Supporting Information

Thermoresponsive dendronized poly(phenylacetylene)s showing tunable helicity

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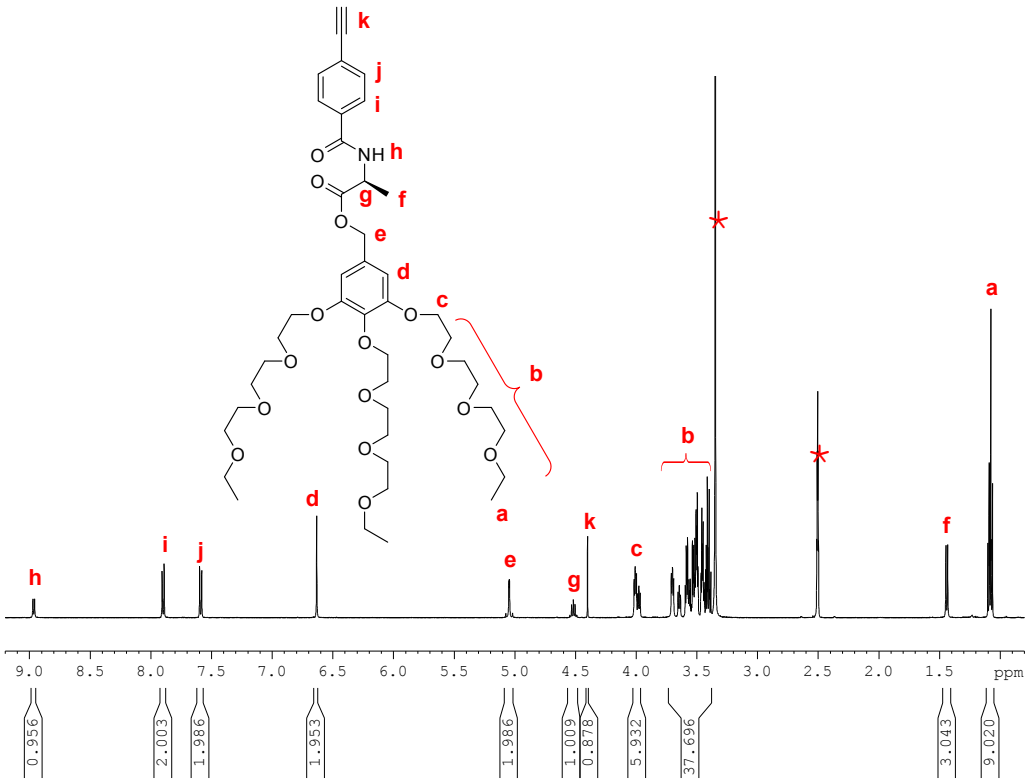

Figure S1. ^{1}H NMR spectrum of monomer **PA-ACe** in d_6-DMSO. The solvent peak is marked with asterisk (*).

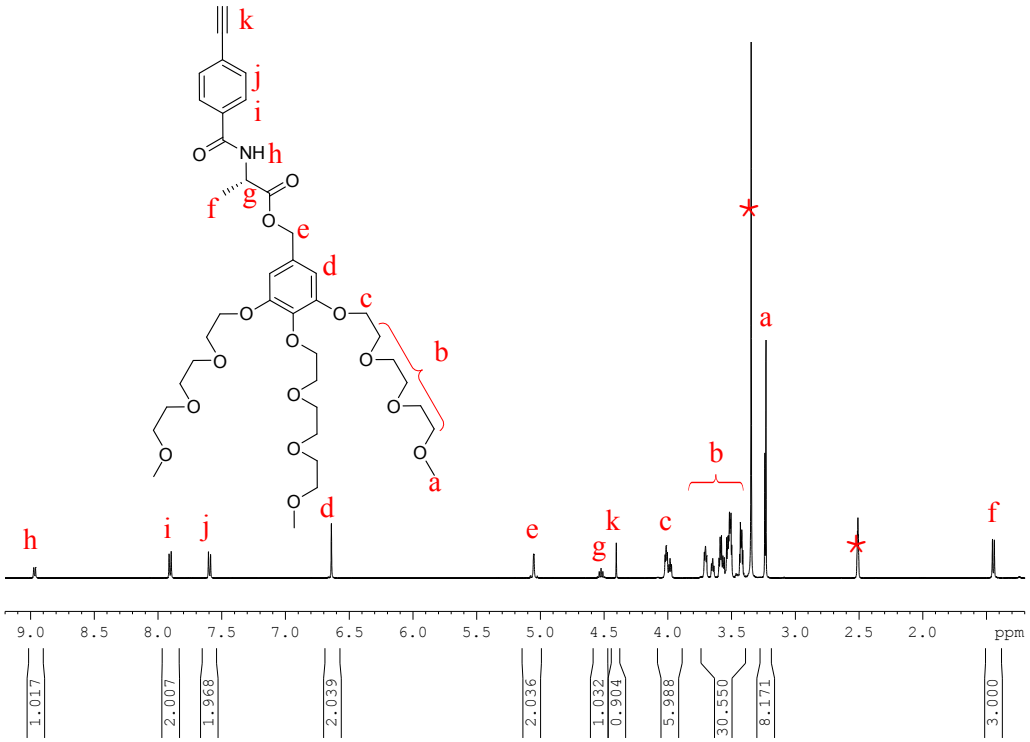

Figure S2. ^{1}H NMR spectrum of monomer **PA-ACm** in d_6-DMSO. The solvent peak is marked with asterisk (*).

