

Supplementary Information

Thermoresponsive Dendritic Oligoethylene Glycols

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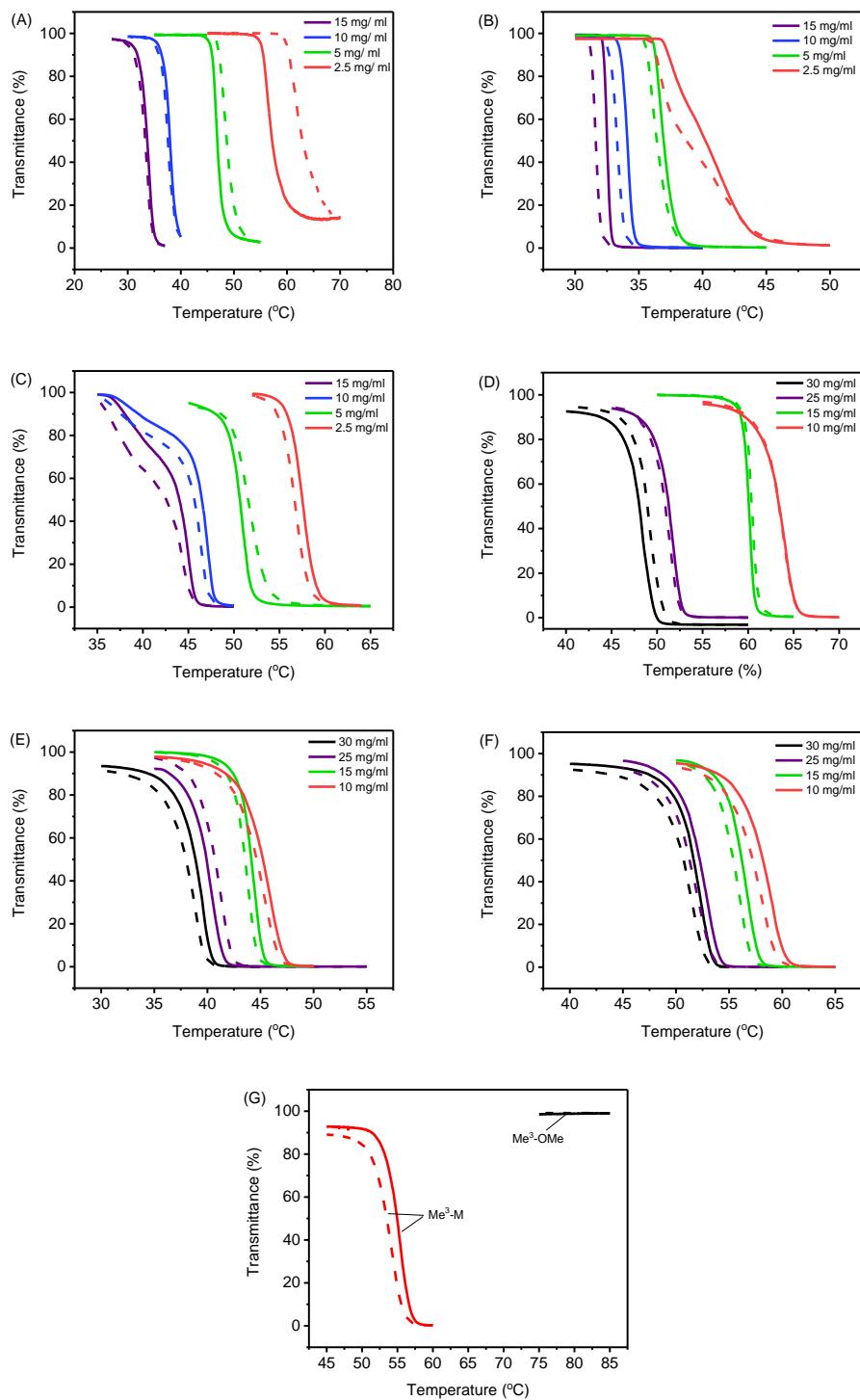


Fig. S1 Plots of transmittance vs temperature for aqueous solutions of $\text{Et}^3\text{-M}$ (A), $\text{Et}^4\text{-M}$ (B), $\text{Et}^6\text{-M}$ (C), $\text{Et}^3\text{-OMe}$ (D), $\text{Et}^4\text{-OMe}$ (E), $\text{Et}^6\text{-OMe}$ (F), $\text{Me}^3\text{-M}$ and $\text{Me}^3\text{-OMe}$ (G, sample concentration 20 mg/mL). Heating and cooling rate = $0.2 \text{ } ^\circ\text{C} \cdot \text{min}^{-1}$. Heating: solid line; cooling: dot line.

