

Supporting Information to

Modular Design of Profluorescent Polymer Sensors

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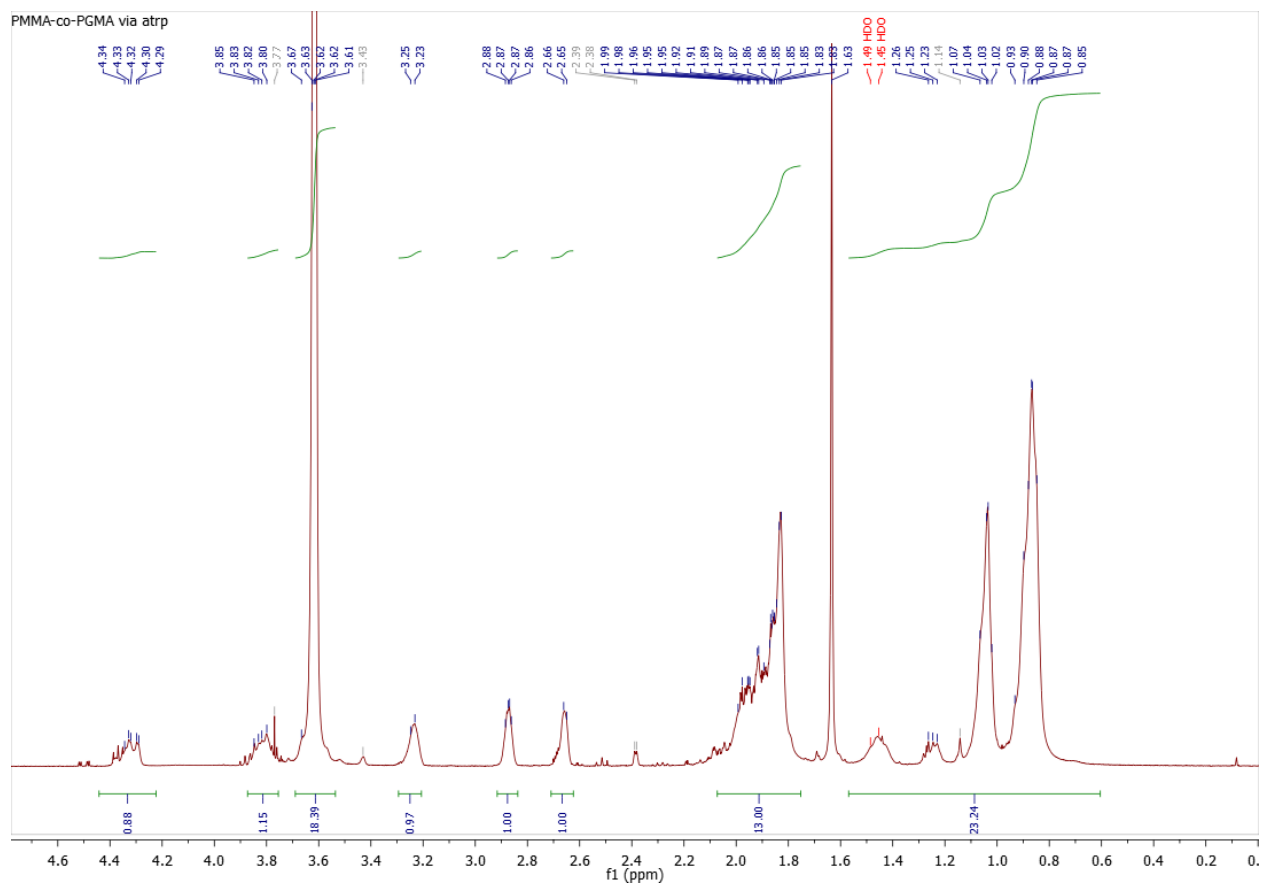
*Blinco**