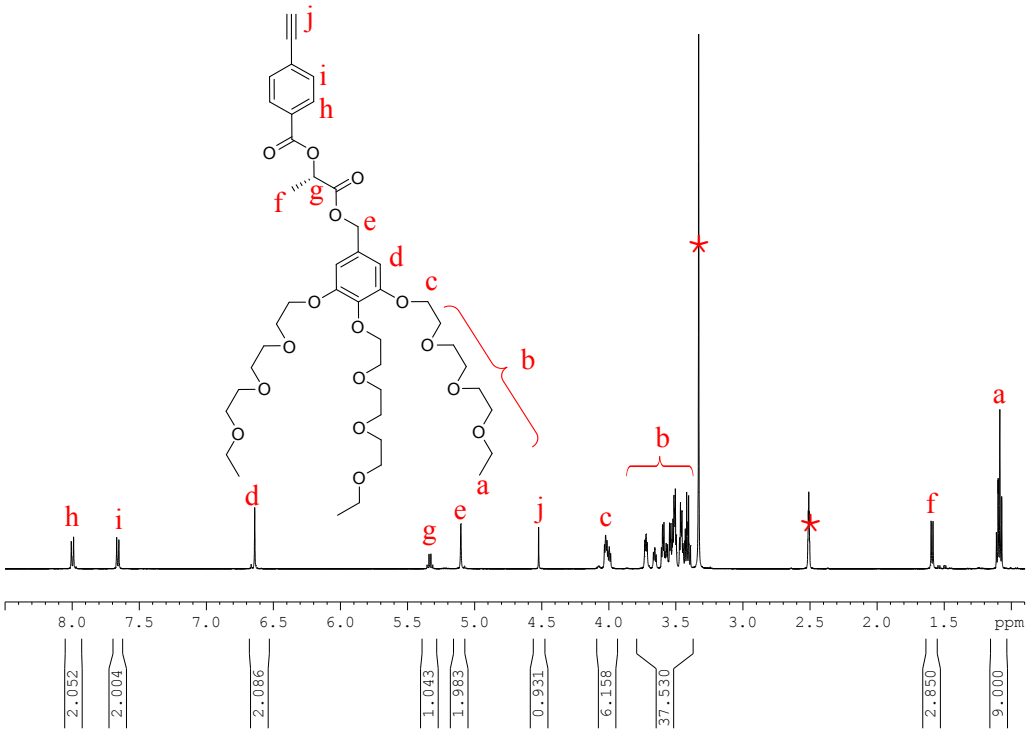

Figure S3. ^{1}H NMR spectrum of monomer **PA-ES** in d_6-DMSO. The solvent peak is marked with asterisk (*).

