

Supplementary Information for

Hierarchical Self-assembly, Photo-responsive Phase Behavior and Variable Tensile Property of Azobenzene-containing ABA Triblock Copolymers

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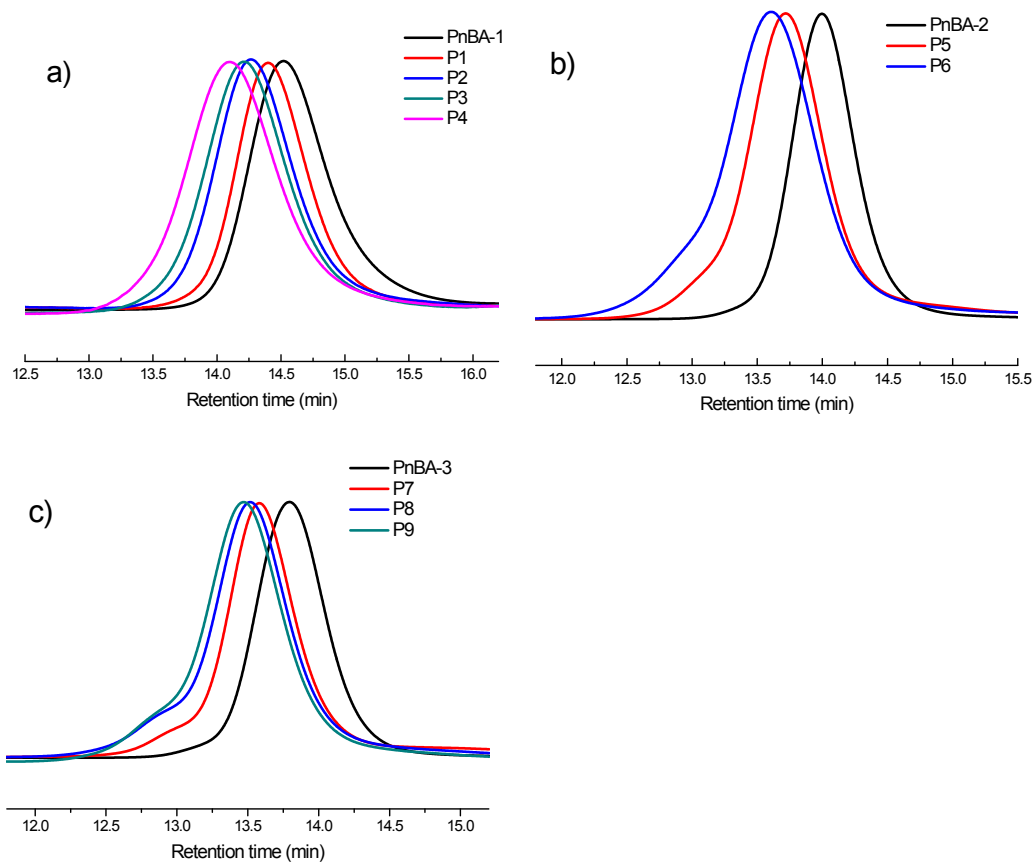


Fig. S1 GPC curves of a) PnBA-1, b) PnBA-2 and c) PnBA-3 based triblock copolymers.