School of Chemistry, Physics and Mechanical Engineering

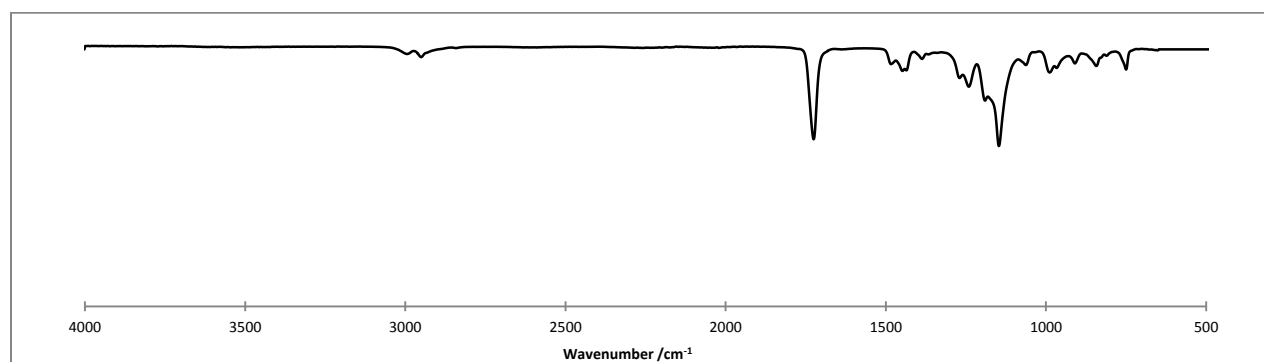
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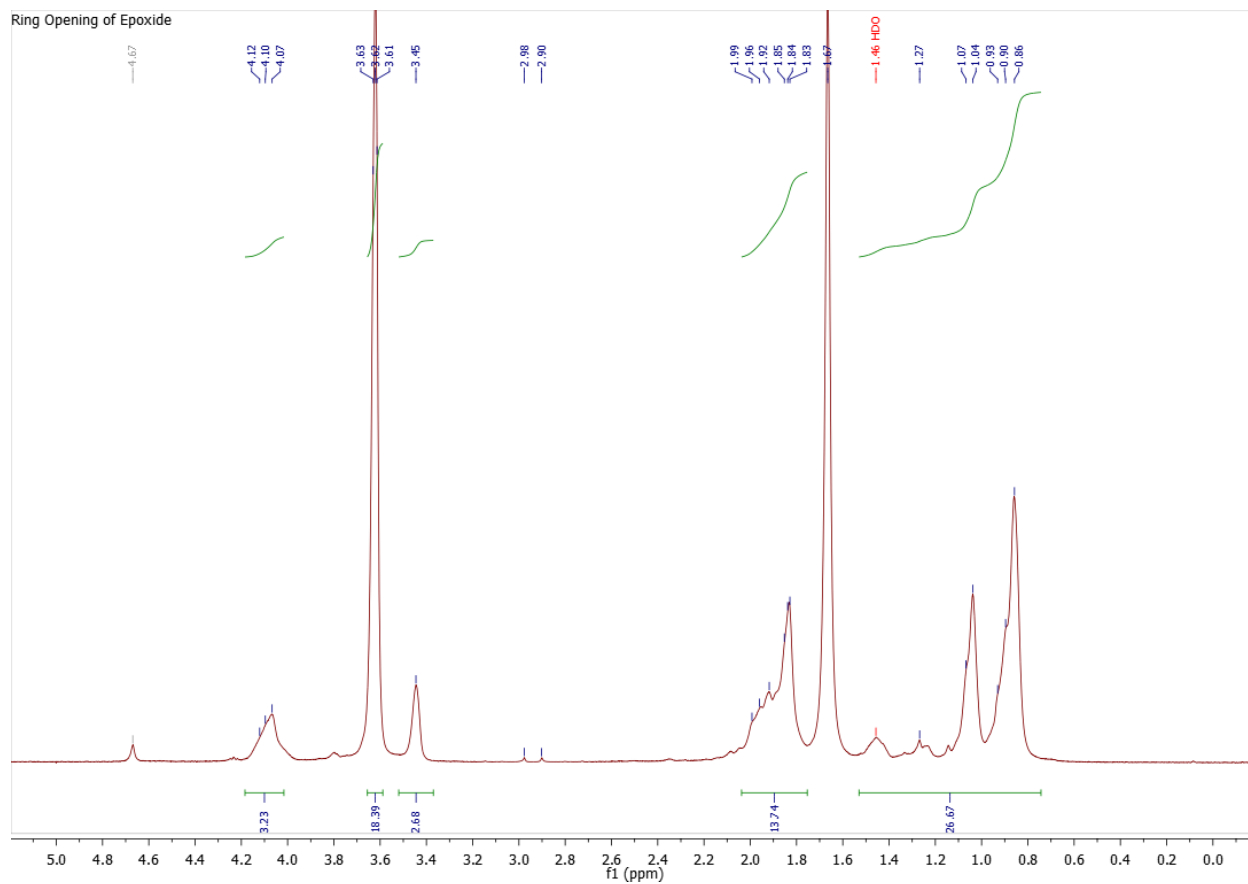
j.blinco@qut.edu.au



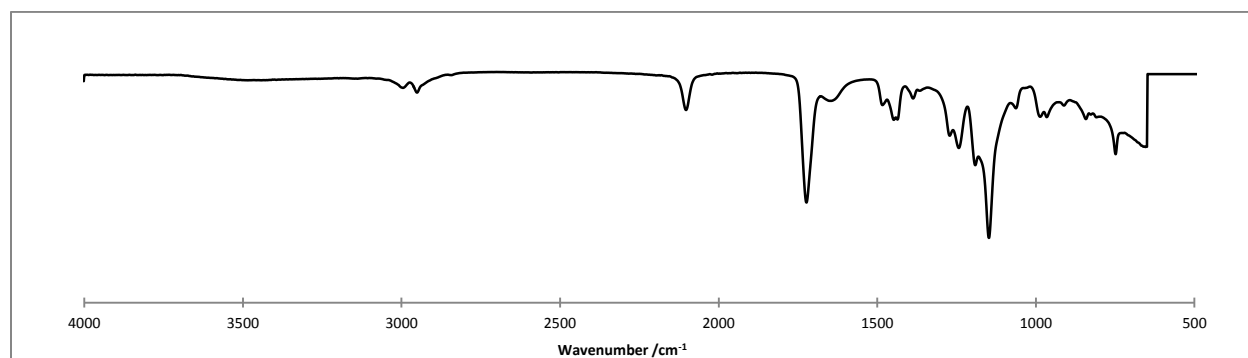
ESI Figure S1. ¹H NMR Spectrum of Polymer 1