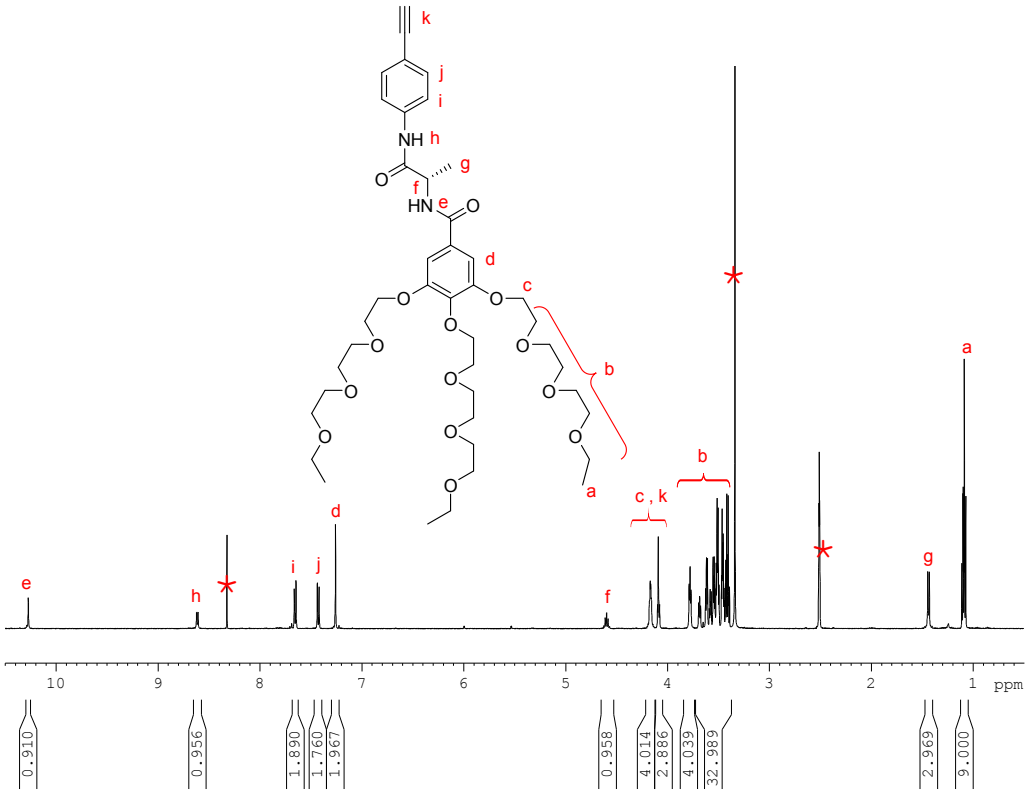

Figure S4. ^{1}H NMR spectrum of monomer **PA-dAM** in d_6-DMSO. The solvent peak is marked with asterisk (*).

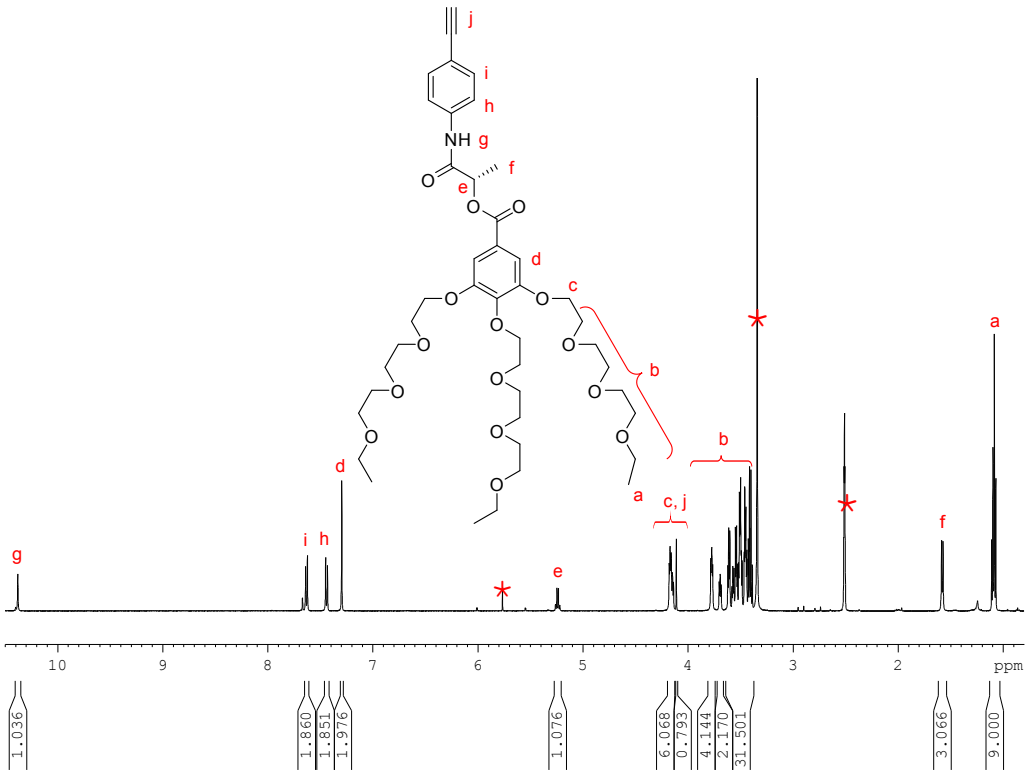

Figure S5. ^{1}H NMR spectrum of monomer **PA-AM** in d_6-DMSO. The solvent peak is marked with asterisk (*).

