

Electronic Supplementary Information

Stimuli-responsive europium-containing metallo-supramolecular polymers

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Fig. S8 Photograph of the 70:30 Zn²⁺:Eu³⁺:**1** dipped into triethyl phosphate liquid.

Table S1 d-spacings from WAXS of metallo-supramolecular polymer films.

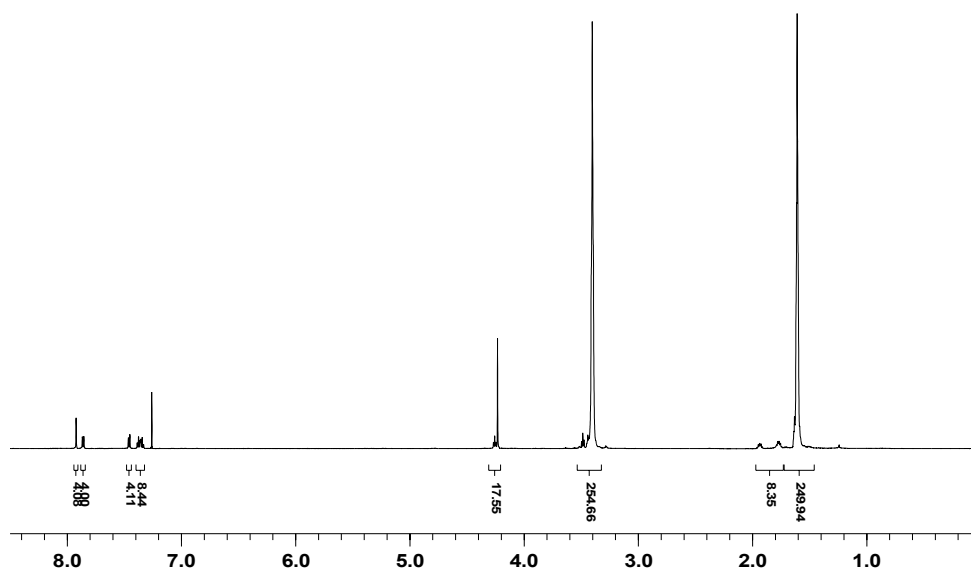


Fig. S1 $^1\text{H-NMR}$ of 1.

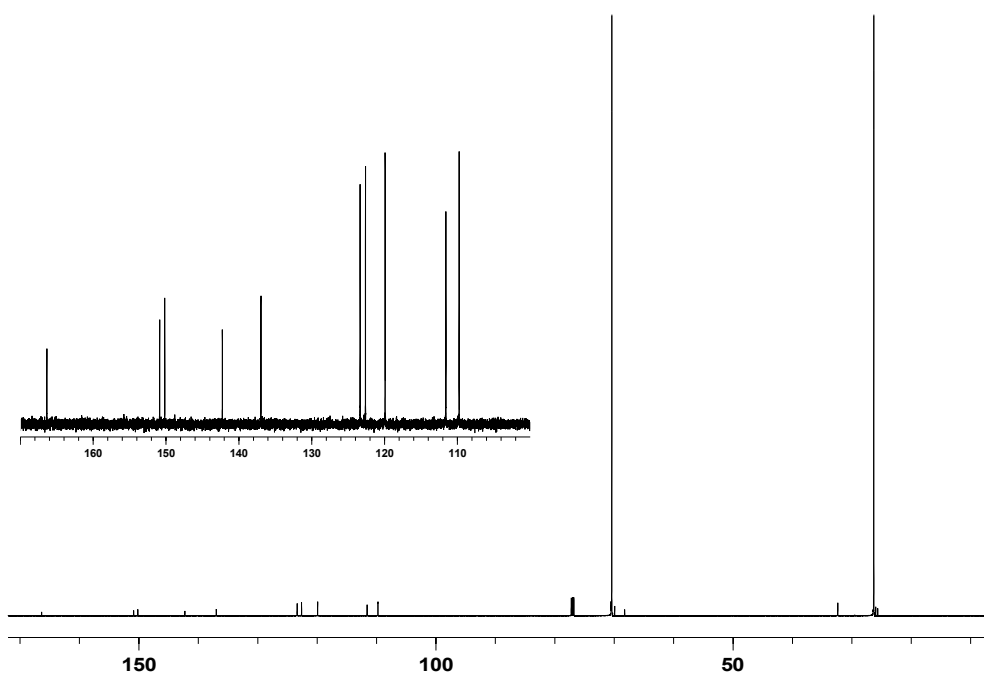


Fig. S2 $^{13}\text{C-NMR}$ of 1.