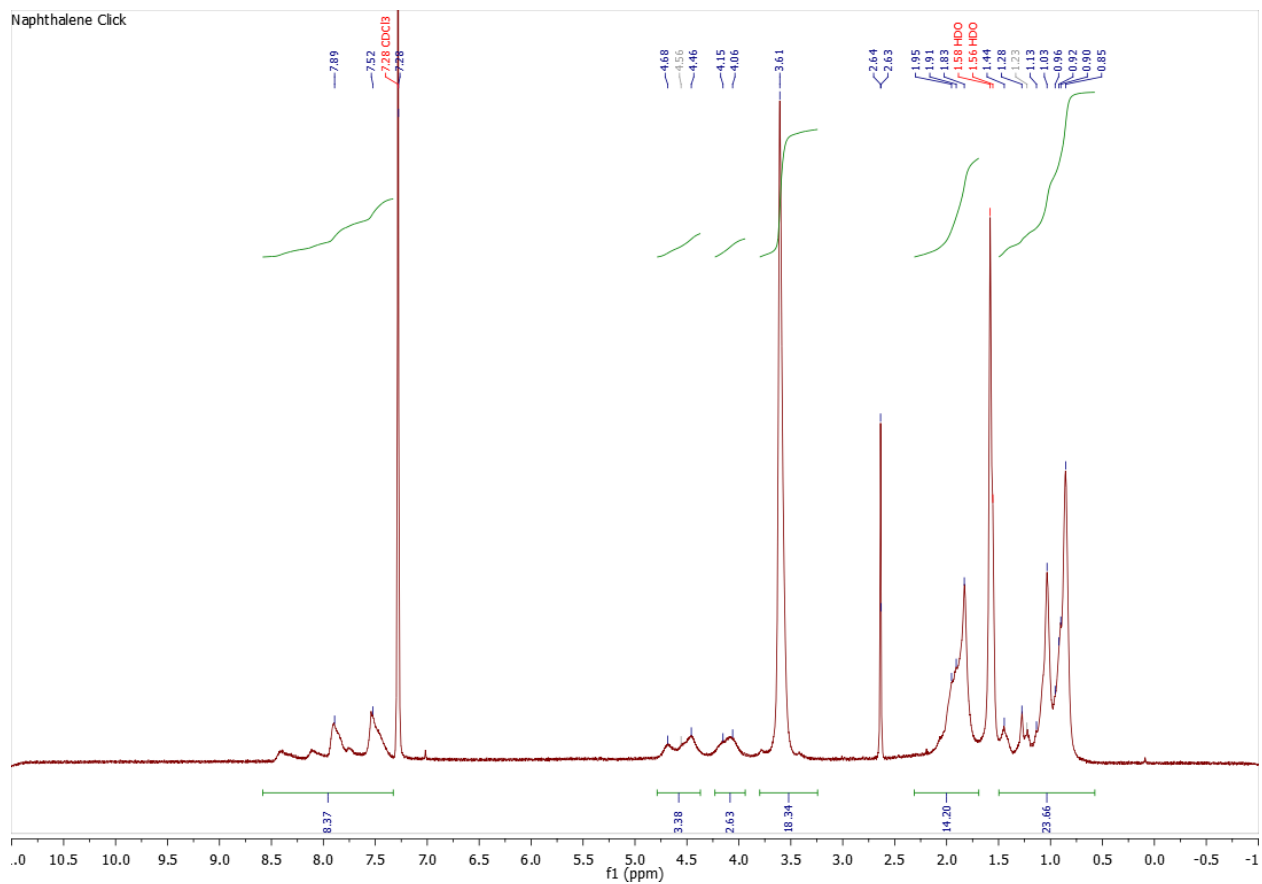
ESI Figure S2. FTIR Spectrum of Polymer 1



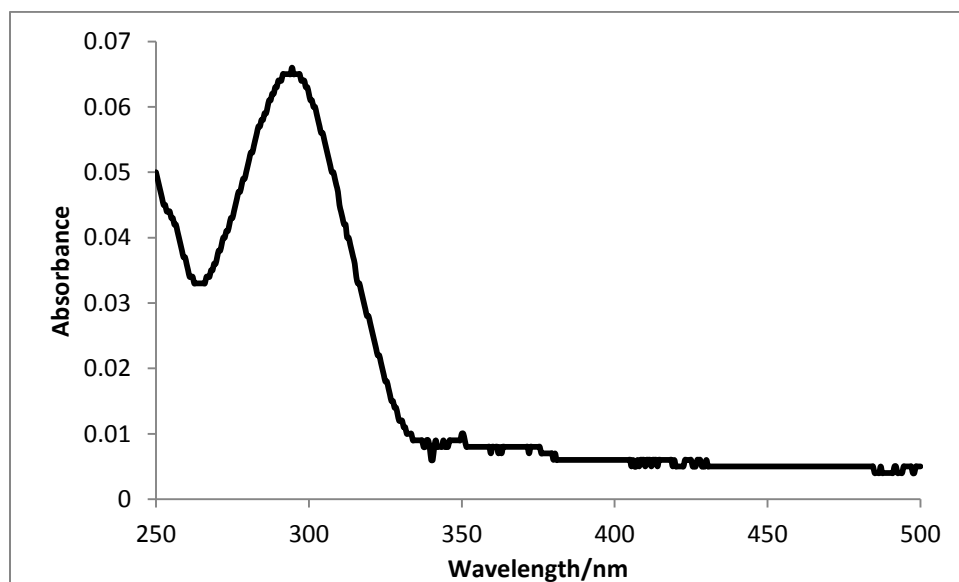
ESI Figure S3. ^1H NMR Spectrum of Polymer 2