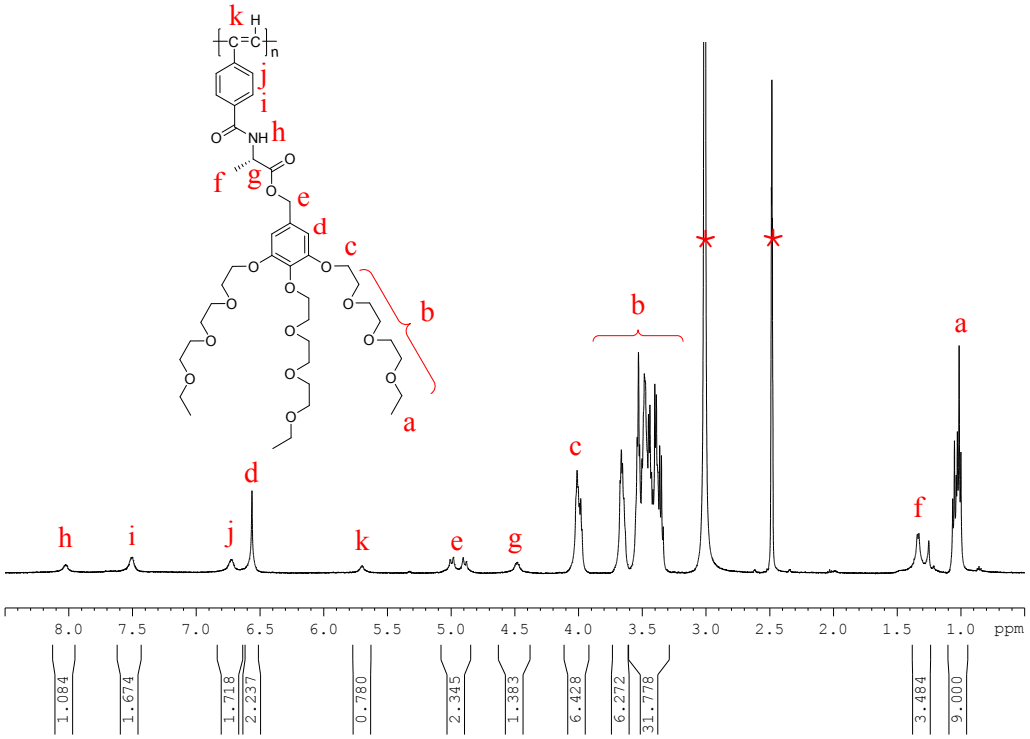

Figure S6. ^{1}H NMR spectrum of compound **PPA-ACe** in d_6-DMSO. The solvent peak is marked with asterisk (*).

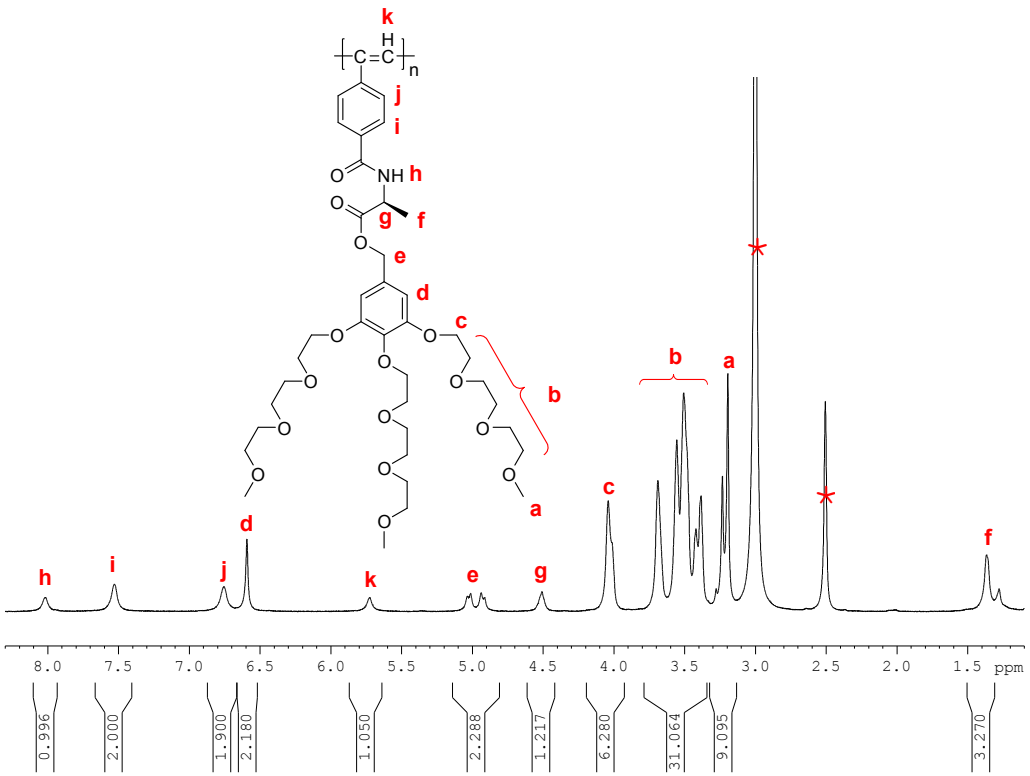

Figure S7. ^{1}H NMR spectrum of compound **PPA-ACm** in d_6-DMSO. The solvent peak is marked with asterisk (*).

