Electronic Supplementary Material (ESI) for Polymer Chemistry


# Electronic Supporting Information

## Spontaneous Thermal Crosslinking of A Sydnone-Containing Side-Chain Polymer with Bis- and Tris-maleimides through A Merged [3+2] Dual-Cycloaddition-Cycloreversion Process for Electro-Optics

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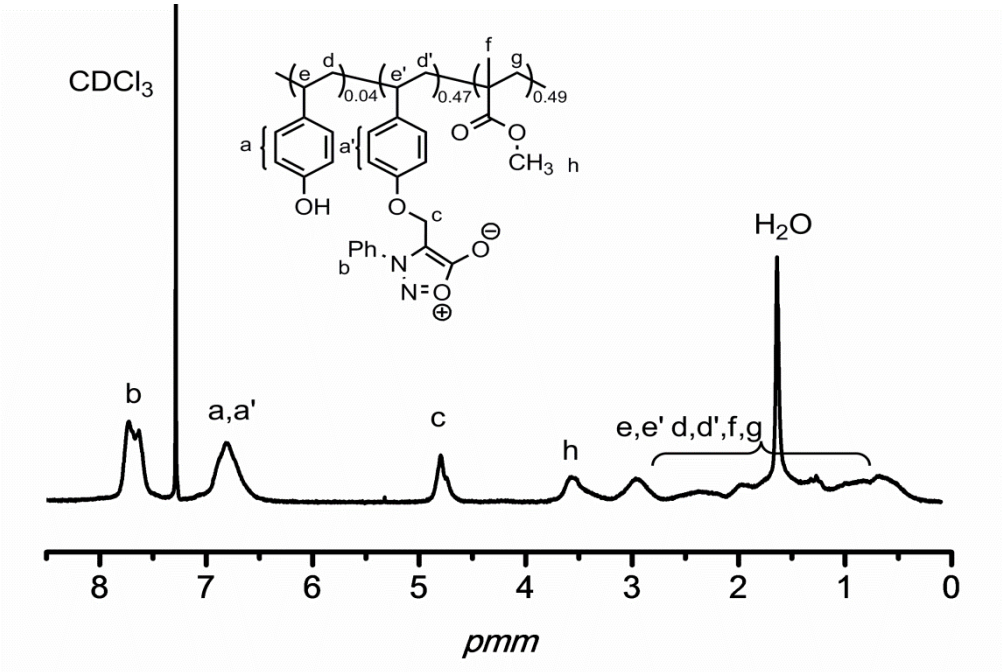