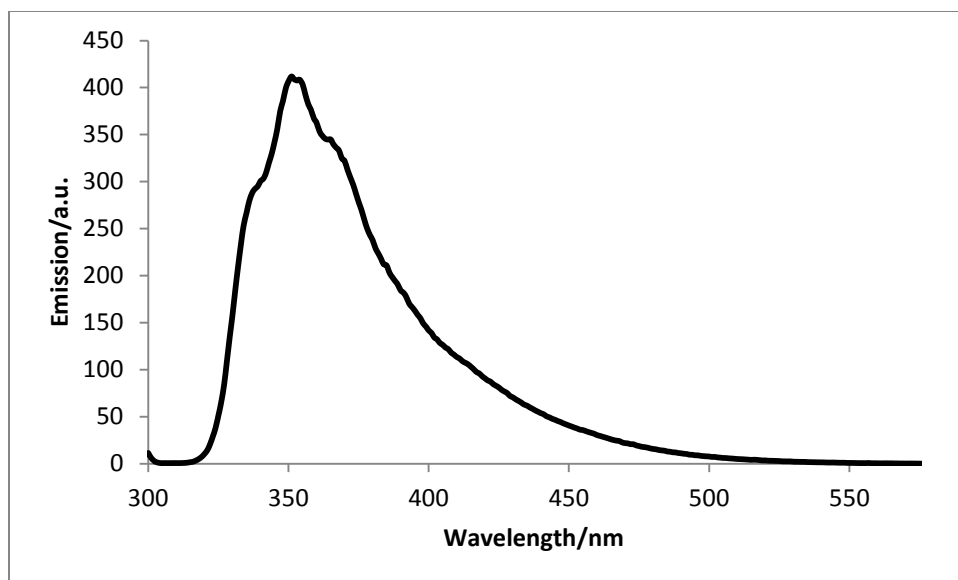
ESI Figure S4. IR Spectrum of Polymer 2



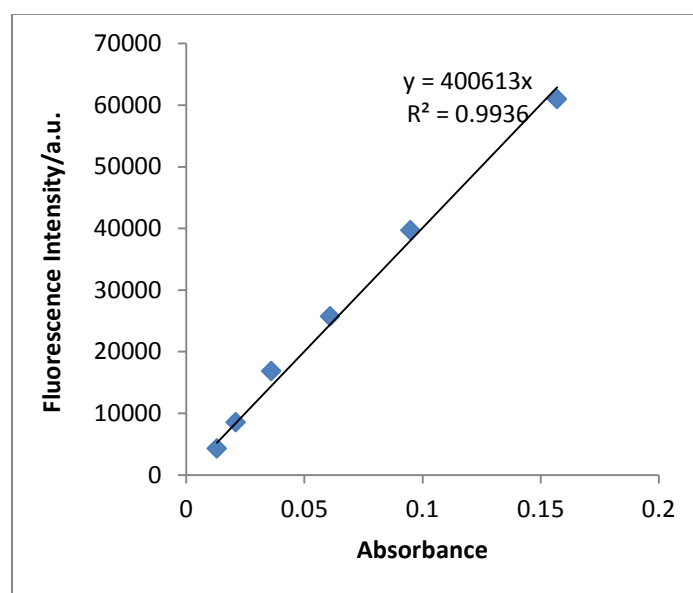
ESI Figure S5. ¹H NMR Spectrum of Polymer 3a



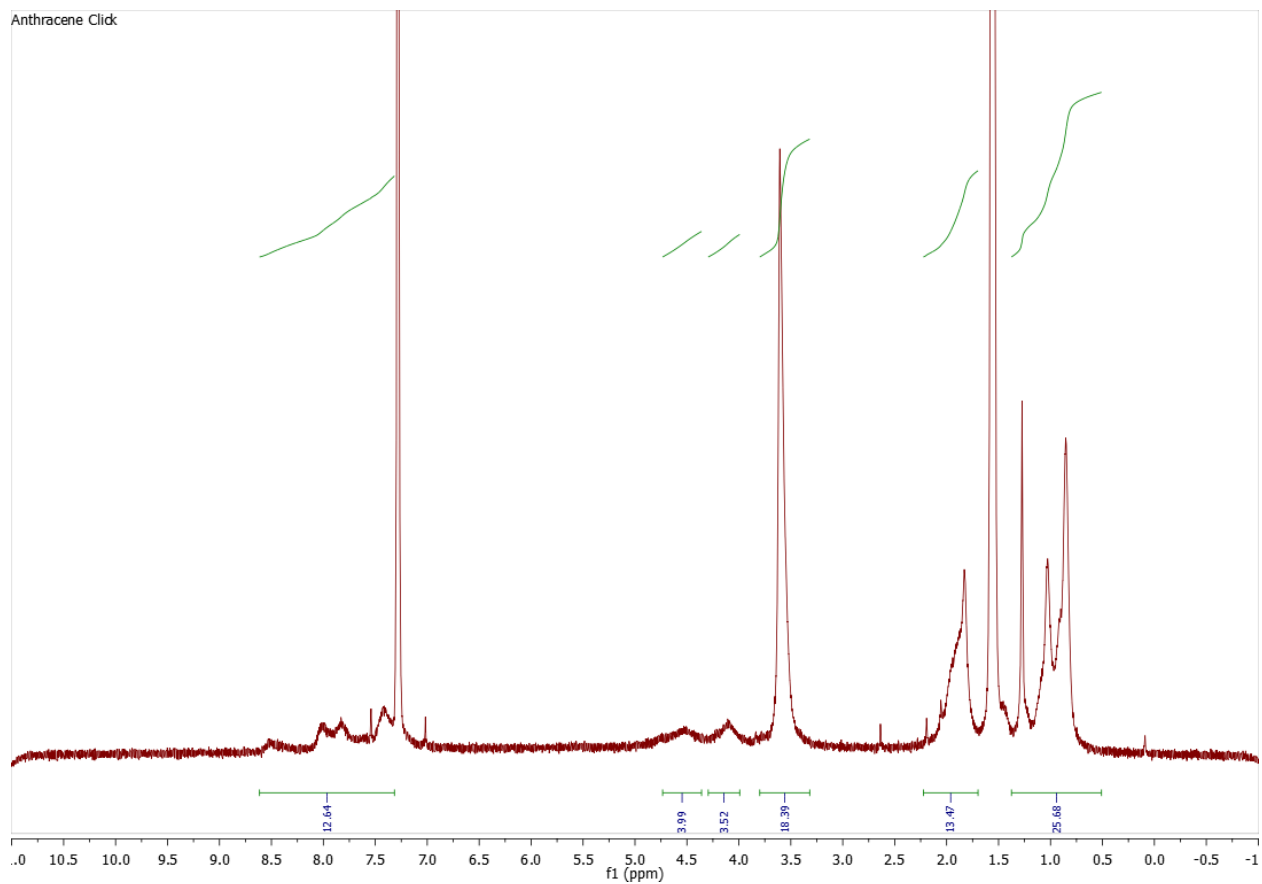
ESI Figure S5. UV-Vis Absorbance Spectrum of Polymer 3a