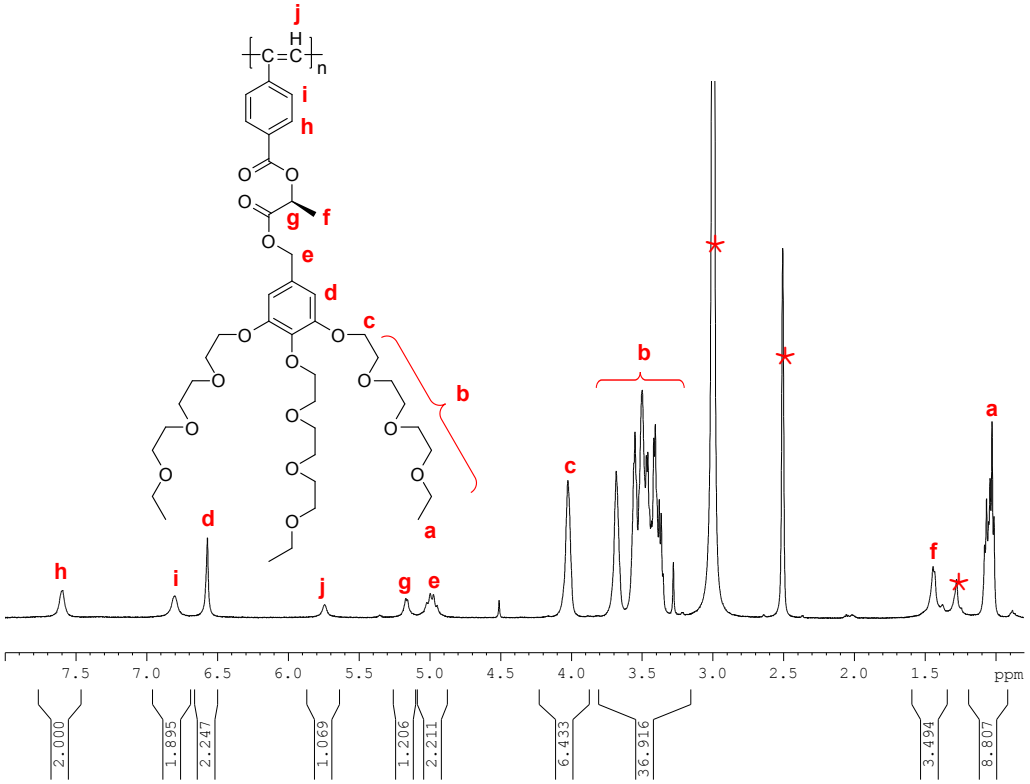

Figure S8. ^{1}H NMR spectrum of compound **PPA-ES** in d_6-DMSO. The solvent peak is marked with asterisk (*).

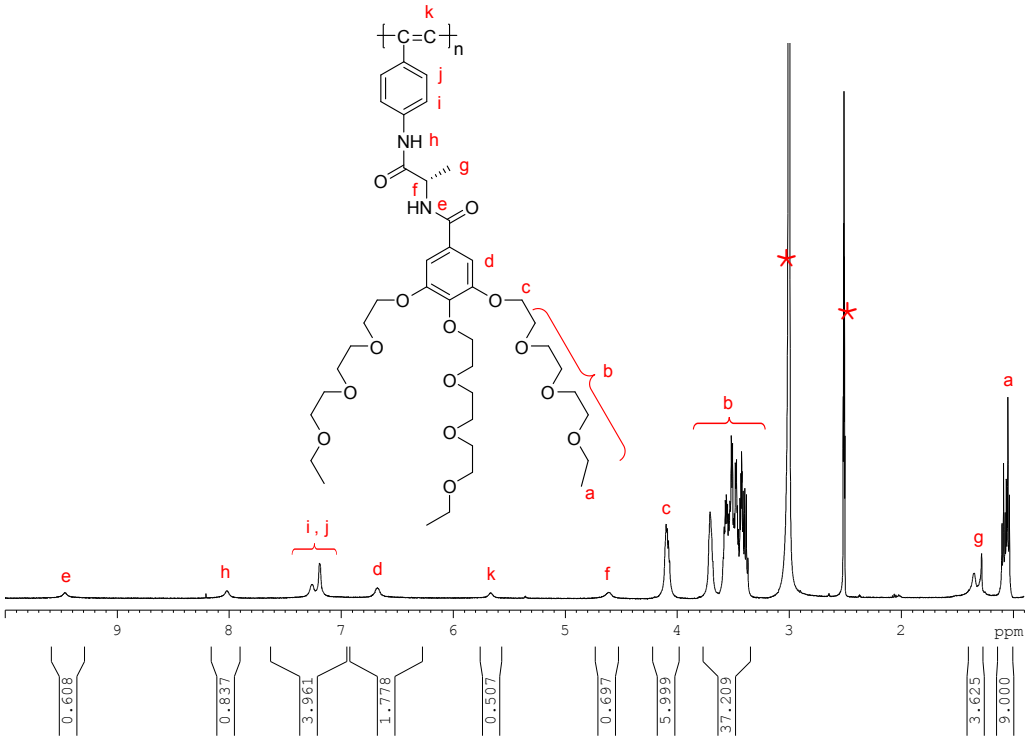

Figure S9. ^{1}H NMR spectrum of compound **PPA-dAM** in d_6-DMSO. The solvent peak is marked with asterisk (*).