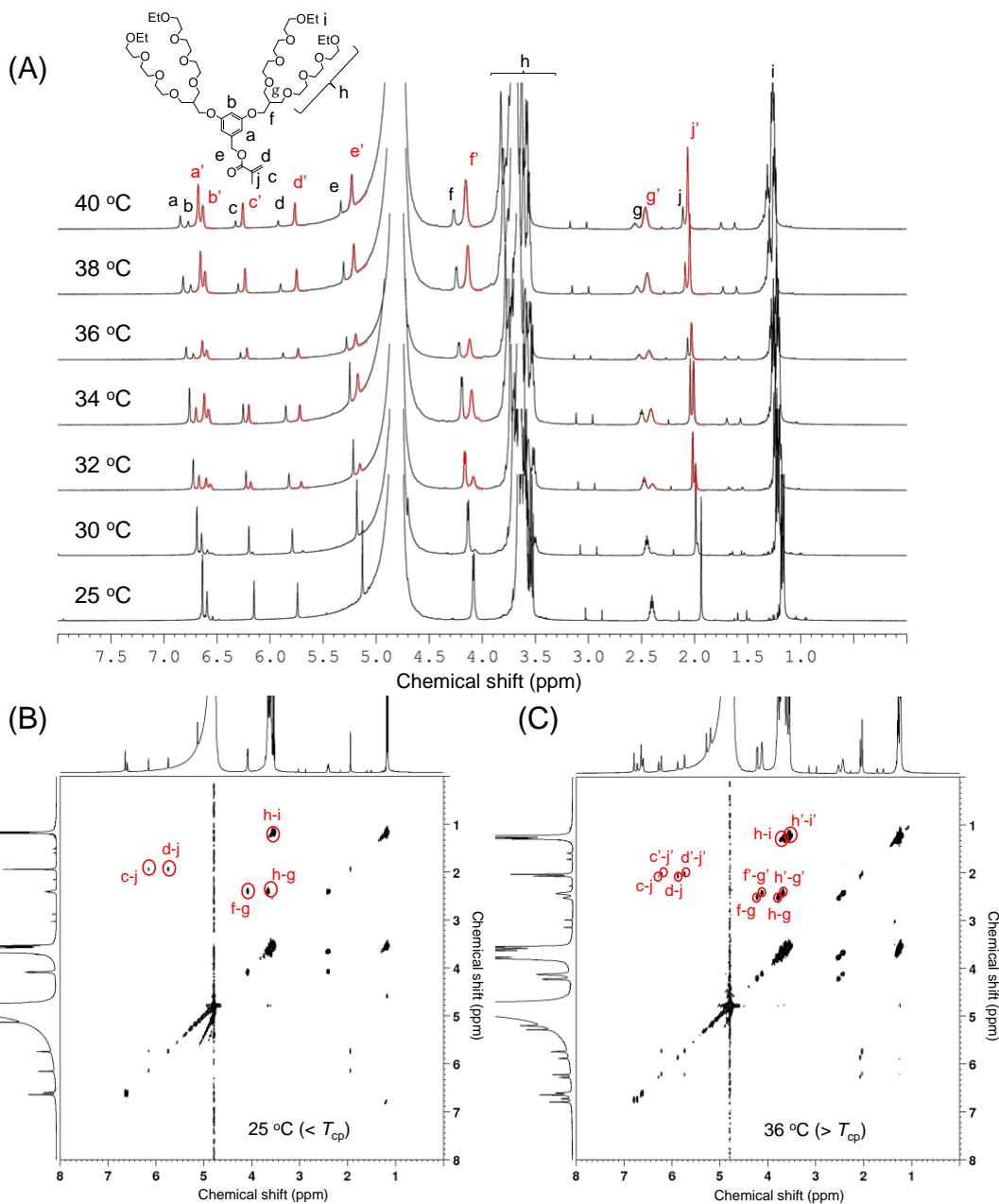


Fig. S2 Thermally-induced aggregation monitored with NMR spectroscopy in D₂O: Temperature-varied NMR spectra of **Et⁴-M** (A); ¹H-¹H COSY spectra of **Et⁴-M** at 25 °C (below T_{cp}) (B) and 36 °C (above T_{cp}) (C). $T_{cp} = 31.4$ °C. Sample concentration 2.0 wt%.