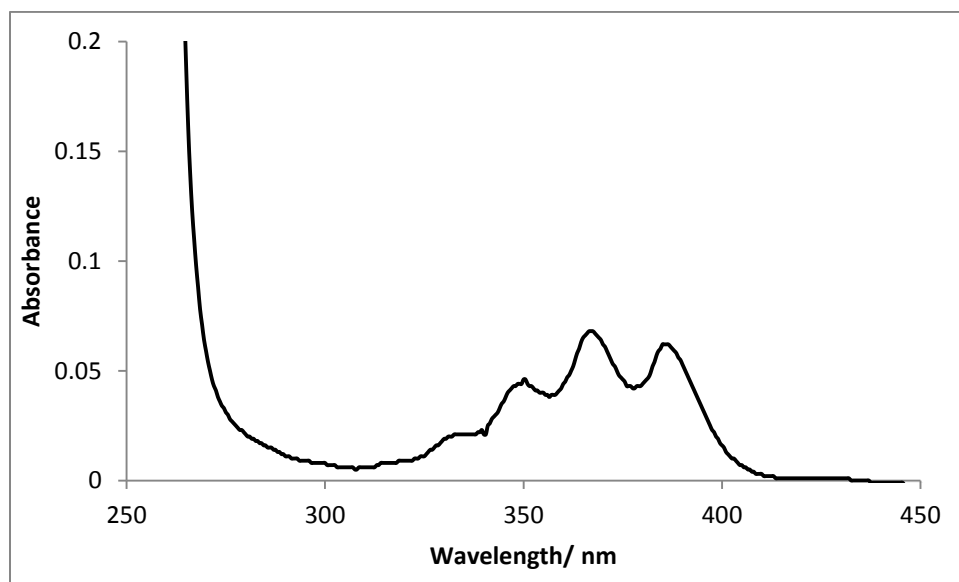
ESI Figure S6. Fluorescence Emission Spectrum of Polymer 3a (excitation 294nm, Detector Voltage 500V)



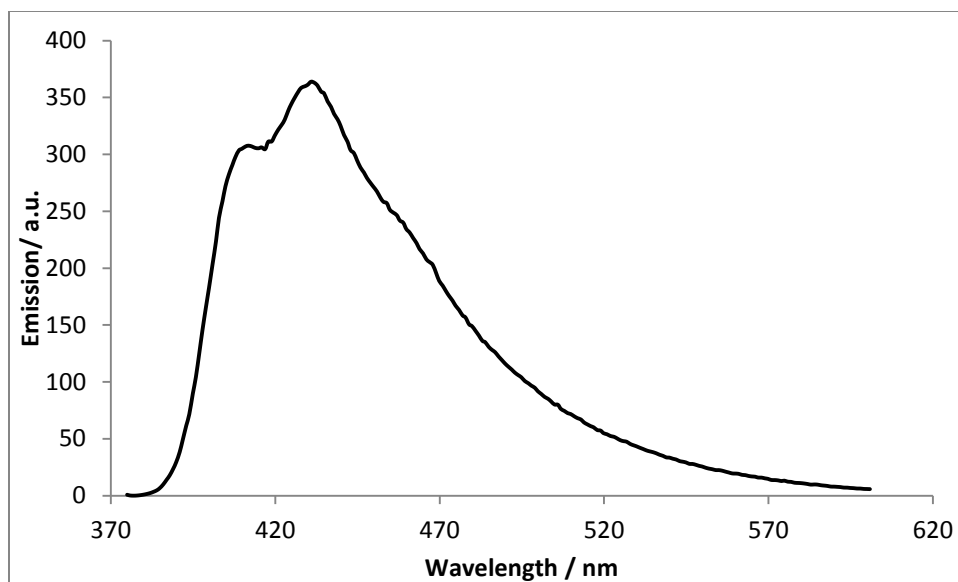
ESI Figure S7. Absorbance vs Total Fluorescence Emission (Excitation 294 nm) for Polymer 3a



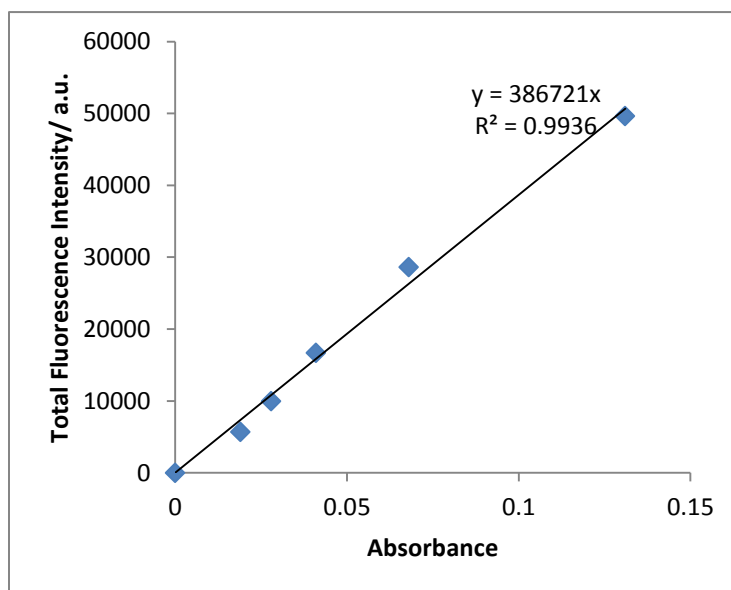
ESI Figure S8. ^1H NMR Spectrum of Polymer **3b**



