Supporting information for

## Thermophilic films and fibers from photo cross-linkable UCST-type polymers

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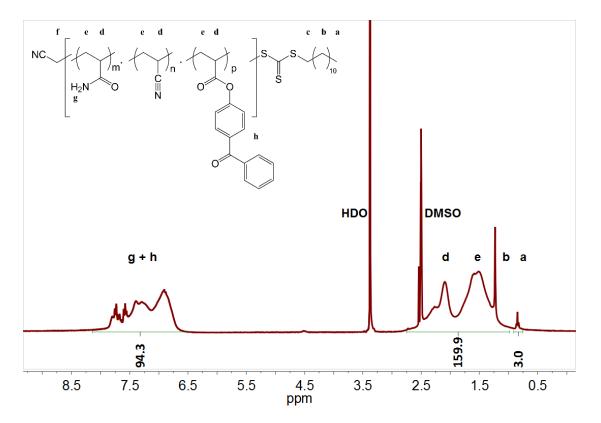


Figure S1. <sup>1</sup>H NMR spectra of RAFT poly(AAm-AN-BPA) (table 1, entry 7, monomer in feed= 92:6:2). The spectra were measured in DMSO-*d*6 at 60 °C. Protons from amide and BPA overlap at 6.5 -7.5 ppm making it not possible to determine the polymer composition.

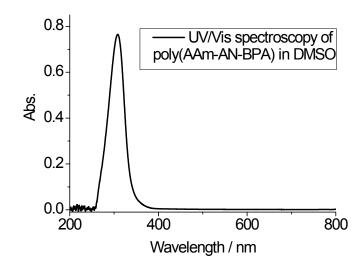


Figure S2. UV/Vis spectroscopy of RAFT poly(AAm-AN-BPA) (table 1, entry 7, monomer in feed= 92:6:2) in DMSO.

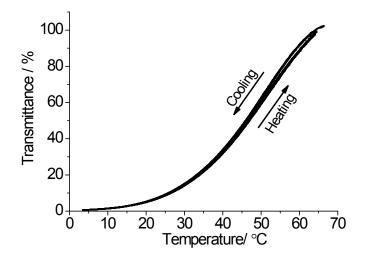


Figure S3. Turbidity measurements of 0.1 wt.% solution of poly(AAm-AN-BPAm) made by FRP using V-70 as initiator. (Table 2 entry 2, AAm : AN : BPAm = 88 : 10 : 2,  $M_n = 60$  kDa, PDI = 1.5).