## Synthesis and Characterization of a Oligomeric Conjugated Metal-Containing

## Poly(p-phenylenevinylene) Analogue

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Figure S1. <sup>1</sup>H NMR spectrum of 6 (300 MHz, CDCl<sub>3</sub>, 298 K).



**Figure S2.** <sup>13</sup>C NMR spectrum of **6** (100.6 MHz, CDCl<sub>3</sub>, 298 K).

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Figure S3. EI-MS spectrum of 6



Figure S4. <sup>1</sup>H NMR spectrum of 2 (300 MHz,  $CDCl_3$  (with trace of THF), 298 K)



**Figure S5.** <sup>13</sup>C NMR spectrum of **2** (100.6 MHz, CDCl<sub>3</sub>, 298 K).



**Figure S6.** MALDI-TOF mass spectrum of **2**. Inset: Simulated isotope distribution for  $[2]^+$ 

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Figure S7. GPC of polymer 8



**Figure S8.** Partial of <sup>1</sup>H NMR spectrum of **8** (400 MHz,  $CD_2Cl_2$  (with a trace of THF- $d_8$ ), 298K).



Figure S9. TGA of polymer 8



Figure S10. IR spectra of polymer 8 and monomer 2



**Figure 11.** <sup>1</sup>H NMR spectrum of **9** (400 MHz, DMSO-*d*<sub>6</sub>, 298 K).



**Figure S12.** <sup>13</sup>C NMR spectrum of **9** (100.6 MHz, CDCl<sub>3</sub>, 298 K).



Figure S13. ESI-MS of 9.



**Figure S14.** <sup>31</sup>P NMR spectrum of **9** (121.4 MHz, DMSO- $d_6$ , 298 K, 8% H<sub>3</sub>PO<sub>4</sub> aqueous solution as external reference).



**Figure S15.** <sup>1</sup>H NMR spectrum of **10** (400 MHz, CDCl<sub>3</sub>, 298 K).



**Figure S16.** <sup>13</sup>C NMR spectrum of **10** (100.6 MHz, DMSO-*d*<sub>6</sub>, 298 K).



Figure S17. ESI-MS spectrum of 10.