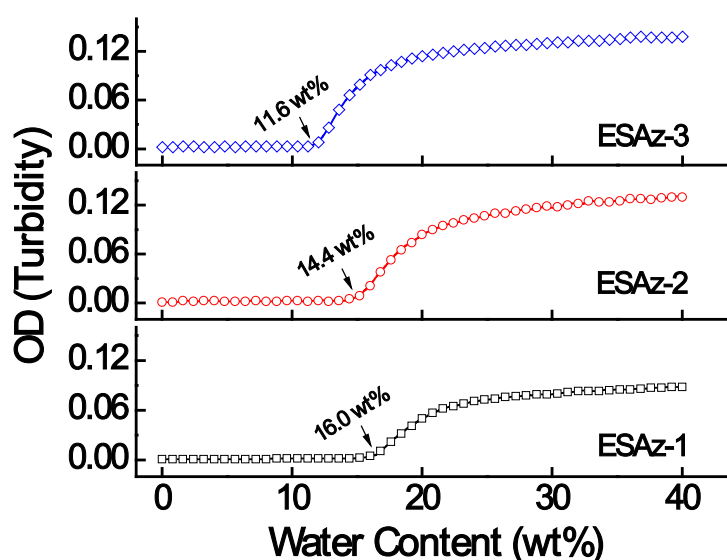


Fig. S1 Turbidity (optical density) curves of the triblock copolymer solution in dioxane at an initial concentration of 0.05 g/L as a function of the amount of water added to the solution.

References

1. G. Yu and A. Eisenberg, *Macromolecules*, 1998, **31**, 5546.
2. J. Yang, R. Piñol, F. Gubellini, D. Lévy, P. A. Albouy, P. Keller and M. H. Li, *Langmuir*, 2006, **22**, 7907.