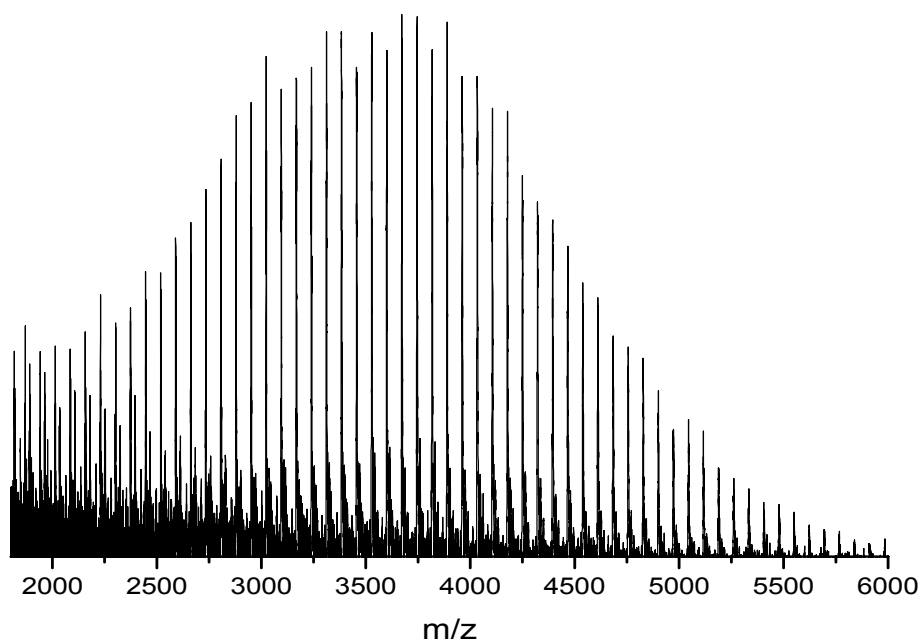


Fig. S3 MALDI-TOF of **1**; matrix: HABA [2-(4-hydroxyphenylazo)benzoic acid] with a sodium trifluoroacetate additive.