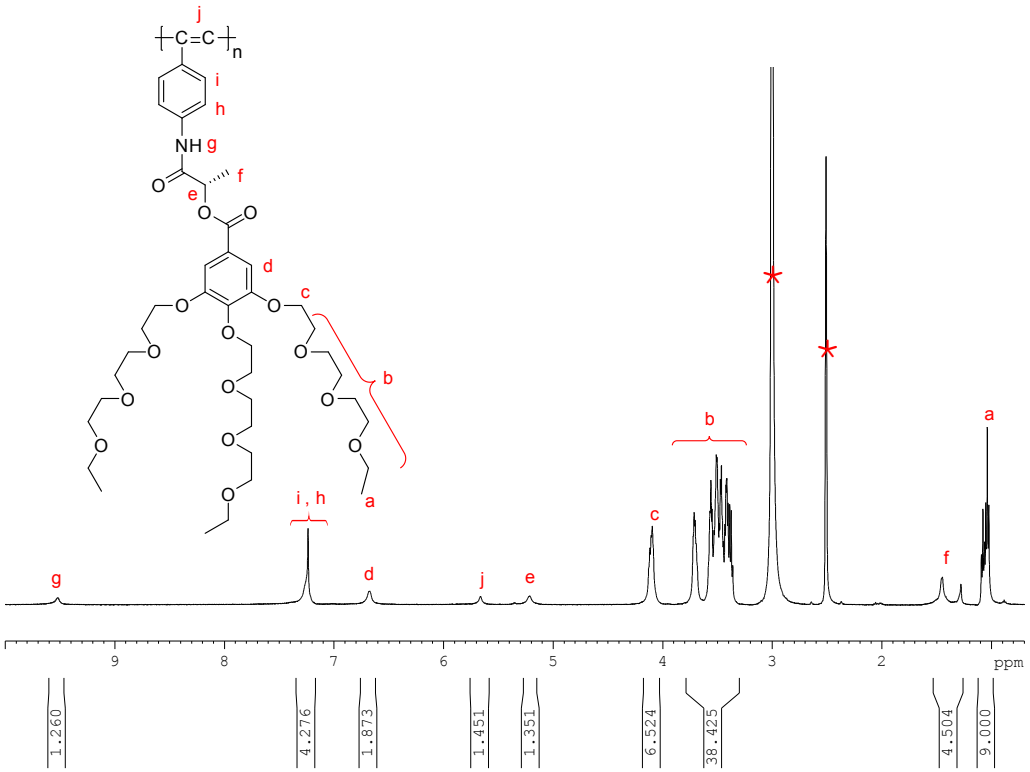

Figure S10. ^{1}H NMR spectrum of compound **PPA-AM** in d_6-DMSO. The solvent peak is marked with asterisk (*).

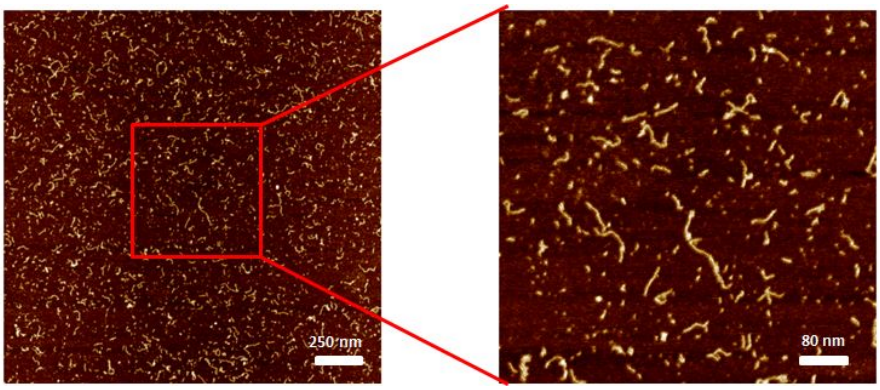

Figure S11. Atomic force microscopy (AFM) image of **PPA-ACm** from THF solution (0.002 mg/mL).