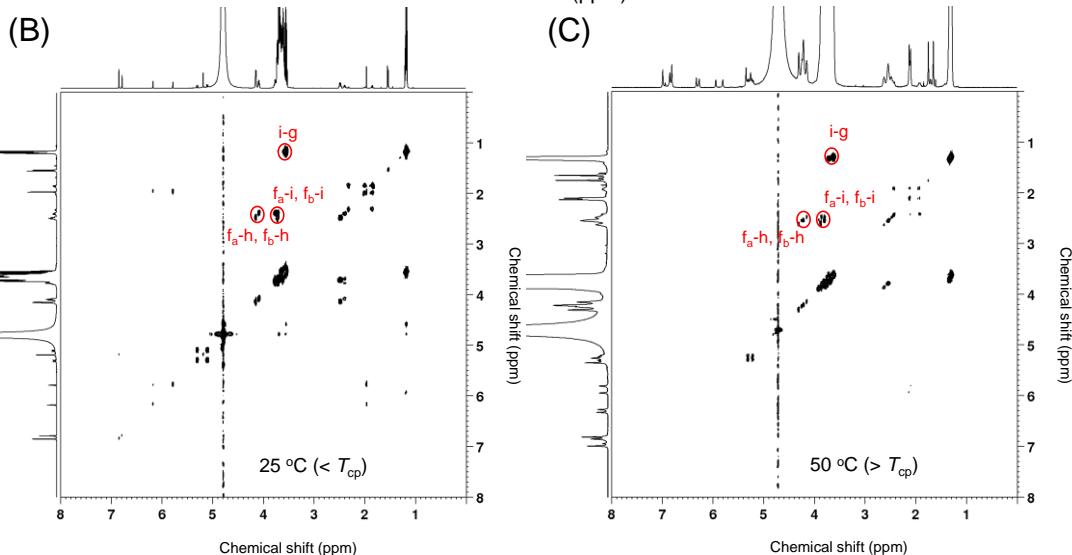
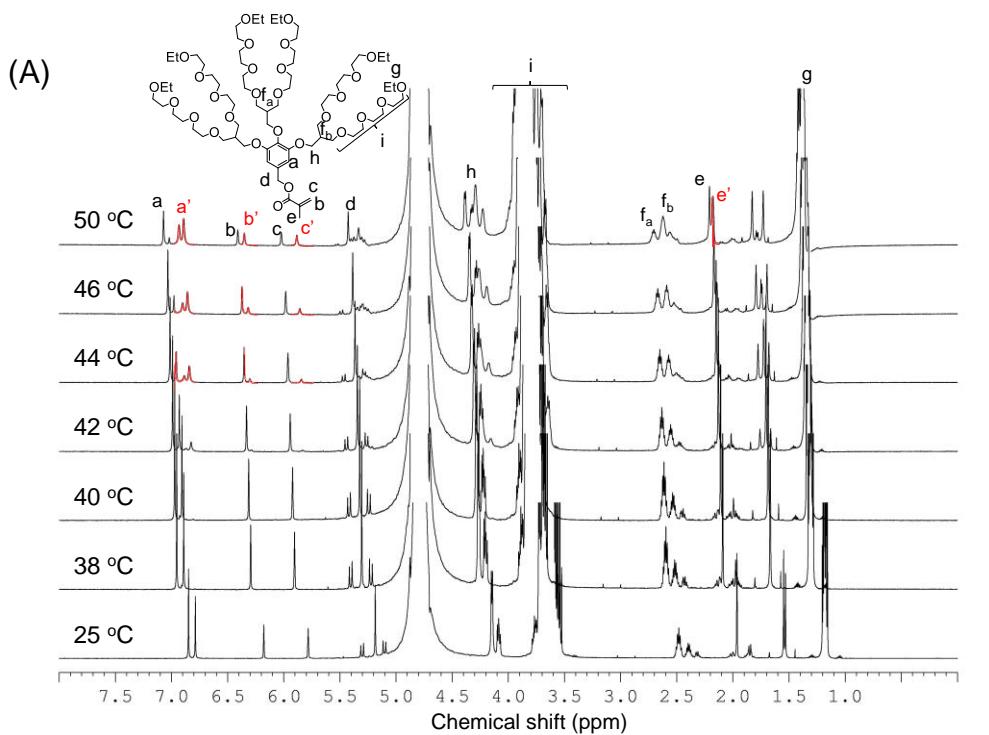