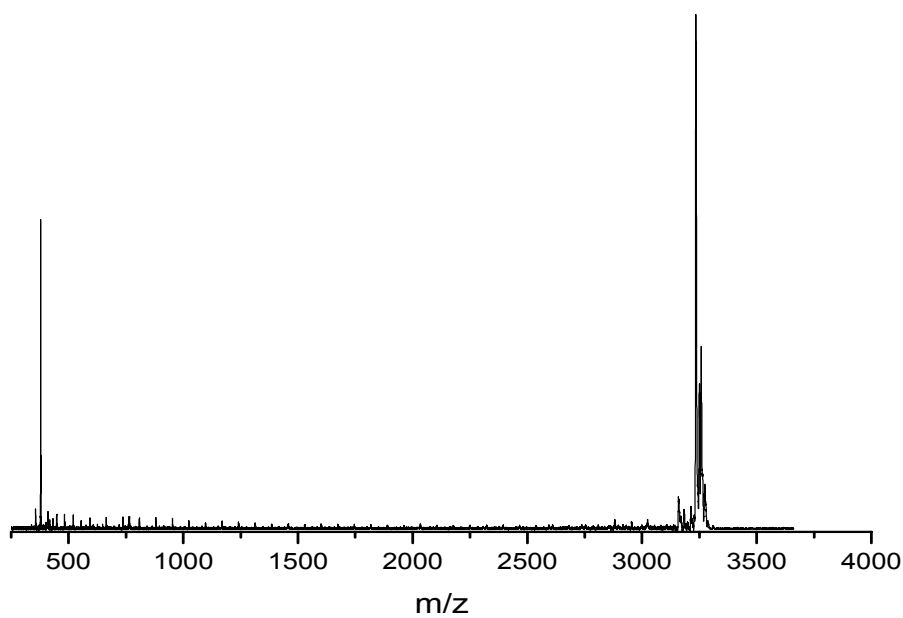


Figure S4 MALDI-TOF/TOF of **1**; matrix: HABA [2-(4-hydroxyphenylazo)benzoic acid] with a sodium trifluoroacetate additive. Fragment peak at 355.4 m/z corresponds to $[M+H]$ of Mebip ligand.

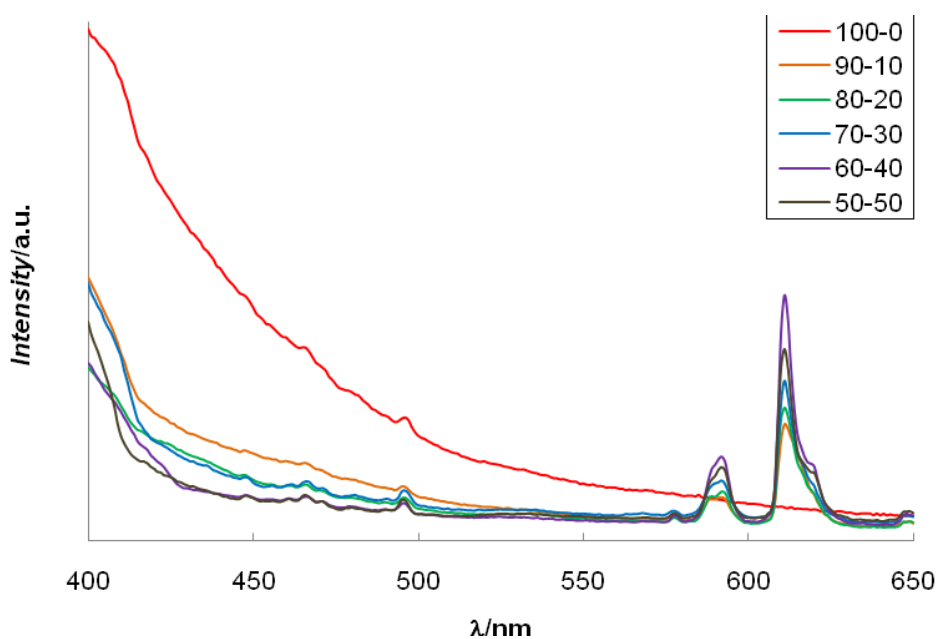


Fig S5 Photoluminescence spectra (PL) of **1** (25 mM) with varying ratios of Zn²⁺:Eu³⁺ in solution (excited at 385 nm).

