Supporting Information

Decoupling Optical Properties in Metallo-Supramolecular Poly(*p*-phenylene ethynylene)s

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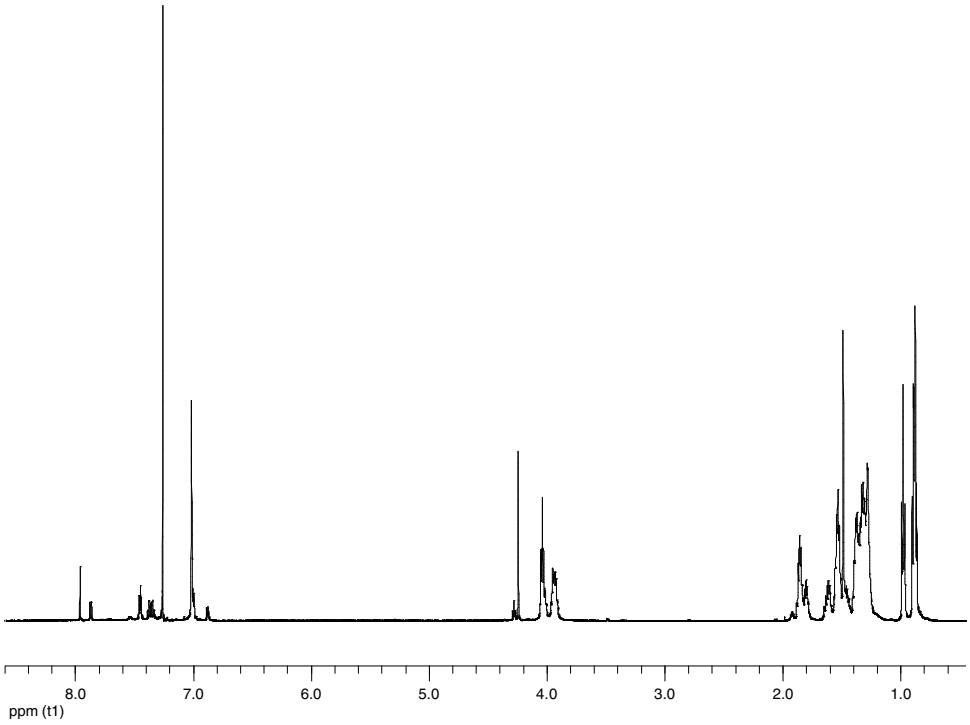

Figure S1. 600 MHz ^{1}H NMR spectrum of macromonomer **1** in $CDCl_3$.

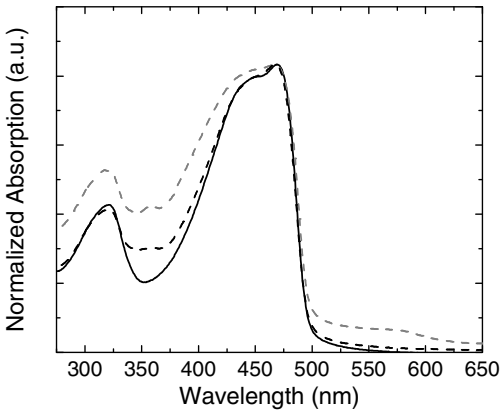

Figure S2. Normalized UV-Vis absorption spectra of spin-coated thin solid films: neat macromonomer **1** (black solid line), [**1**·$Zn(ClO_4)_2$]$_n$ (black dashed line), [**1**·$Fe(ClO_4)_2$]$_n$ (gray dashed line).

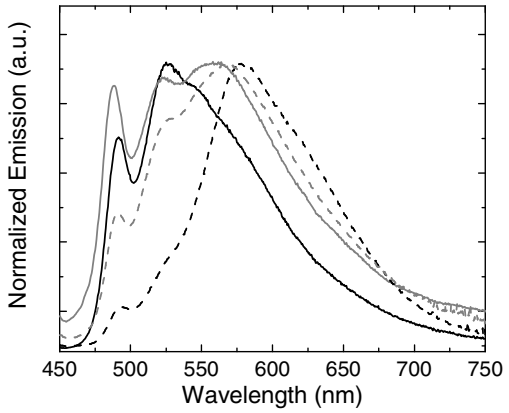

Figure S3. Normalized PL emission spectra of spin-coated thin solid films: neat macromonomer **1** thickness = 2 μm (black solid); neat macromonomer **1** thickness = 3.5 μm (black dot); [**1**·$Zn(ClO_4)_2$]$_n$ thickness = 1.8 μm (gray solid); [**1**·$Zn(ClO_4)_2$]$_n$ thickness = 3.5 μm (gray dot).

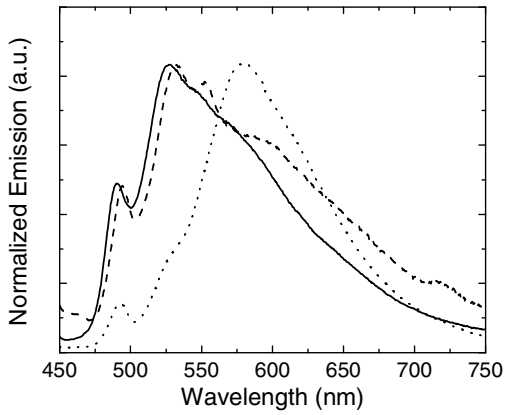

Figure S4. Normalized emission spectra of spin-coated thin films of the neat macromonomer **1** of a thickness of 3.5 μm (solid line), and after annealing for 24 hours (dashed line), and a solution cast film of **1** of a thickness of 9 μm (dotted line).

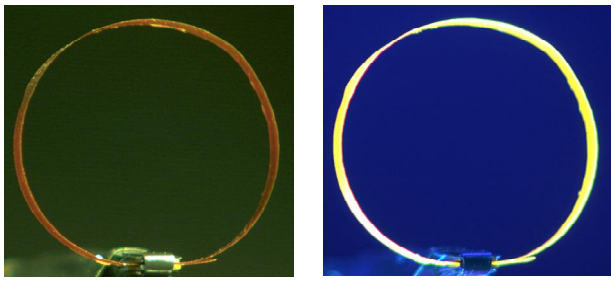

Figure S5. Pictures of a solution-cast film of [**1**·$Zn(ClO_4)_2$]$_n$ under ambient illumination (a) and excitation with 365 nm UV light (b).