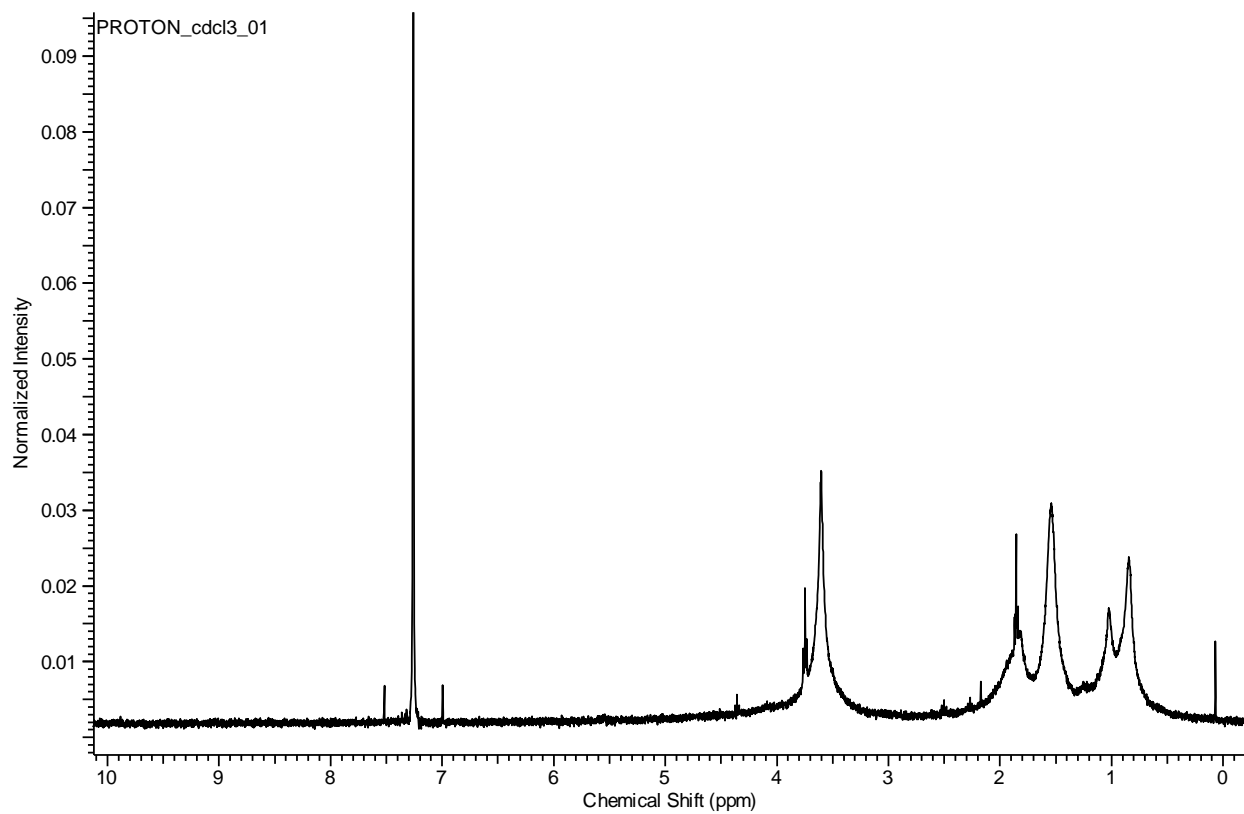
ESI Figure S9. UV-Vis Absorbance Spectrum of Polymer **3b**



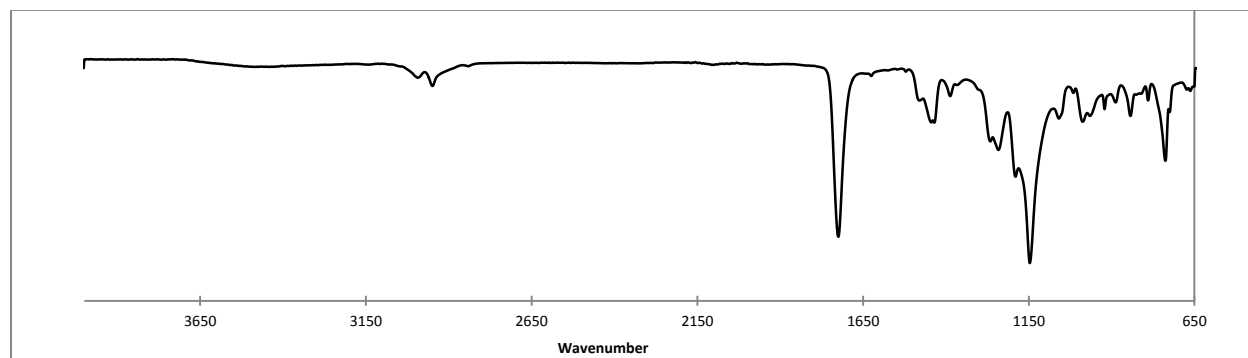
ESI Figure S10. Fluorescence Emission Spectrum of Polymer **3b** (Excitation 365nm, Detector Voltage 500V)