Fig. S3 Thermally-induced aggregation monitored with NMR spectroscopy in D_2O : Temperature-varied ^1H NMR spectra of $\text{Et}^6\text{-M}$ (A); ^1H - ^1H COSY spectra of $\text{Et}^6\text{-M}$ at 25 °C (below T_{cp}) (B) and 50 °C (above T_{cp}) (C). $T_{\text{cp}} = 41.7$ °C. Sample concentration 2.0 wt%.

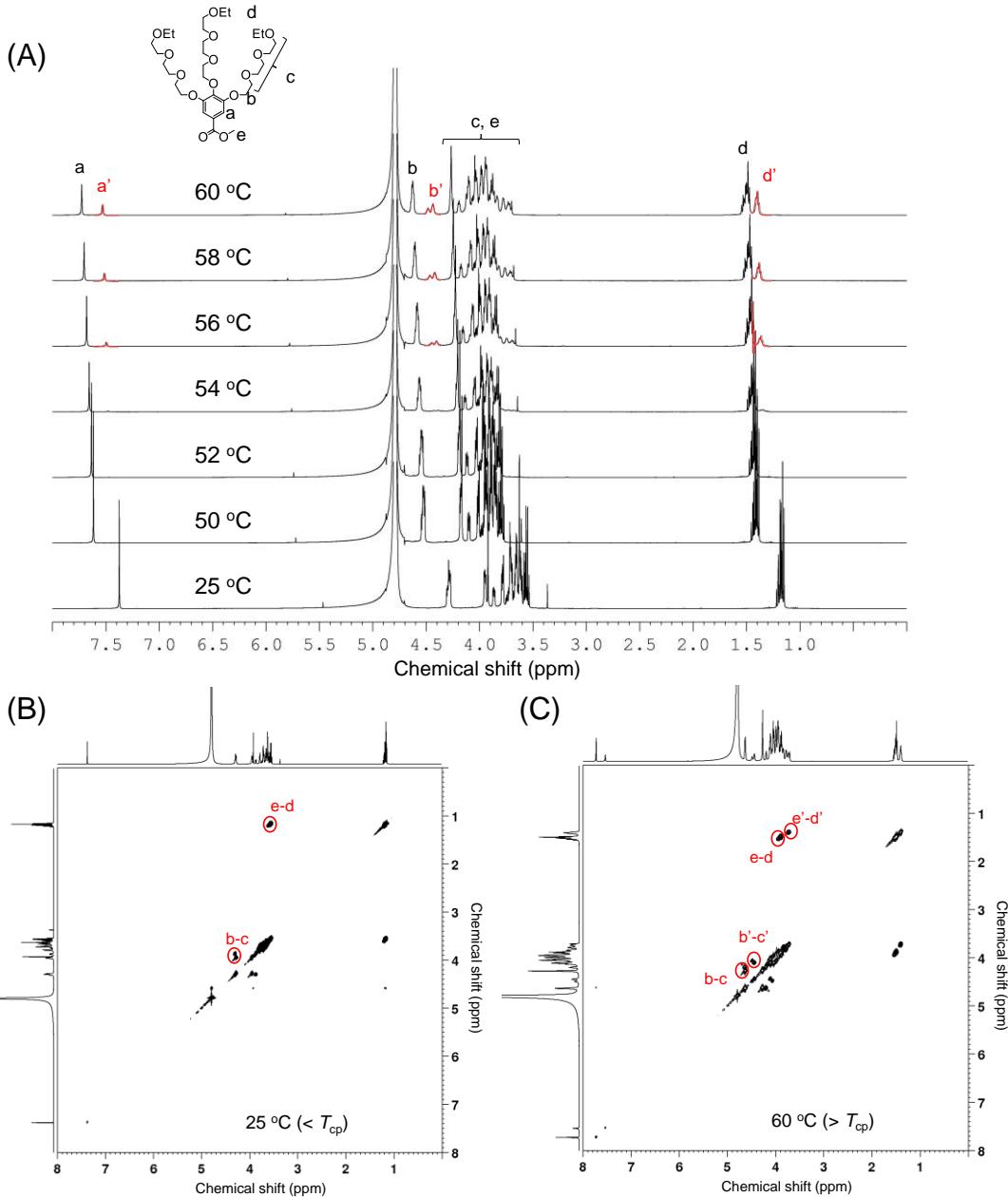