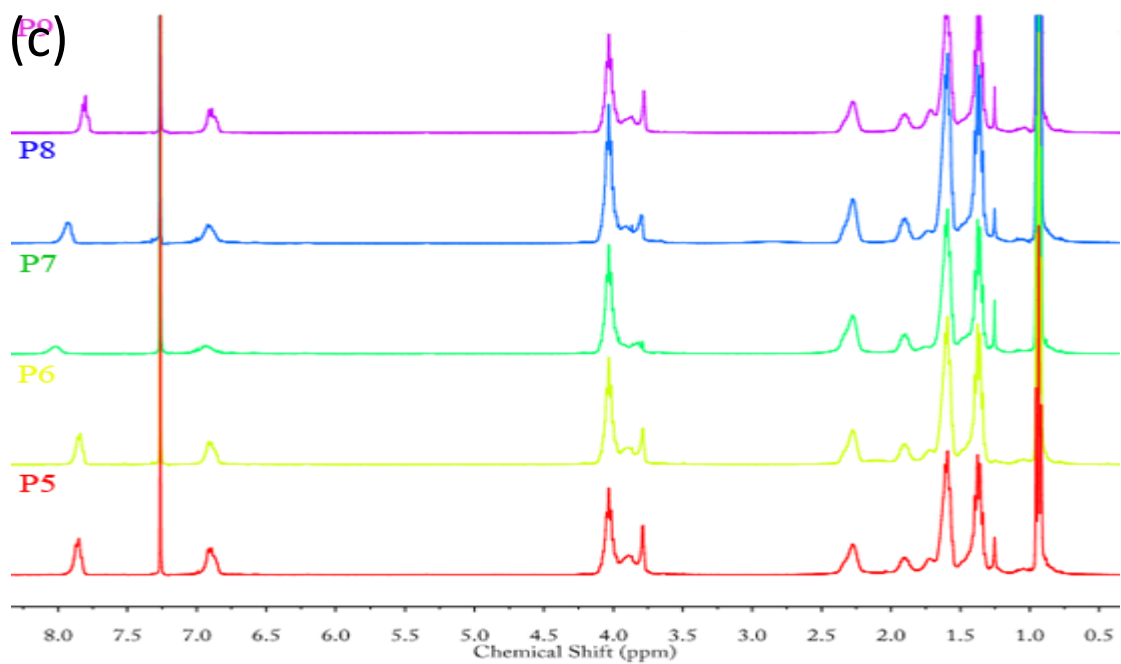
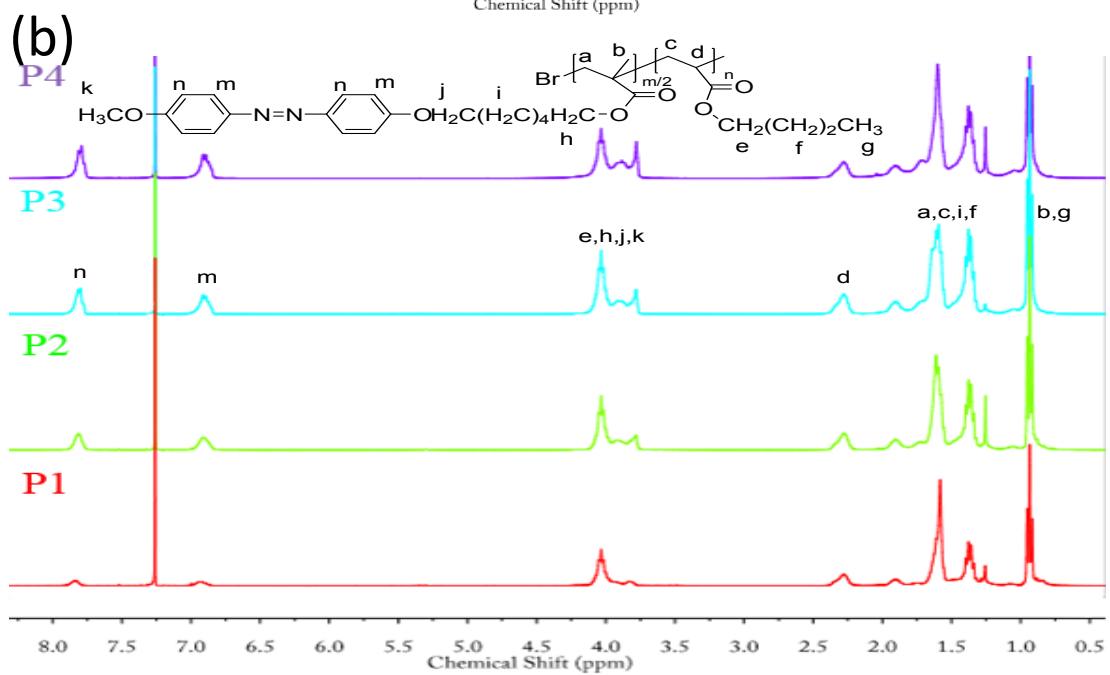
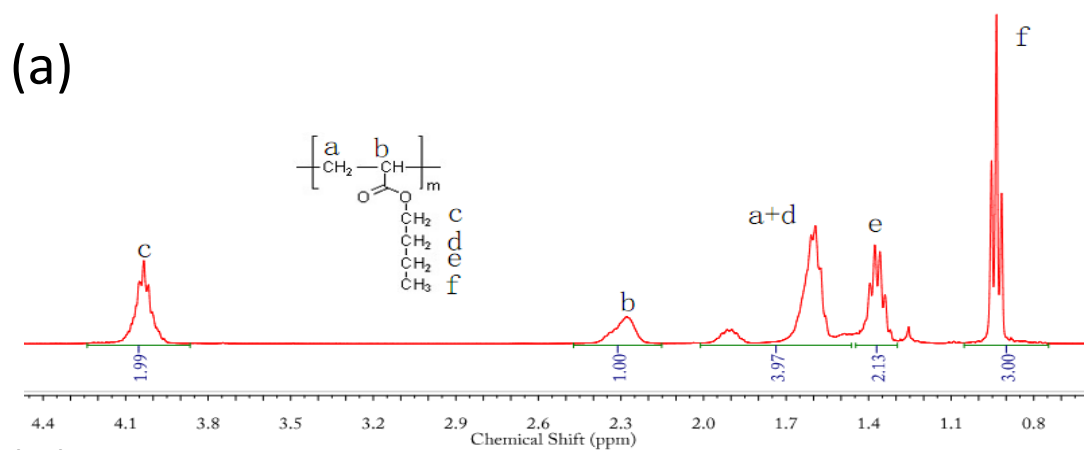