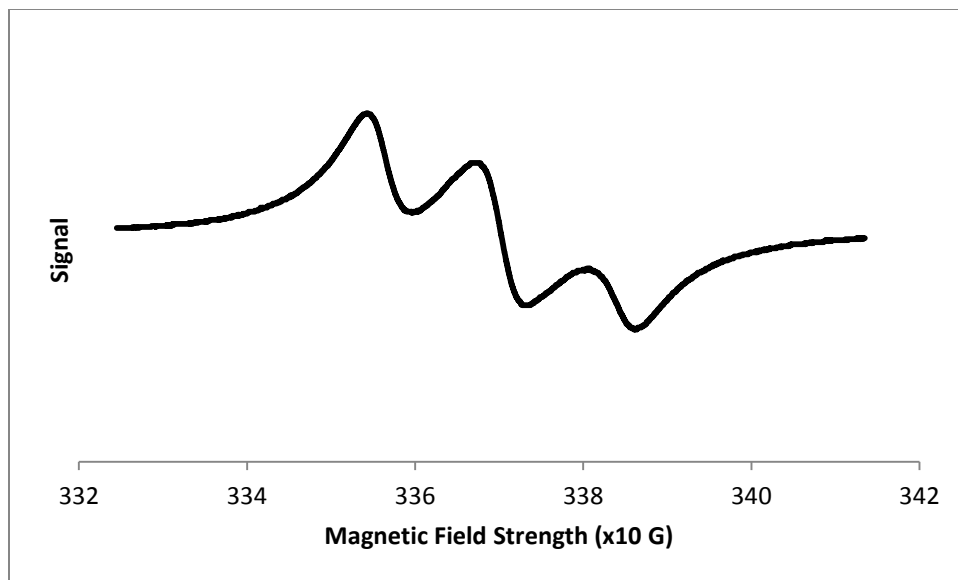
ESI Figure S11. Absorbance vs Total Fluorescence Emission (Excitation 365 nm) for Polymer **3b**



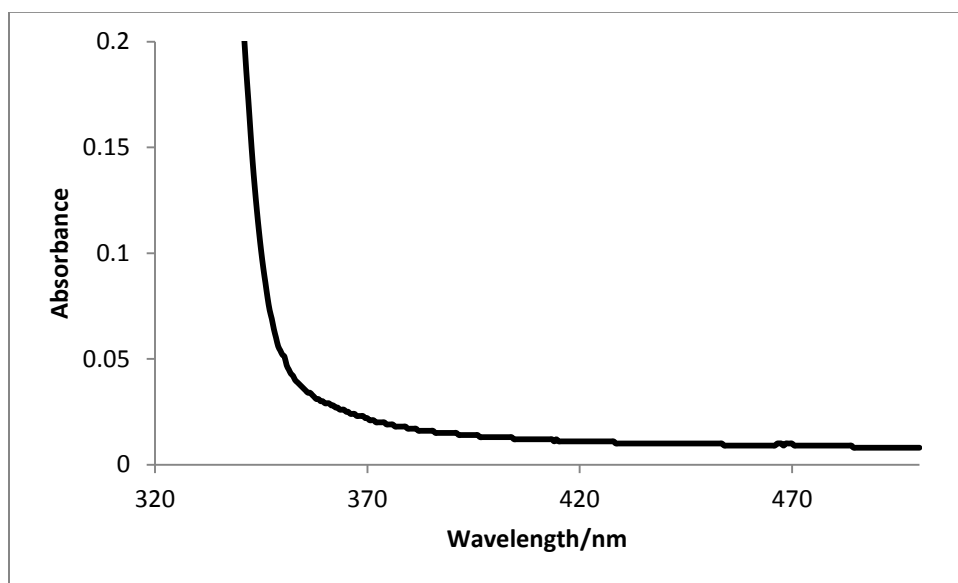
ESI Figure S12. ¹H NMR Spectrum of Polymer 3c