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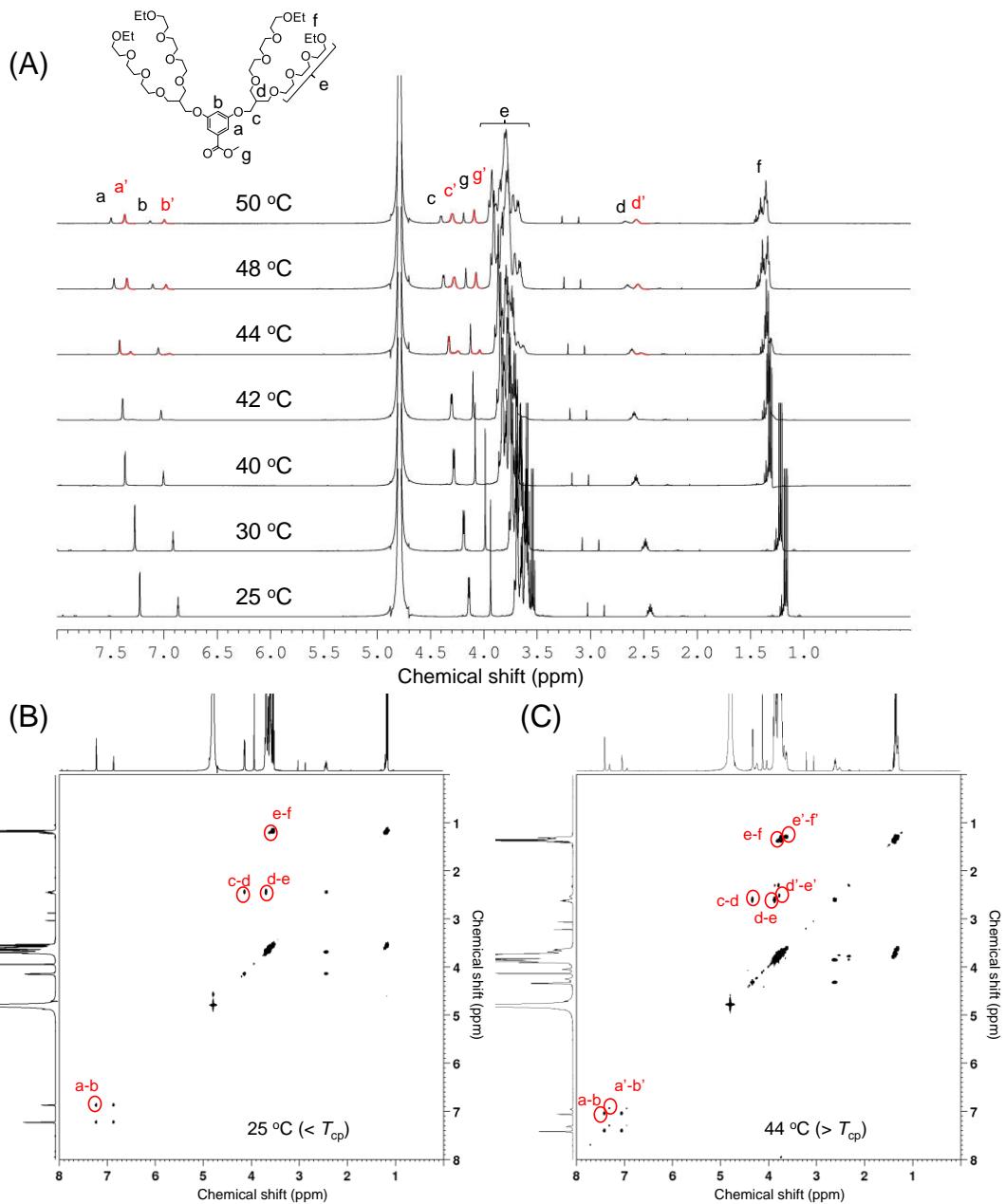


Fig. S5 Thermally-induced aggregation monitored with NMR spectroscopy in D₂O: Temperature-varied ¹H NMR spectra of Et⁴-OMe (A); ¹H-¹H COSY spectra of Et⁴-OMe at 25 °C (below T_{cp}) (B) and 44 °C (above T_{cp}) (C). T_{cp} = 41.9 °C. Sample concentration 2.0 wt%.

