Electronic Supplementary Information: Post-synthesis modification of slide-ring gels for thermal and mechanical reconfiguration

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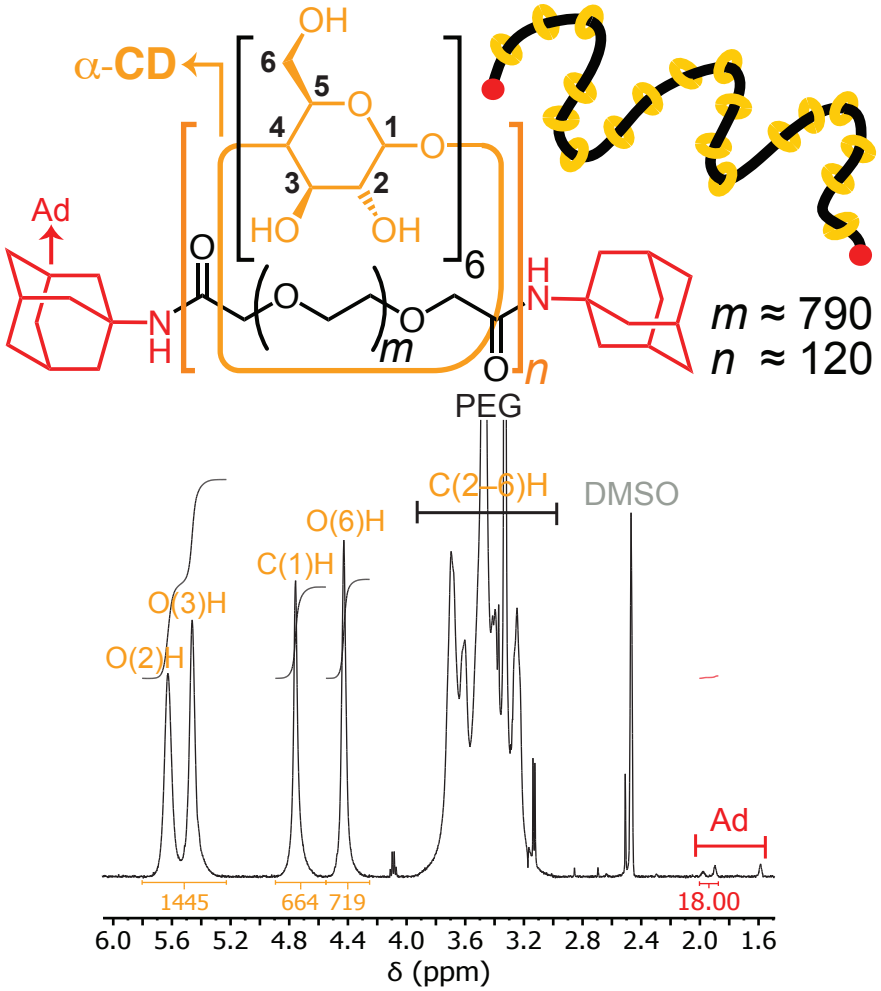

Figure S1: ^{1}H NMR spectrum (400 MHz, DMSO-d_6, 293 K) of uPR.

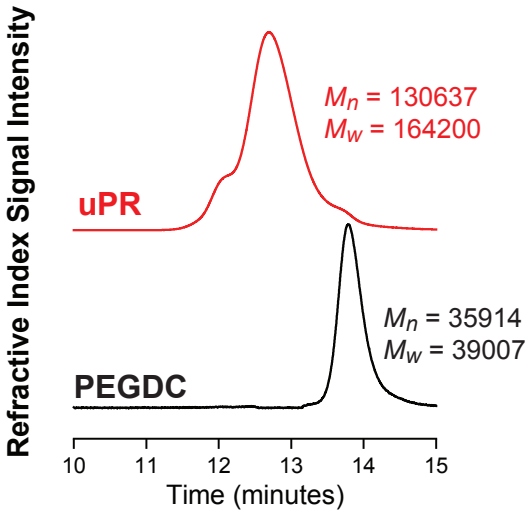

Figure S2: Gel permeation chromatography (GPC) traces of uPR and PEGDC in DMSO (0.2% w/v).

