

Supporting Information

**Supporting Information for
PU/PMMA composite synthesized by
reaction-induced phase separation: a general
approach to achieve shape-memory effect**

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XPS results

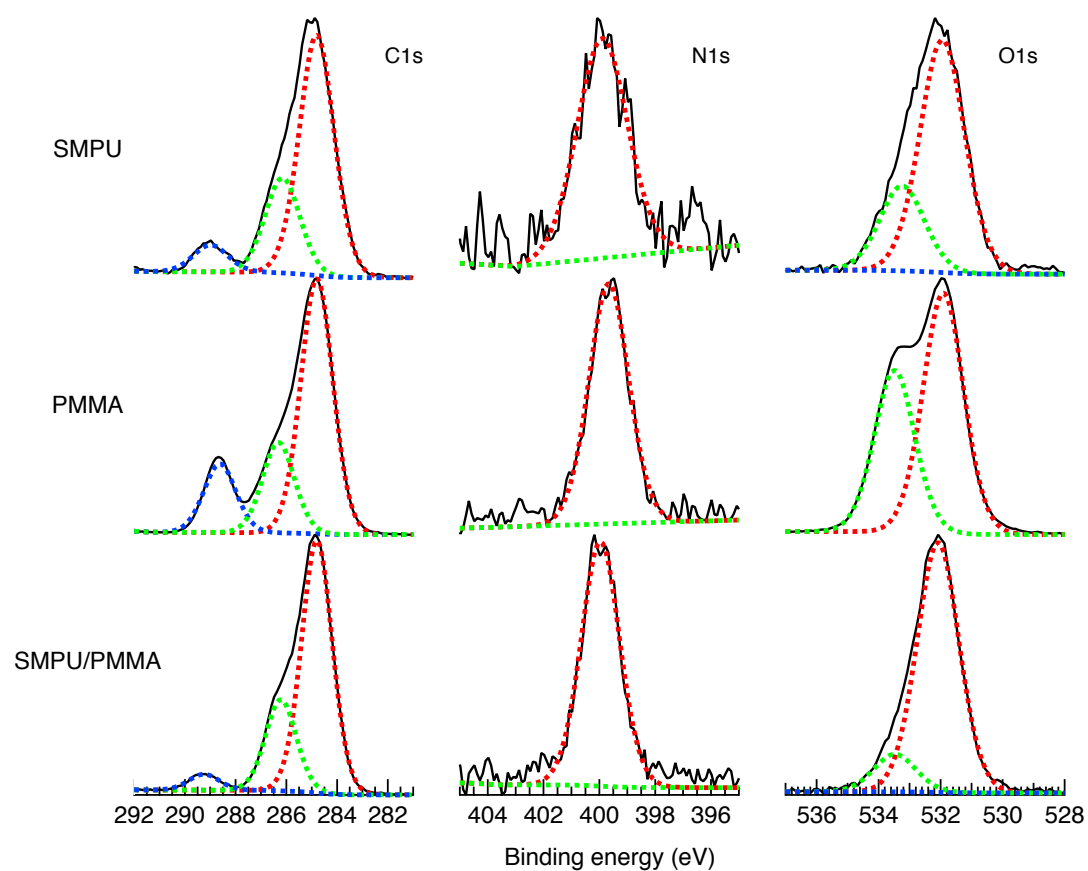


Figure S1: The XPS spectra of SMPU, PMMA and the composites SMPU/PMMA.