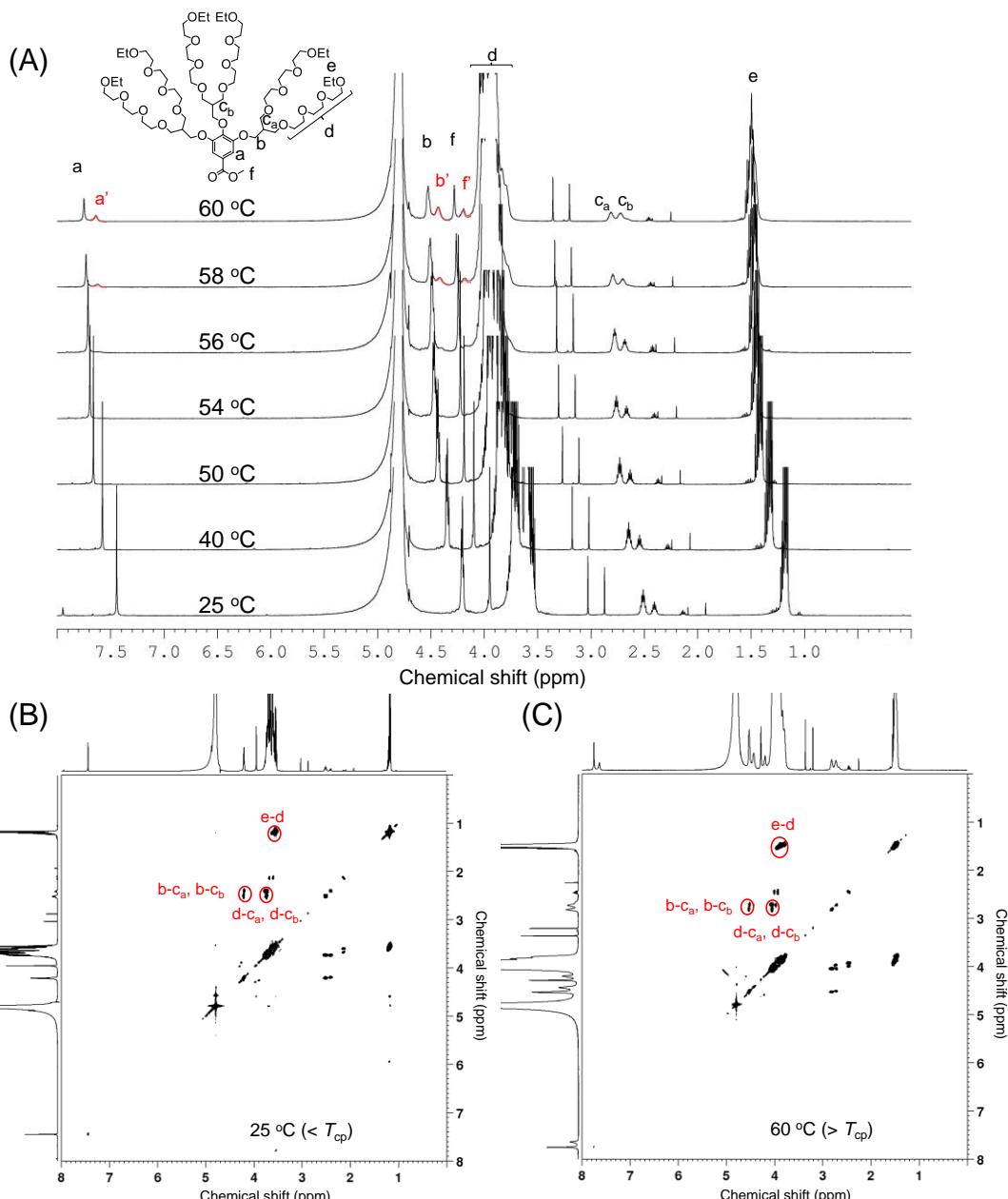


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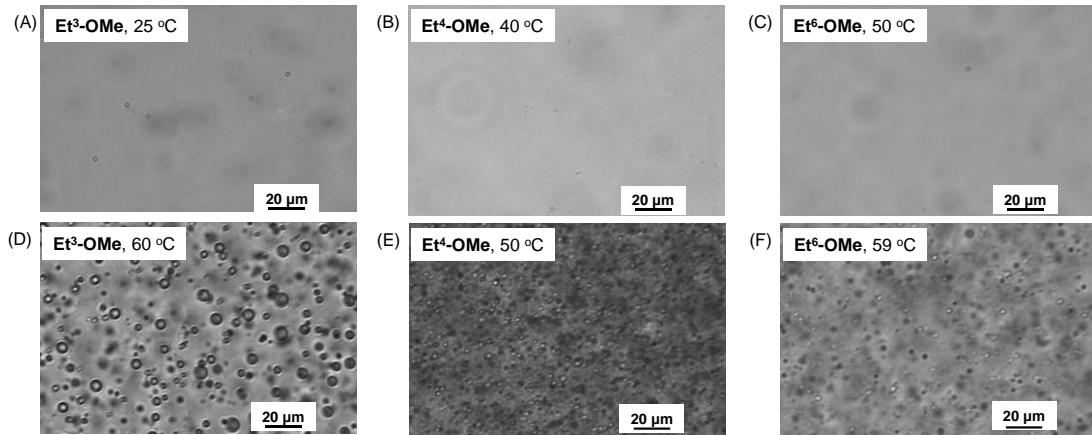


Fig. S7 Optical photographs of aqueous solutions of the dendritic esters below (A-C) and above (D-F) their T_{cp} s. All