Table S1: Volume changes associated with cryogel formation of SRGs and PLGs

Sample	Original volume	Freeze dried volume		Heat dried volume	
	mm^3	mm^3	% change	mm^3	% change
SRG0	20.41	14.93	31.8 ± 3.3	5.70	71.5 ± 5.0
SRG1	18.64	12.59		6.38	
SRG2	19.23	12.33		5.96	
SRG3	24.53	16.27		5.10	
PLG0	13.34	9.21	32.2 ± 1.1	2.24	83.0 ± 2.1
PLG1	10.79	7.22		2.20	
PLG2	13.14	9.13		2.10	
PLG3	16.28	10.97		2.40	

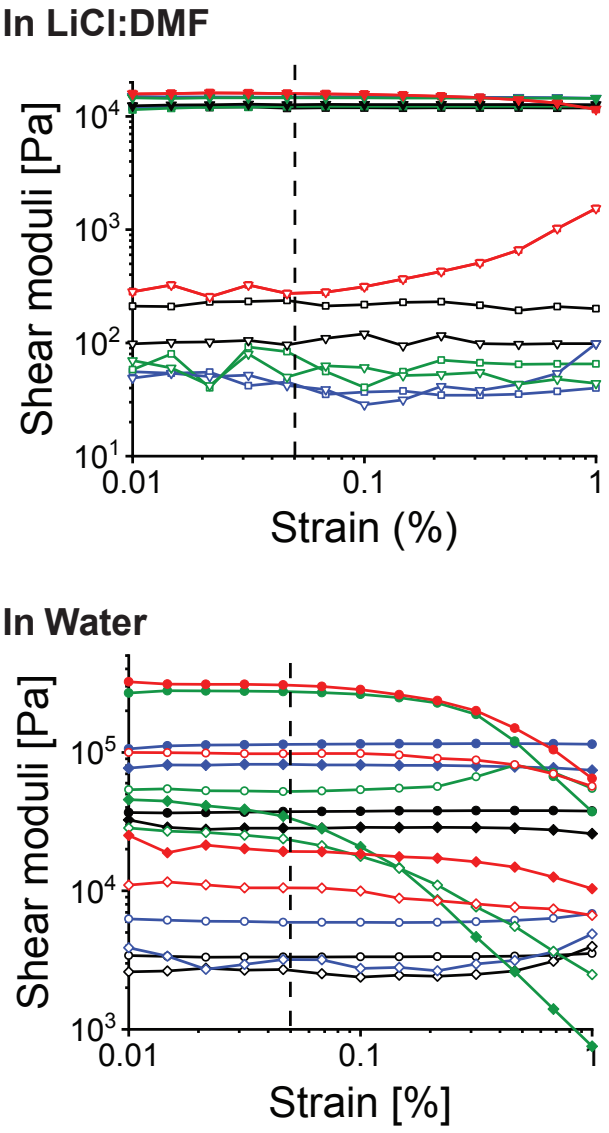

Figure S3: Amplitude sweep plots for SRG0–SRG3 at room temperature (RT) and 70 °C in (a) LiCl:DMF solution and (b) water.

