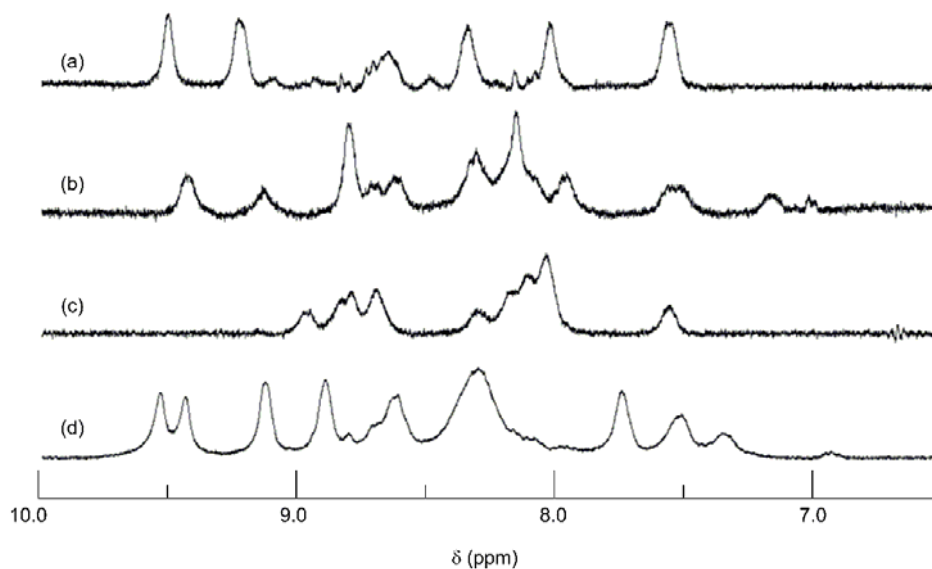


Supporting Information

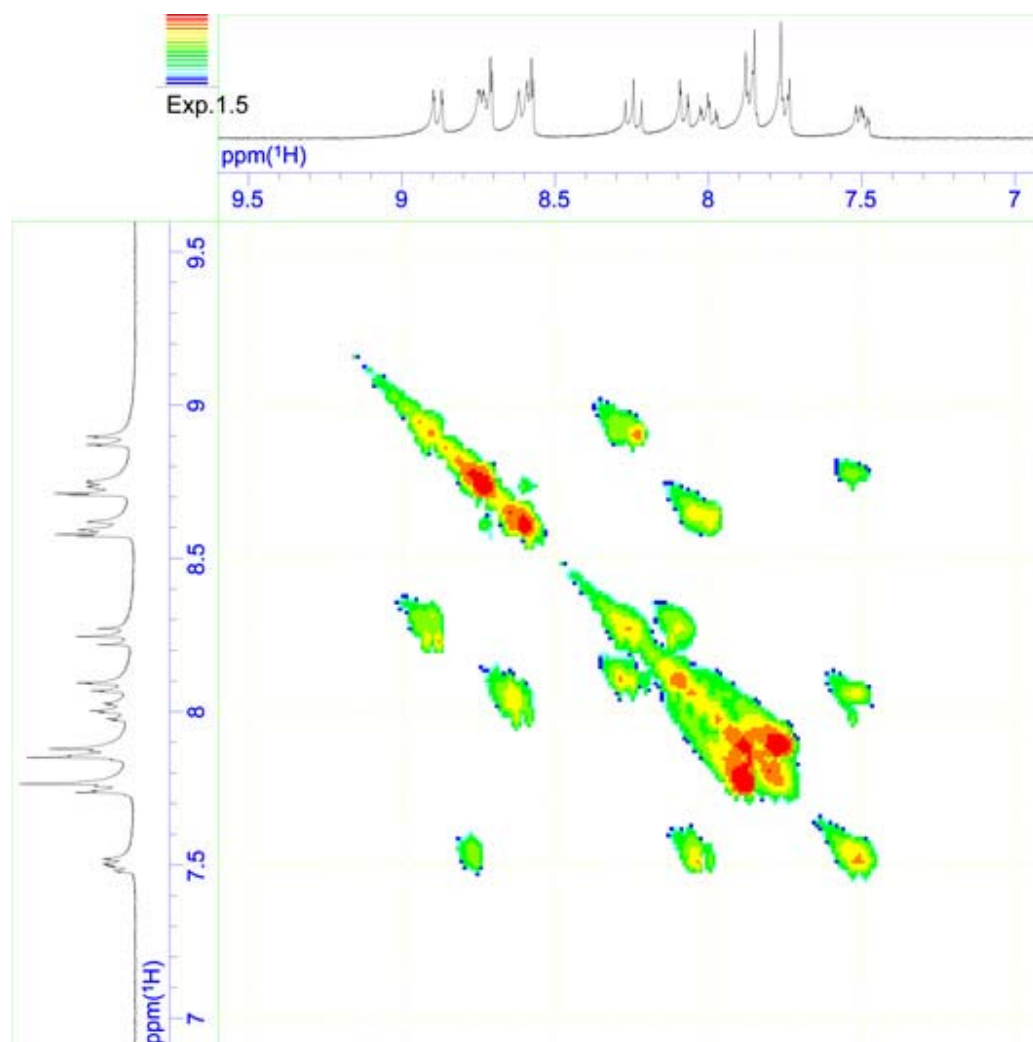
**Fluorescent colour modulation in Zn(II)-based metallo-supramolecular polymer films by electronic-state control of the ligand**