**Figure S1.** $^{1}$H NMR spectrum of **SCP** in $CDCl_3$.

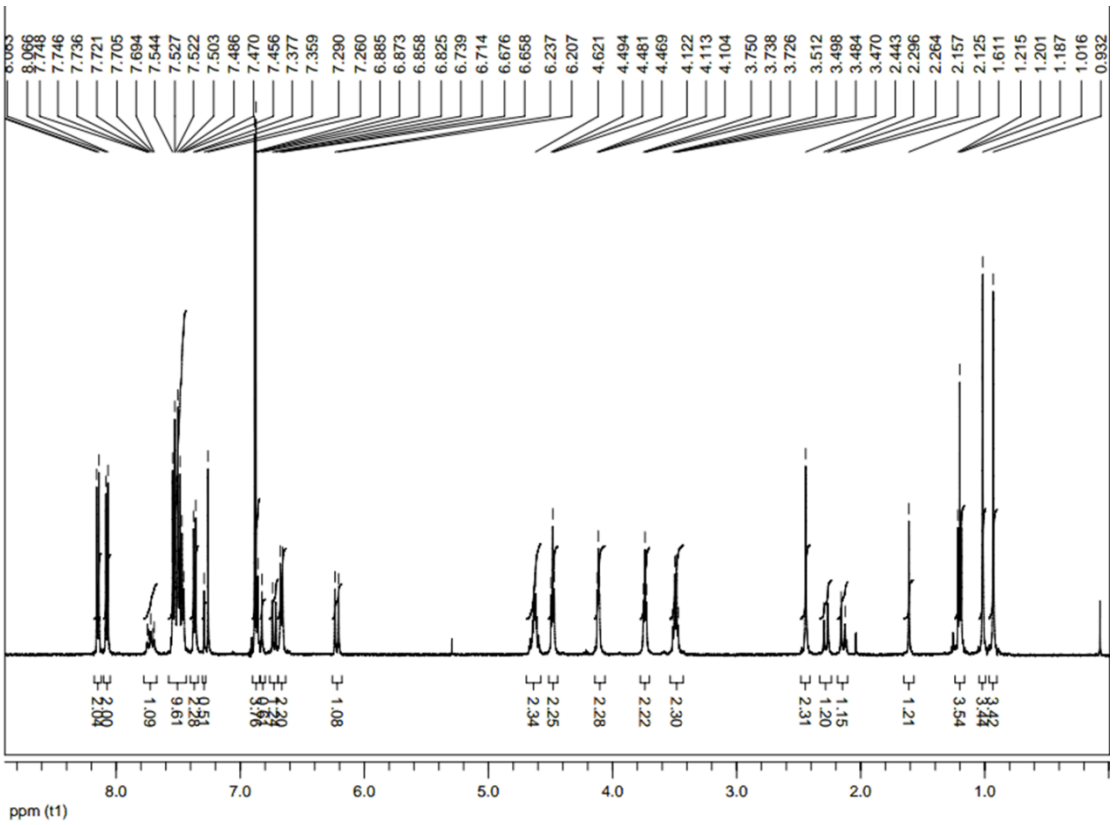


**Figure S2.** $^{1}$H NMR spectrum of **BMI-2** in $CDCl_3$.

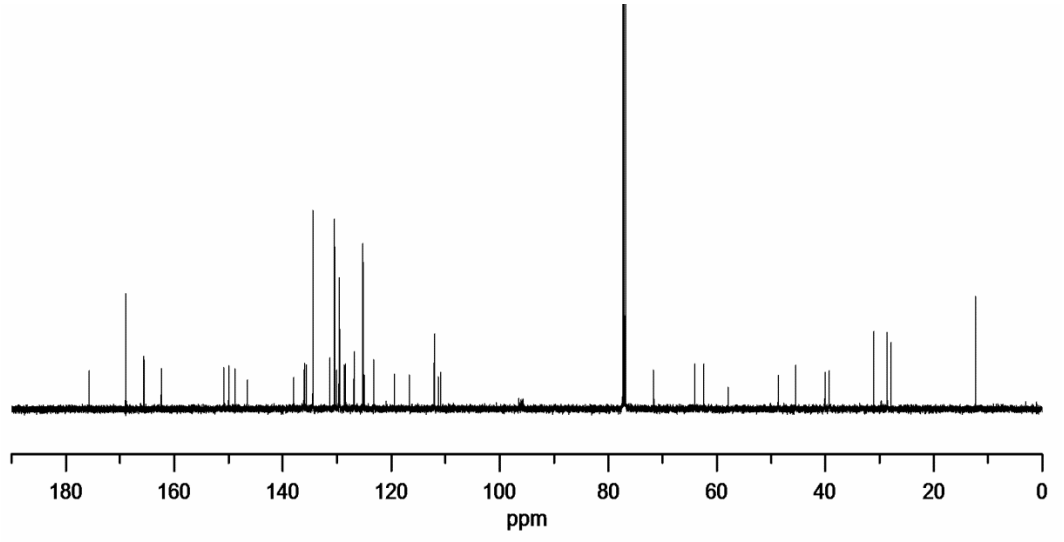