Fig. S2 NMR spectrum of (a) PnBA-1, (b) triblock copolymers (P1-P4) and (c) P5-P9.

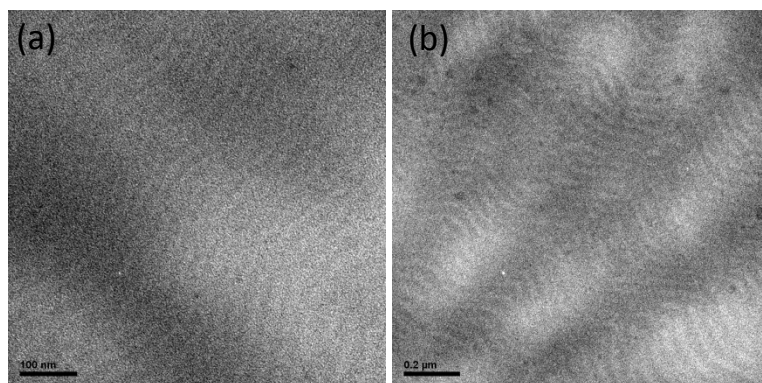


Fig. S3 TEM images of (a) P4 and (b) P6.

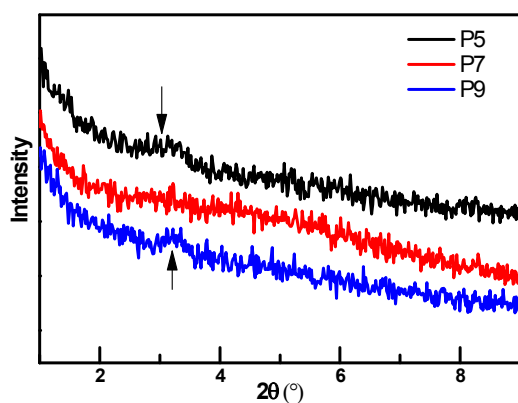


Fig. S4 XRD curves of P5, P7 and P9 at room temperature, the experiment carried out in an X'Pert PRO instrument (PANalytical BV) at room temperature using Ni-filtered Cu K α radiation with a wavelength of 1.54 Å as the X-ray source. Noting that the wavelength is different from the experiment obtained from synchrotron X-ray in manuscript.

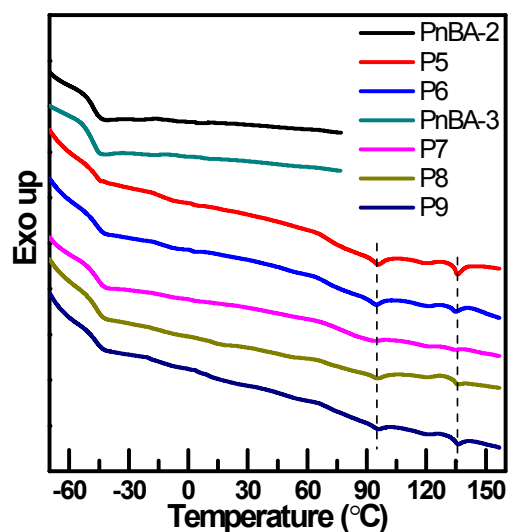


Fig. S5 DSC heating scans of PnBA-2 and PnBA-3 based triblock copolymers.