Takashi Sato, Rakesh K. Pandey and Masayoshi Higuchi\*

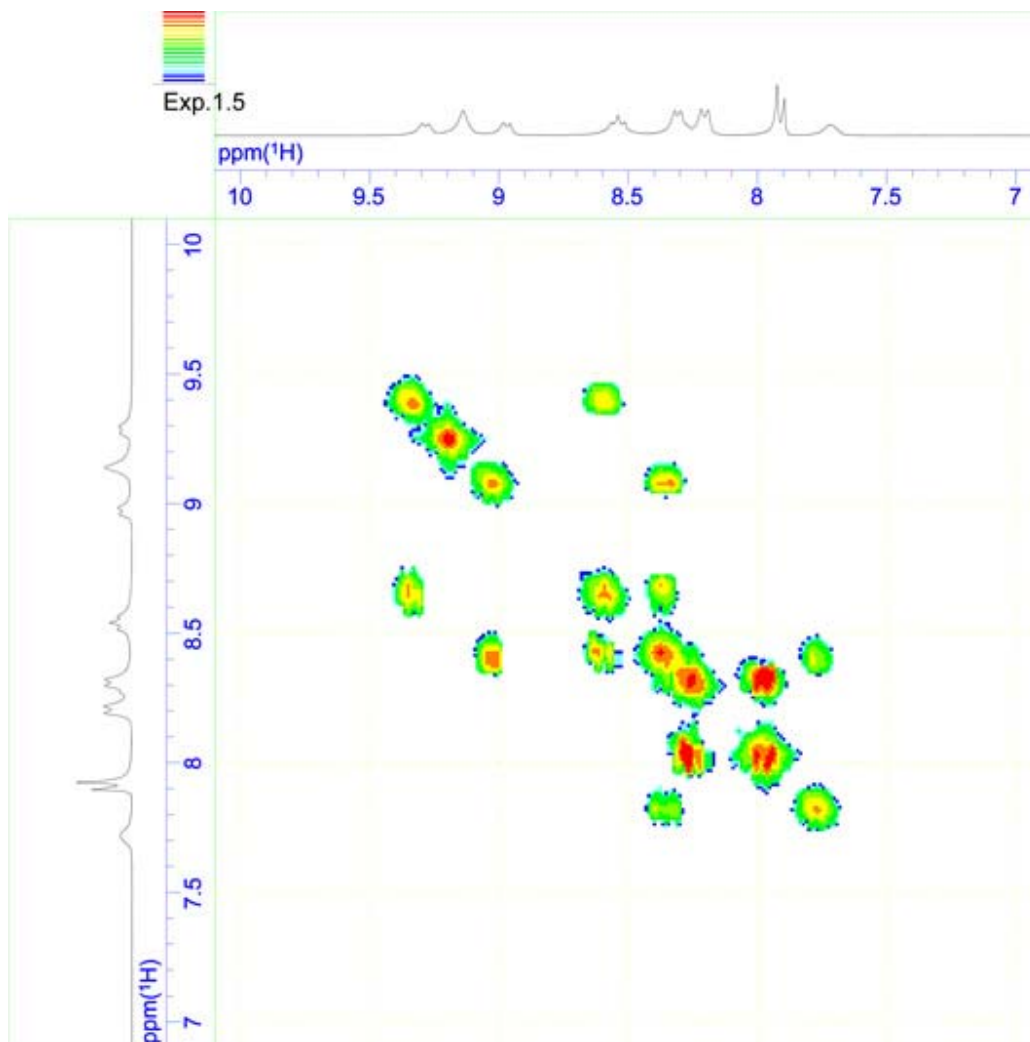
Electronic Functional Materials Group, Polymer Materials Unit, National Institute for Materials Science, 1-1 Namiki, Tsukuba 305-0044, Japan, and JST-CREST