DSC results

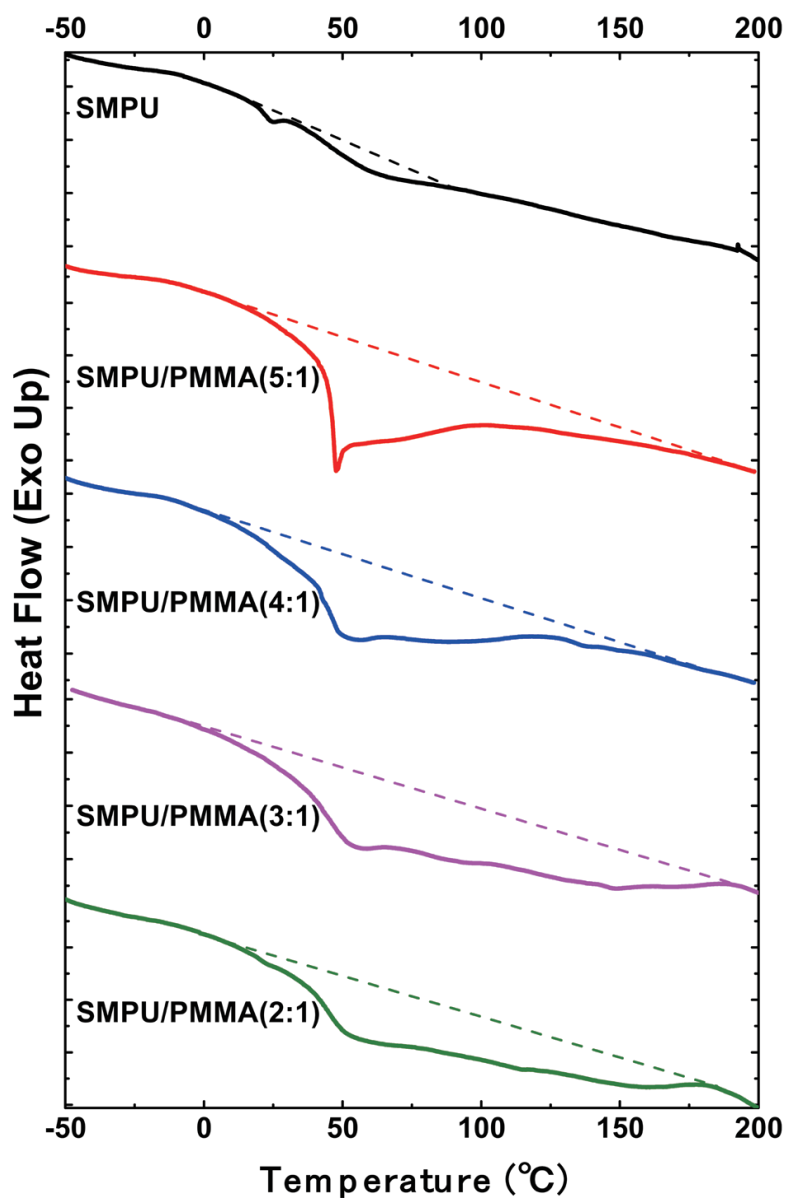


Figure S2: The DSC curves for SMPU and the composites of SMPU/PMMA with different volume ratio.

Static force

Figure S3 shows the results of static force stored in the materials, and the change of static force with temperature. In this measurement, the specimen was first stretched to double of its original length. Then the length of the specimen was fixed at 0 °C. By gradually increasing temperature, the elastic potential stored in the specimen was realized. In the temperature region investigated, the composites show higher static force than pure PU. The static force of pure PU continue decrease with temperature monotonically; while the static force of composites increase first, and gradually drop after it reaches the maximum value.

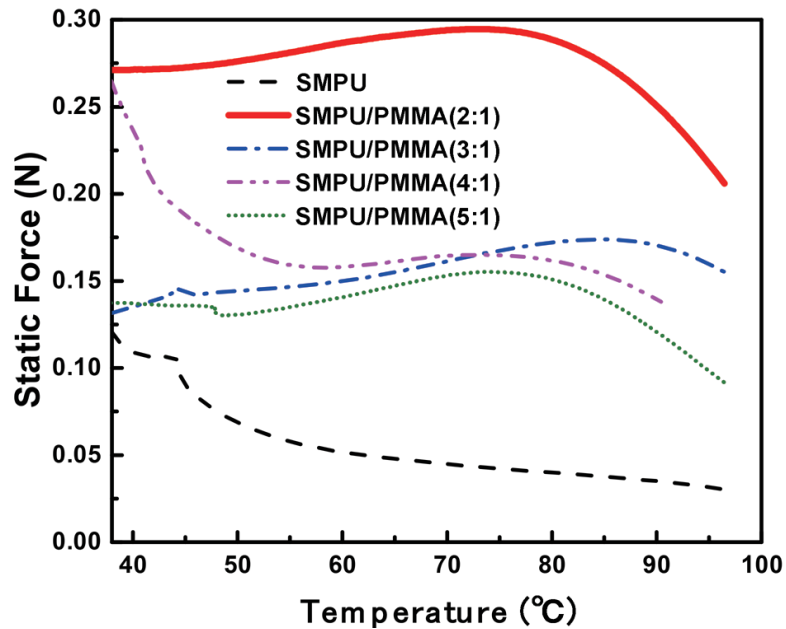


Figure S3: The results of static force measurements for SMPU and the composites SMPU/PMMA with different volume ratio.