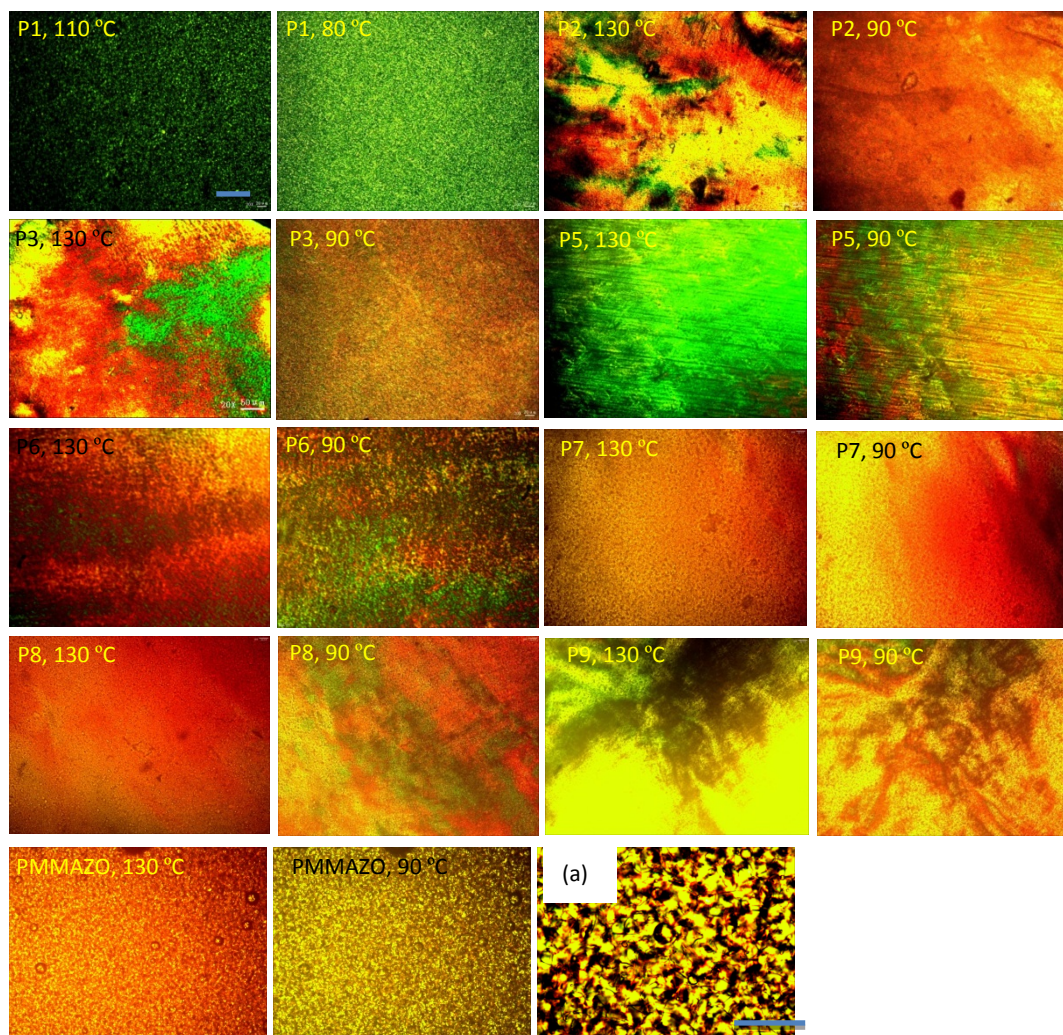


Fig. S6 POM image of triblock copolymers and POMMAZO homopolymer at the indicated temperatures. The image of (a) is the magnification in the image of PMMAZO 90 °C. The scale bare in the figure is 50 μ m.