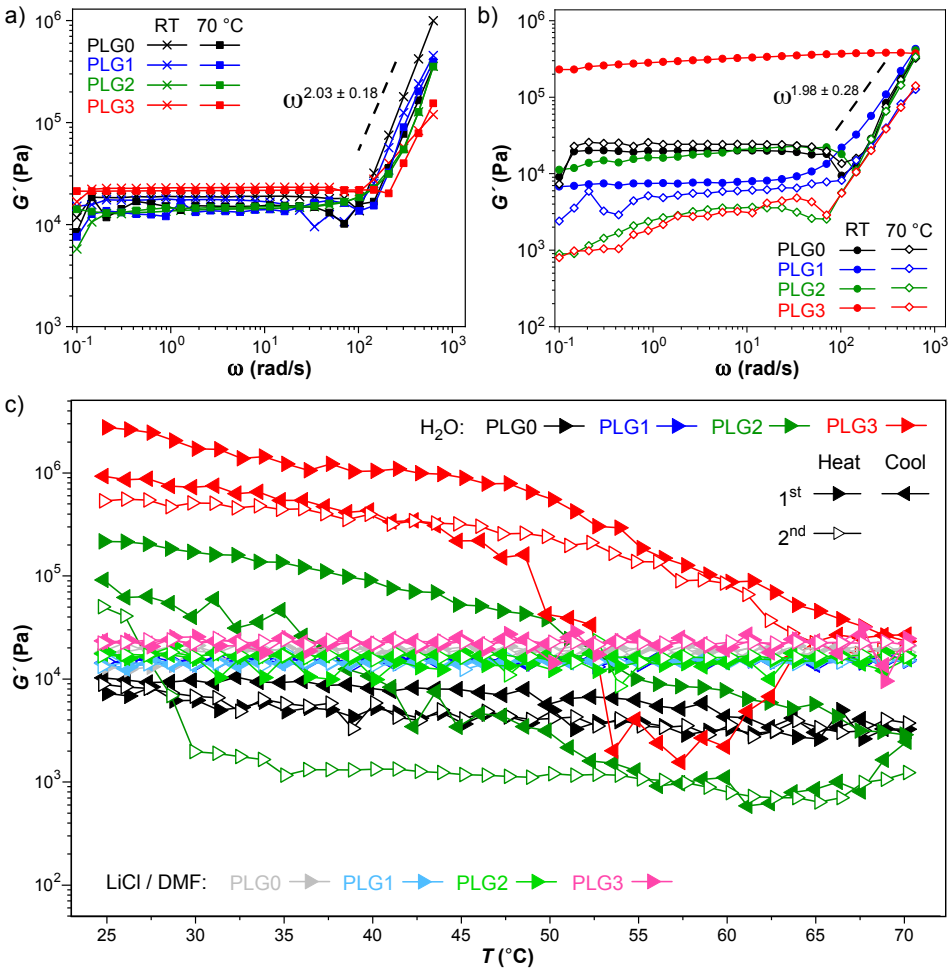

Figure S4: Rheology of pullulan (PL) gels. (a) Frequency sweeps at RT and 70 °C for PLG0–PLG3 in LiCl:DMF (8% w/v) solution. (b) Frequency sweeps at RT and 70 °C for PLG0–PLG3 in water. (c) Temperature sweeps of PLG0–PLG3 in water and LiCl/DMF (8% w/v).

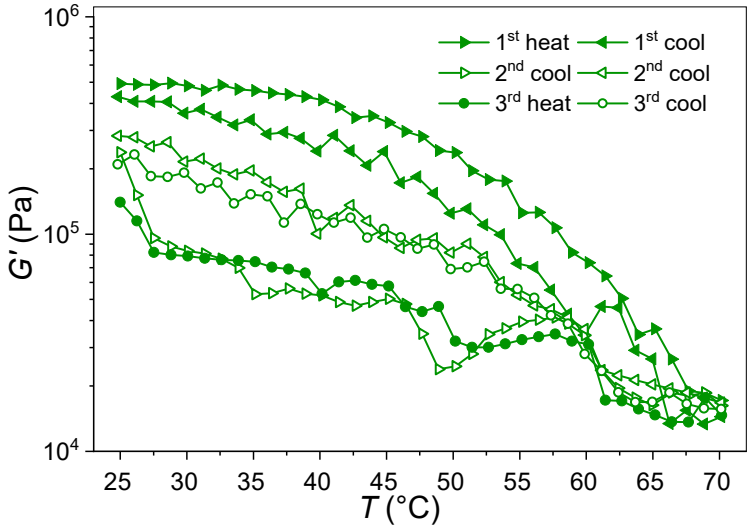

Figure S5: Temperature sweeps of SRG2 with an equilibration period of 1 hour between heat-cool cycles.