**Figure S3.** $^{13}$C NMR spectrum of chromophore (**BMI-2**) in $CDCl_3$.

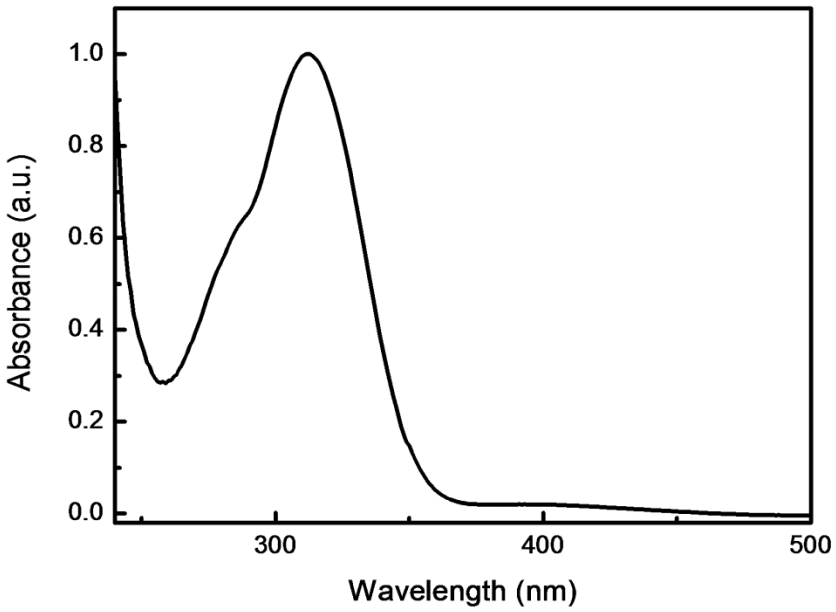


**Figure S4.** UV-*vis* absorption spectrum of **SCP.**

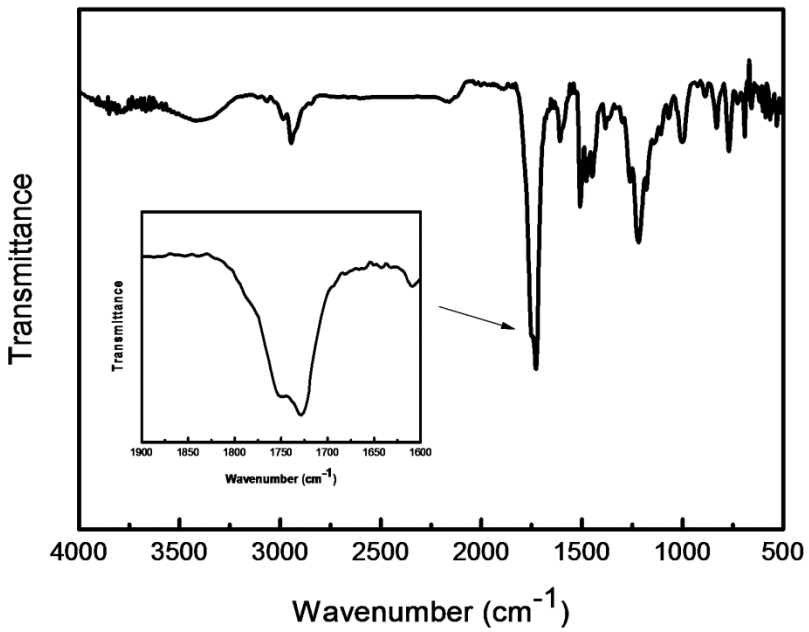