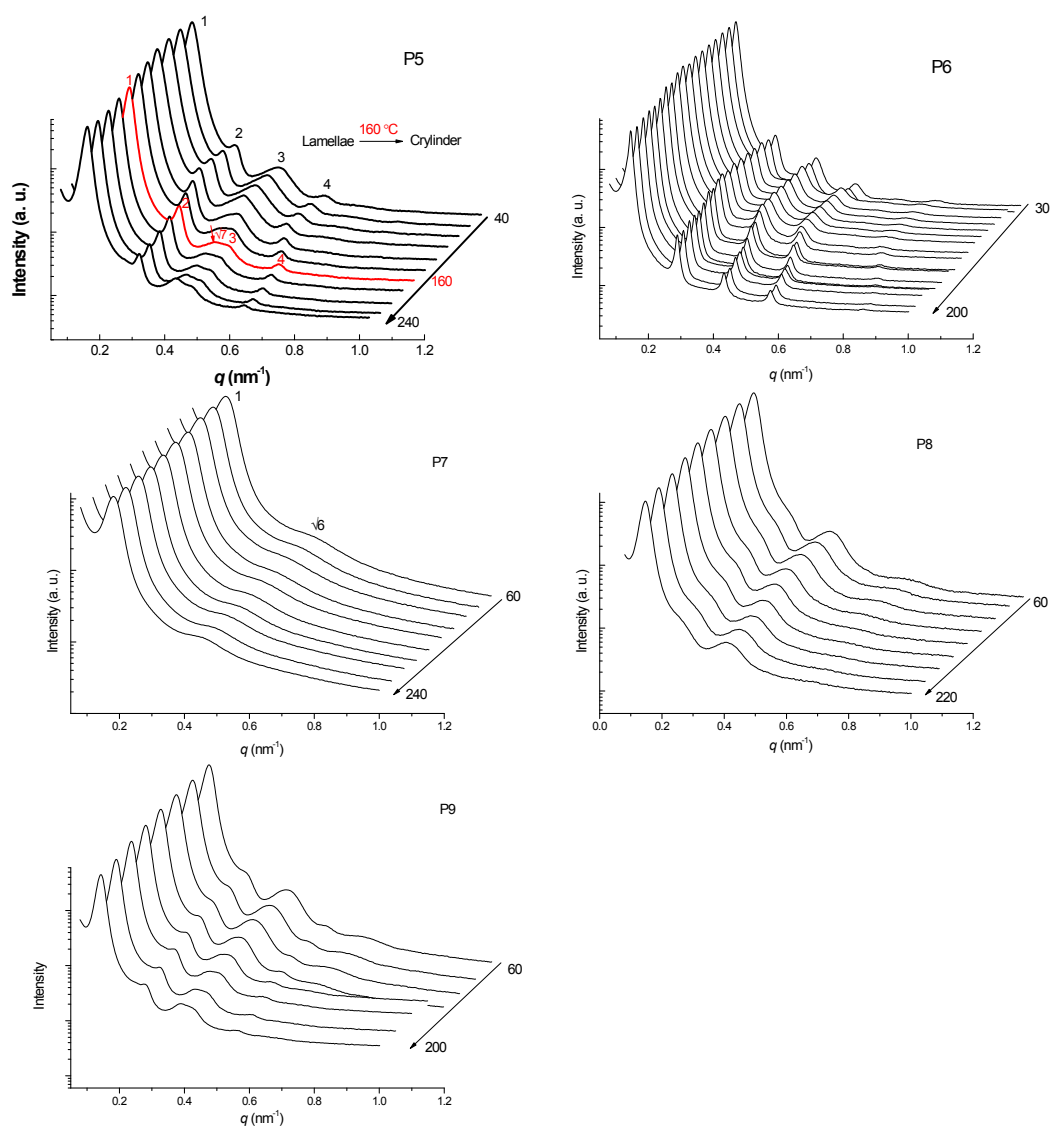


Fig. S7 Temperature-dependent SAXS profiles of P5-P9.

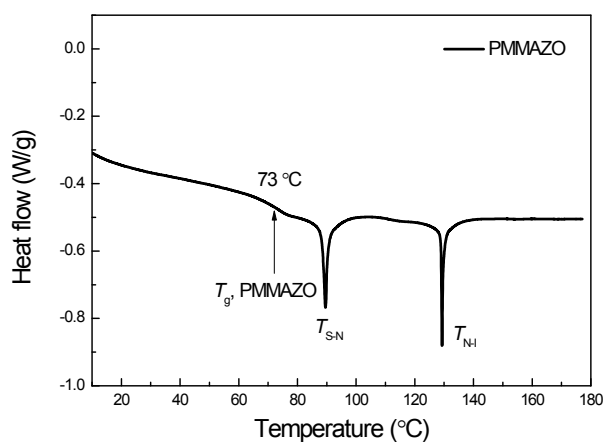


Fig. S8 DSC second heating scan of homopolymer PMMAZO sample. In this case, the T_g of PMMAZO block could be obviously observed and located as around 73°C .

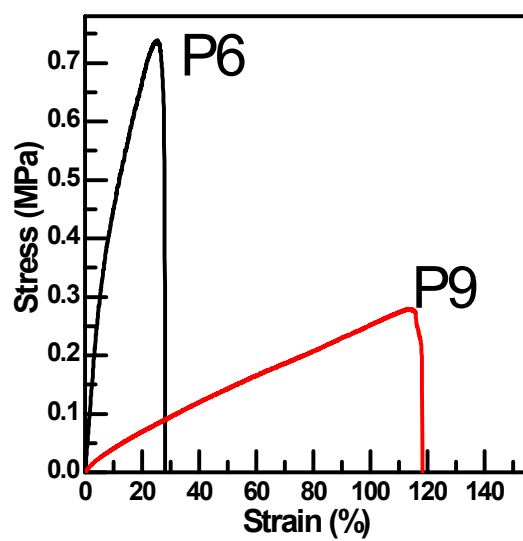


Fig. S9 The uniaxial stress-strain curves of P6 and P9 at room temperature.