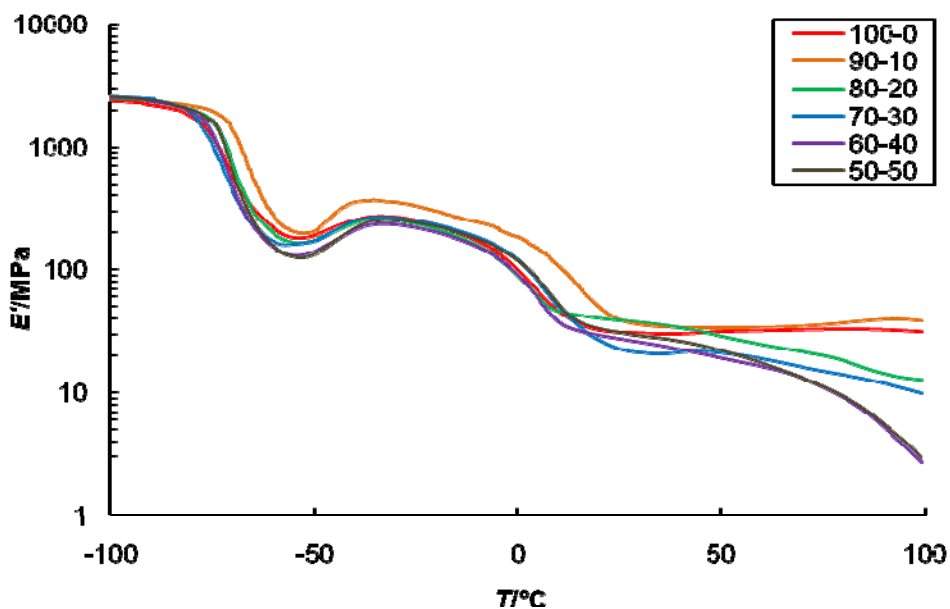


Fig. S6 Dynamic mechanical thermal analysis (DMTA) of films made from **1** with varying ratios of Zn²⁺:Eu³⁺. Samples were cooled directly to -110 °C and run. The increase in modulus at -35 °C is attributed to a cold crystallization of the p(THF) core.

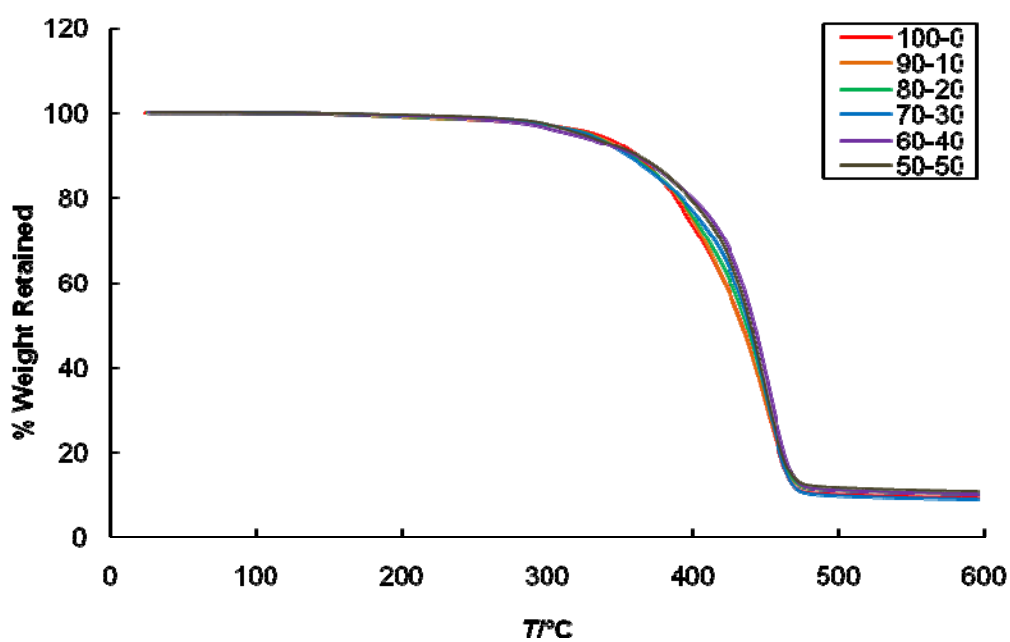


Fig. S7 TGA of films made from **1** with varying ratios of Zn²⁺:Eu³⁺. Thermogravimetric analyses were carried out on a TA Instruments TGAQ500 under N₂.

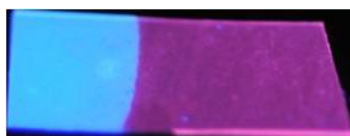


Fig. S8 Photograph of the 70:30 Zn²⁺:Eu³⁺:**1** dipped into triethyl phosphate liquid

$\text{Zn}^{2+}:\text{Eu}^{3+}$	d_1 (Å)	d_2 (Å)
100:0	60.2	9.8
90:10	50.3	9.7
70:30	-	9.5
50:50	58.6	9.5

Table S1 WAXS d-spacings of select films of **1** and varying ratios of $\text{Zn}^{2+}:\text{Eu}^{3+}$.