**Figure S5.** FT-IR spectrum of **SCP** film.

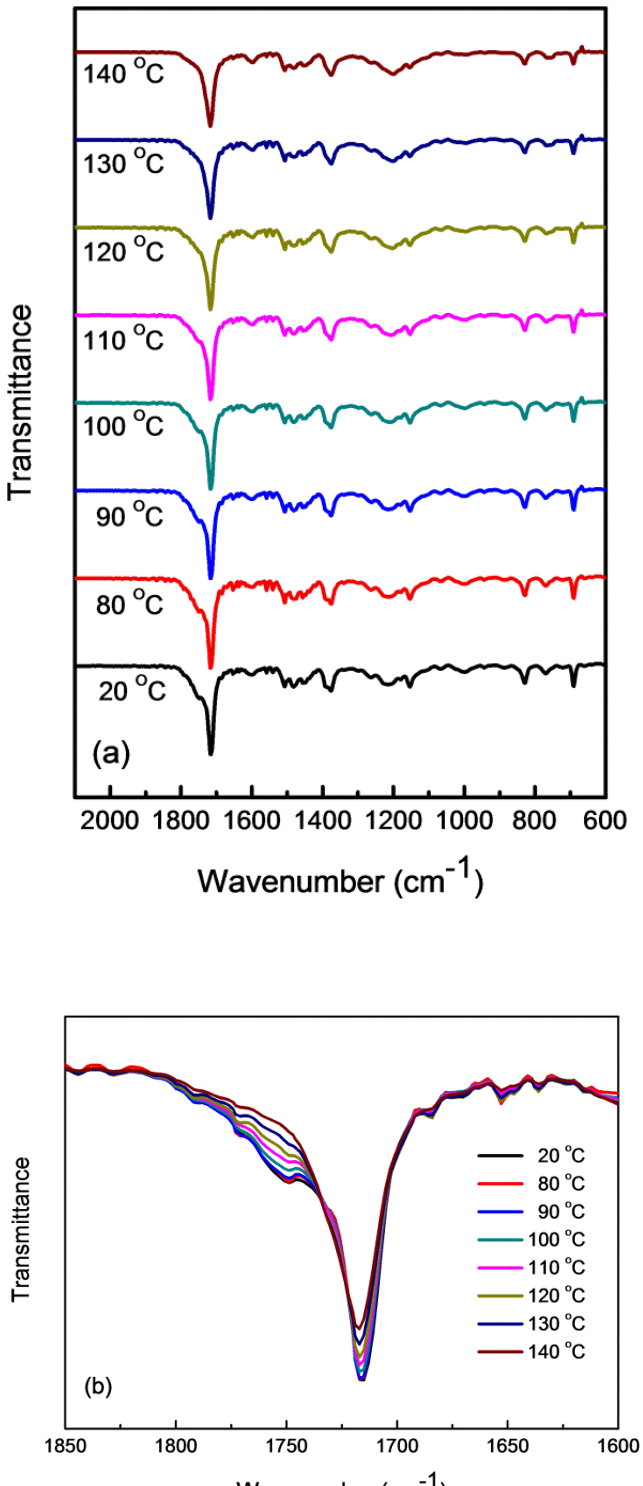


**Figure S6.** FT-IR spectra of **SCP/BMI-1** film, being cured at elevated temperatures with a 10 min heating interval at each temperature.