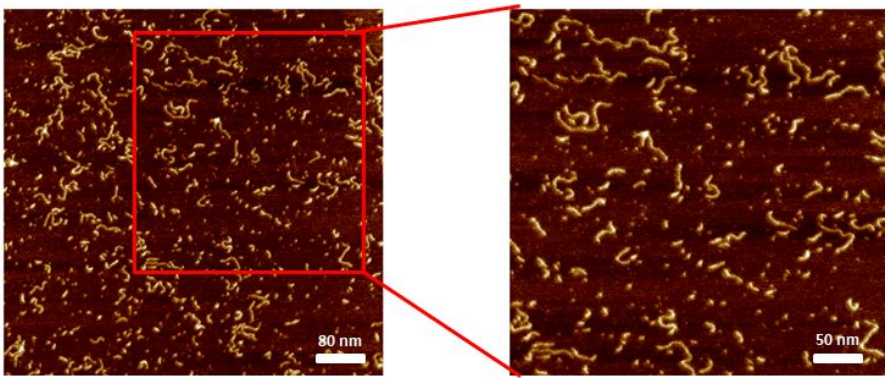

Figure S12. Atomic force microscopy (AFM) image of **PPA-ACe** from THF solution (0.002 mg/mL).

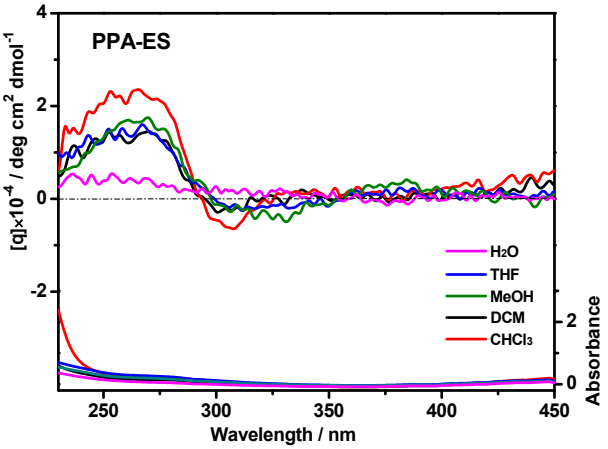

Figure S13. CD and UV-vis spectra of **PPA-ES** (0.25 mg/mL) measured in H_2O, THF, MeOH, DCM and $CHCl_3$ at 25 °C.

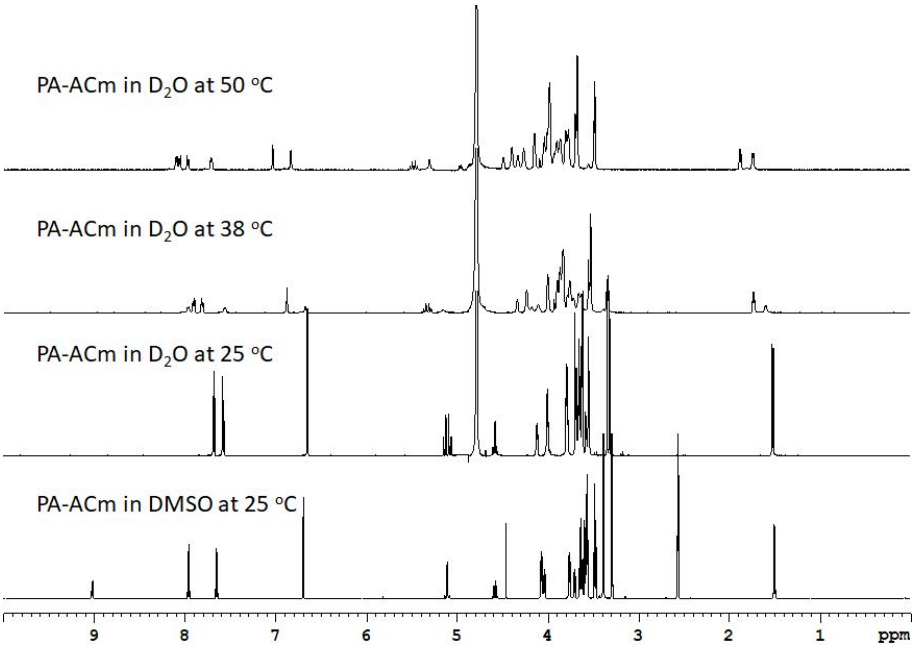

Figure S14. ^{1}H NMR spectra of monomer **PA-ACm** at various temperatures in D_2O, as well as in d_6-DMSO at 25 °C.