images have the same scale bar of 20 μ m. Sample concentration 2.0 wt%. A few air bubbles were appeared in the micrographs A and C below their T_{cp} s.

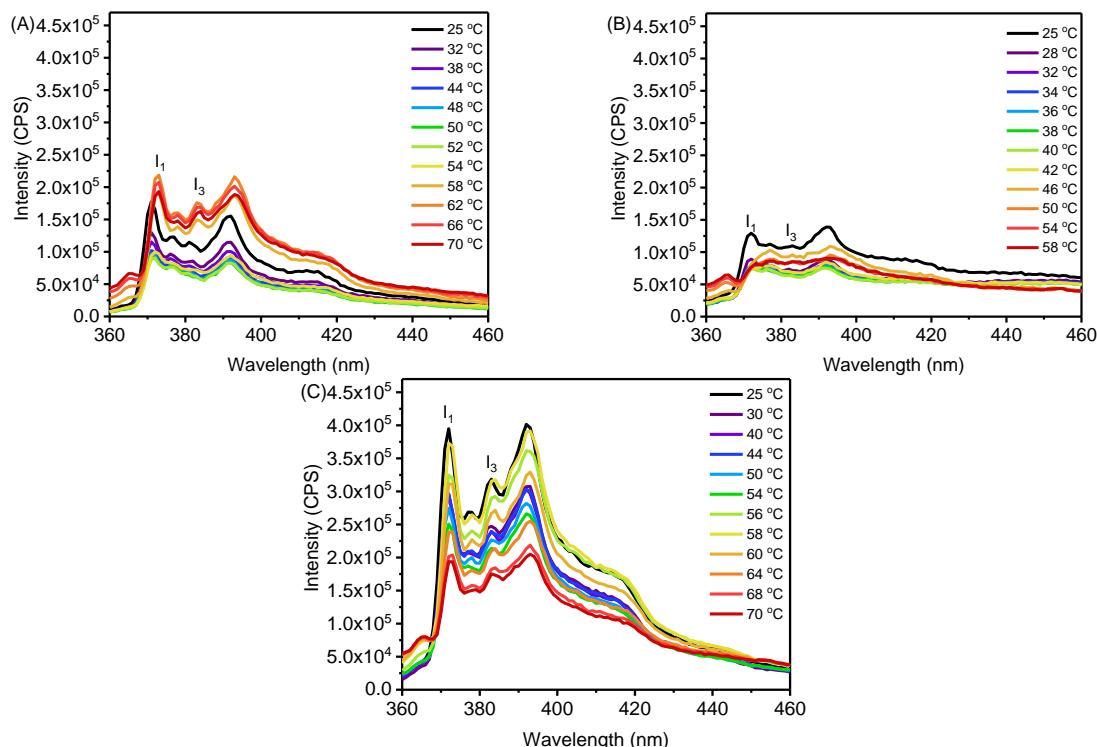


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