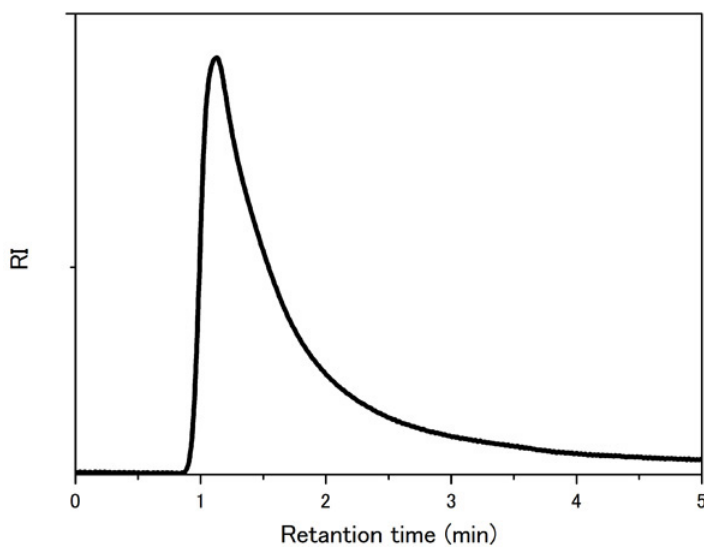
**Fig. S1**  $^1\text{H-NMR}$  spectra of (a) **poly1**, (b) **poly2**, (c) **poly3** and (d) **poly4** in  $\text{DMSO-}d_6$  (300 MHz, TMS).



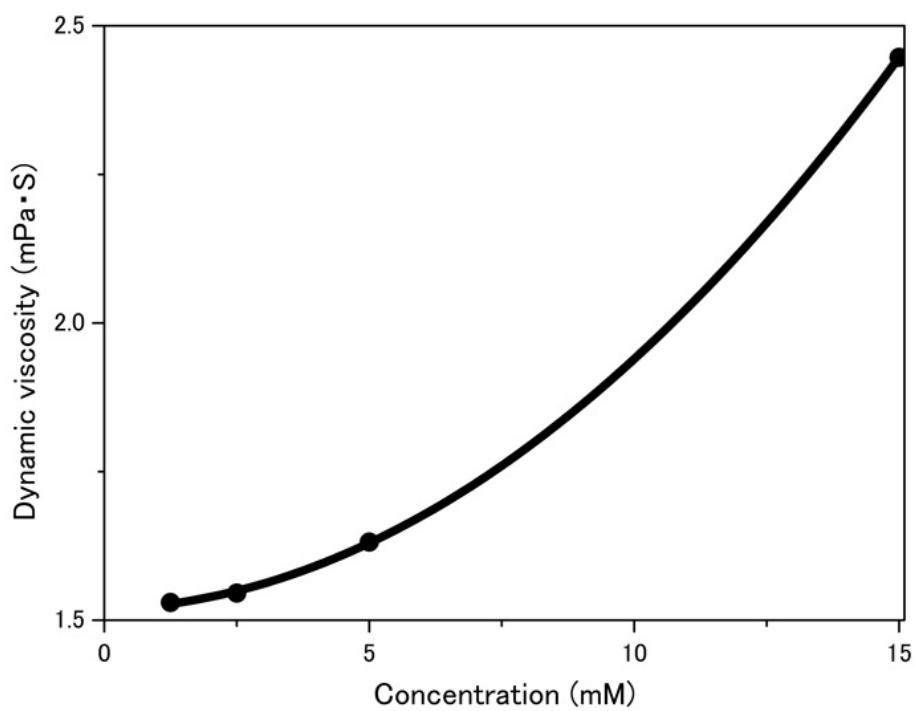
**Fig. S2**  $^1\text{H}$ - $^1\text{H}$  COSY NMR spectrum of CN-tpy in  $\text{DMSO-}d_6$  (300 MHz, TMS).



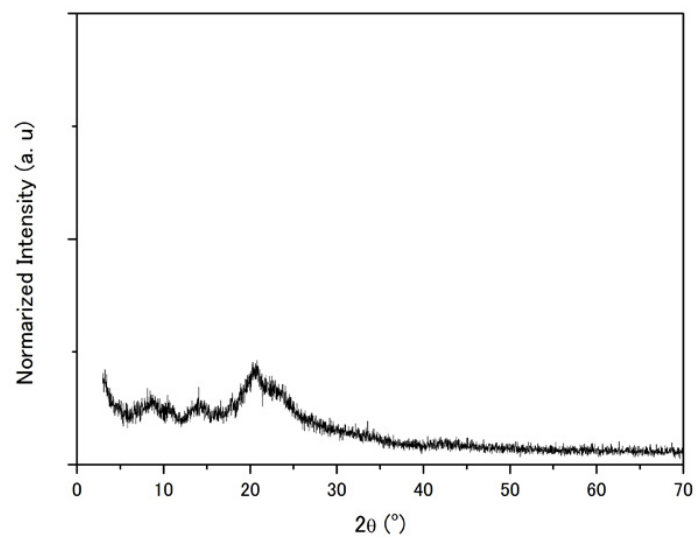
**Fig. S3** <sup>1</sup>H-<sup>1</sup>H COSY NMR spectrum of CN-tpy and Zn(ClO<sub>4</sub>)<sub>2</sub> (CN-tpy:Zn(ClO<sub>4</sub>)<sub>2</sub> = 2:3) in DMSO-*d*<sub>6</sub> (300 MHz, TMS).



**Fig. S4** The RI spectrum of **poly1** in the viscometry-RALLS measurement.



**Fig. S5** The dynamic viscosity of DMSO solutions of **poly1** with different concentrations at room temperature.



**Fig. S6** The powder XRD pattern of **poly1** at room temperature.