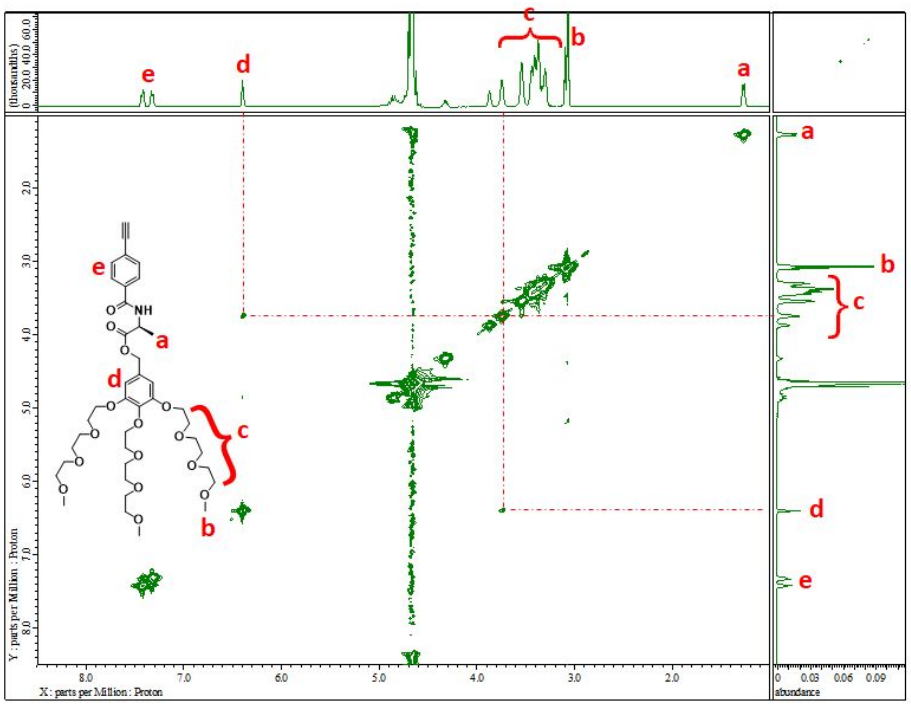

Figure S15. ^{1}H-^{1}H NOESY spectrum of monomer **PA-ACm** in D_2O at 10 °C. Mixing time 1000 ms.

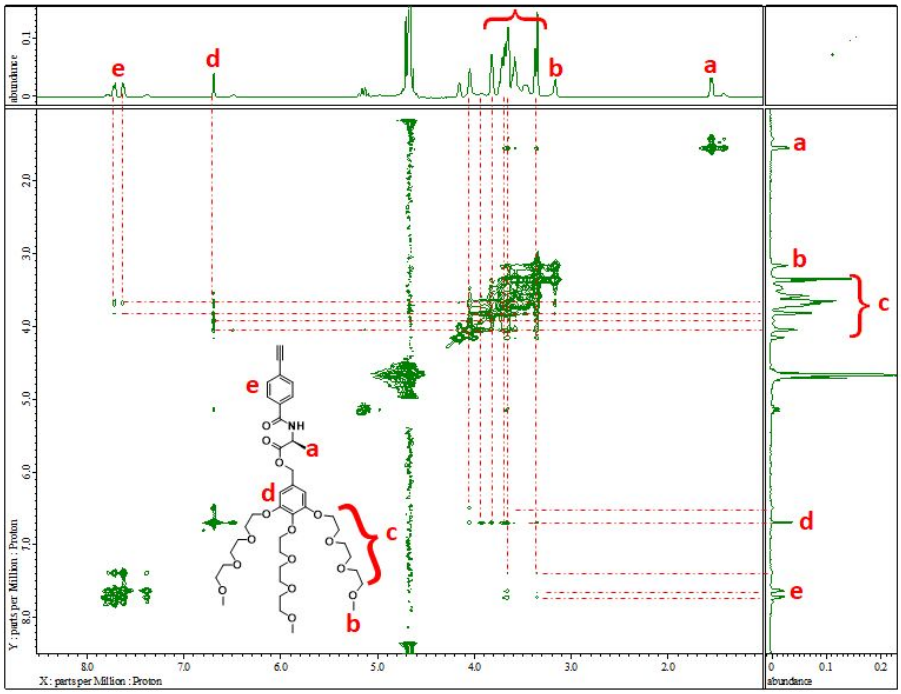

Figure S16. ^{1}H-^{1}H NOESY spectrum of monomer **PA-ACm** in D_2O at 38 °C. Mixing time 1000 ms.

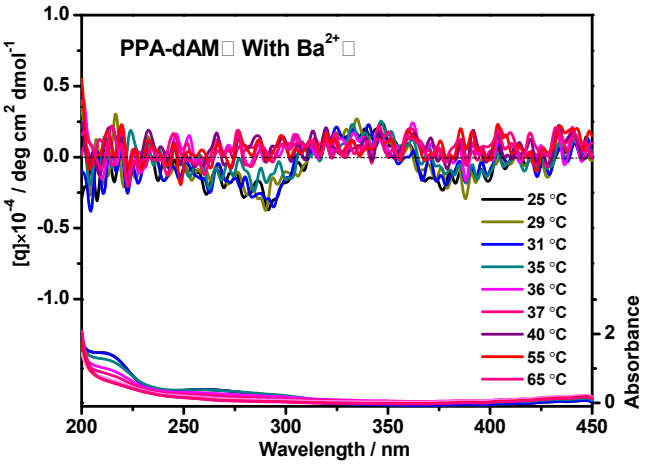

Figure S17. Temperature variable CD spectra of **PPA-dAM** (0.025 mg/mL) taken after the addition of $BaCl_2 \cdot H_2O$ (0.25 mg/mL).