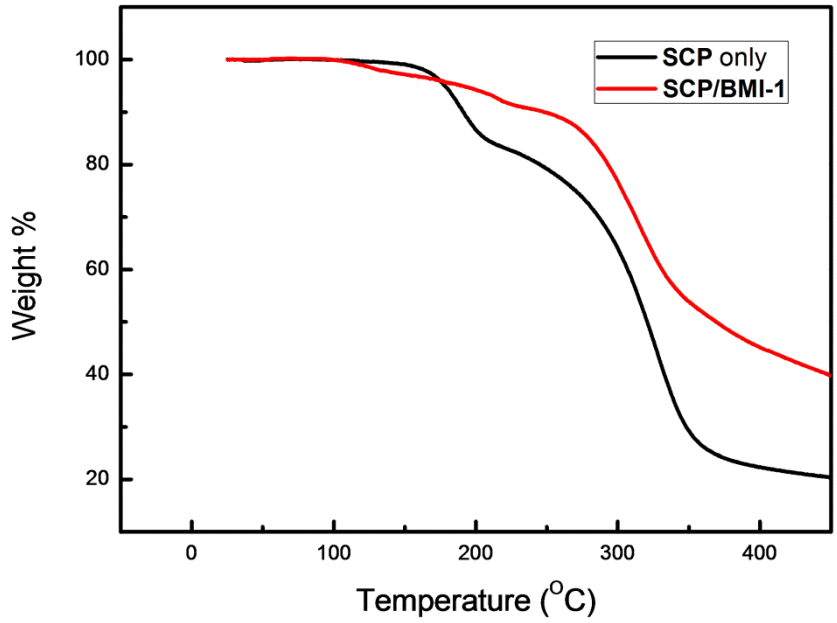


**Figure S7.** Thermal gravimetric analysis of **SCP** and **SCP/BMI-1** composite using a 2 °C /min heating rate

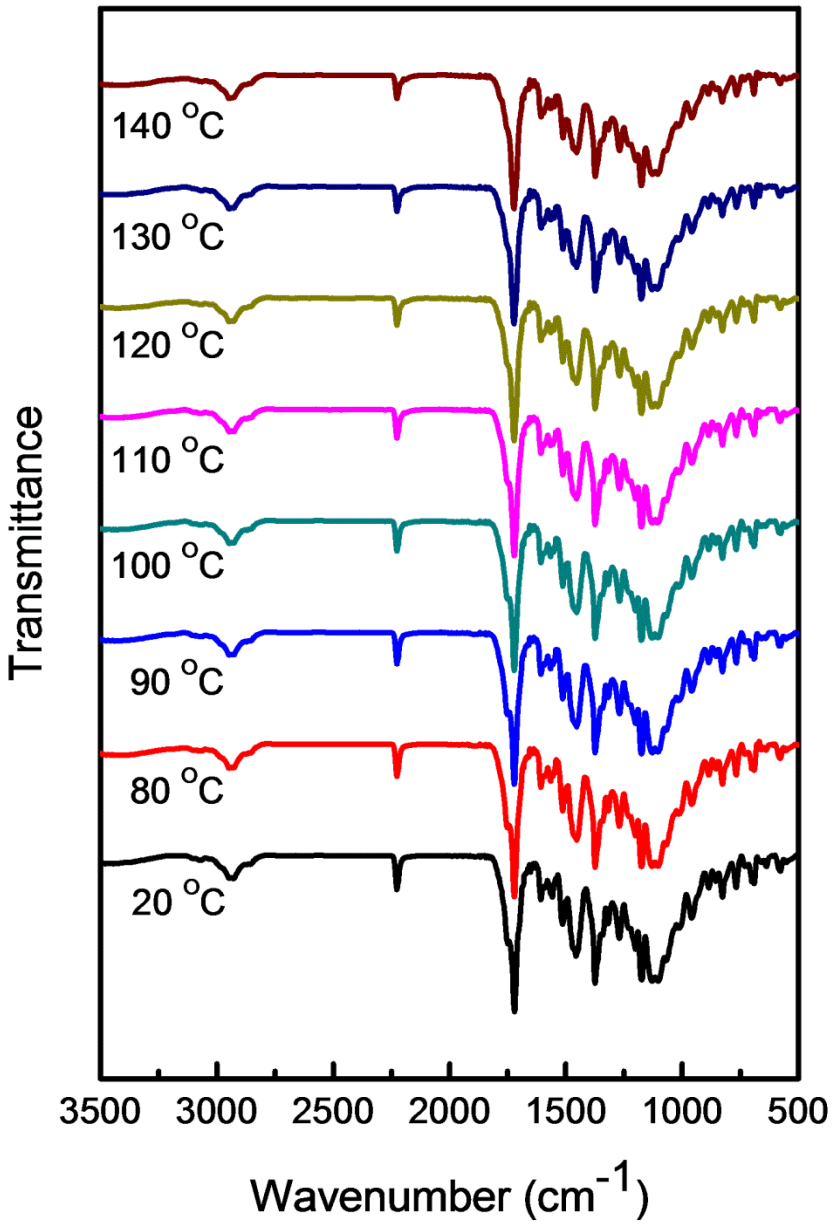


**Figure S8.** FT-IR spectra of the **SCP/BMI-2/TMI** film, being cured at elevated temperatures with a 10 min heating interval.