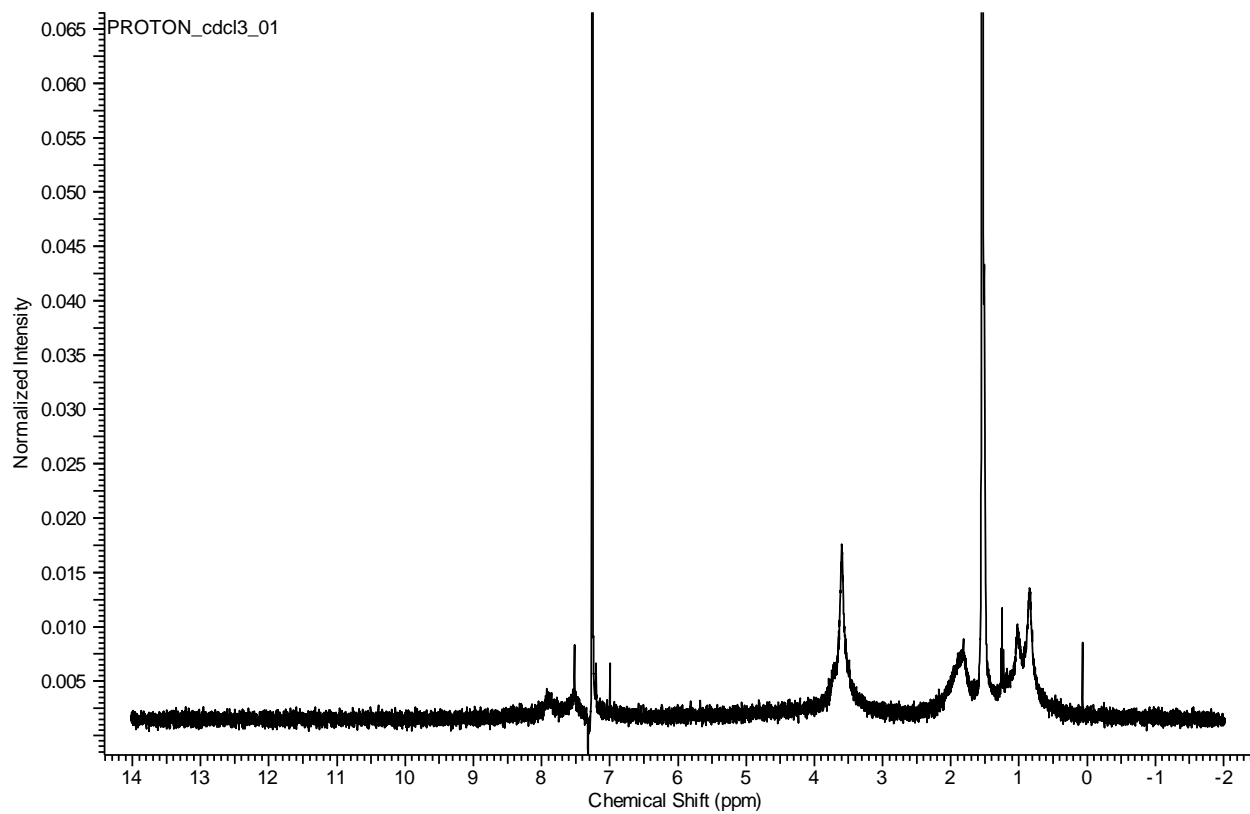
ESI Figure S13. FTIR Spectrum of Polymer 3c



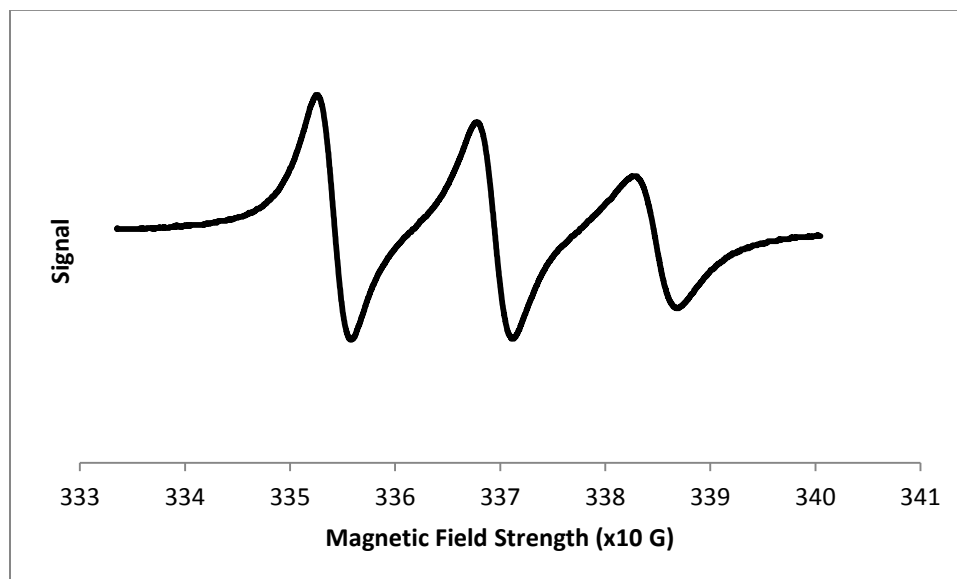
ESI Figure S14. EPR Spectrum of Polymer **3c**



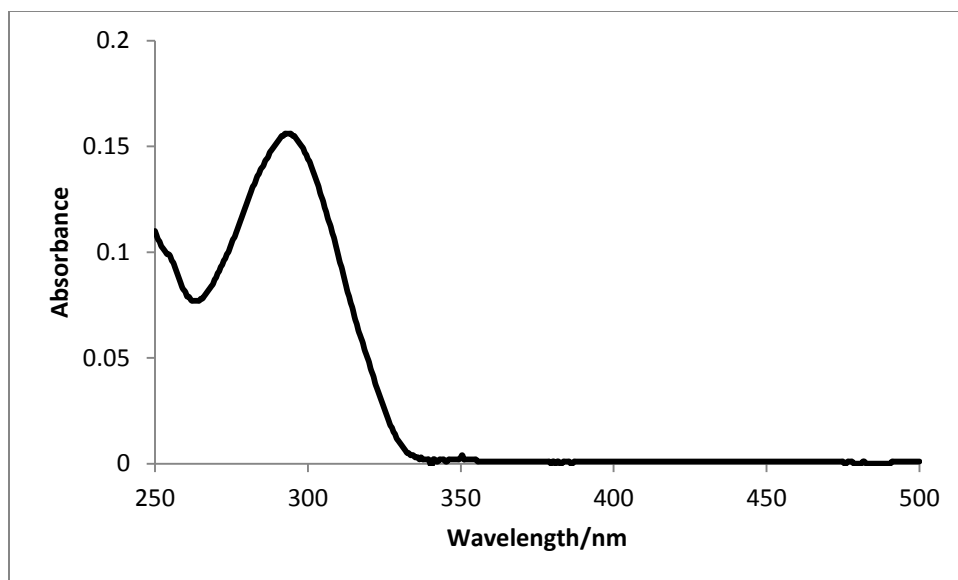
ESI Figure S15. UV-Vis Absorbance Spectrum of Polymer **3C**



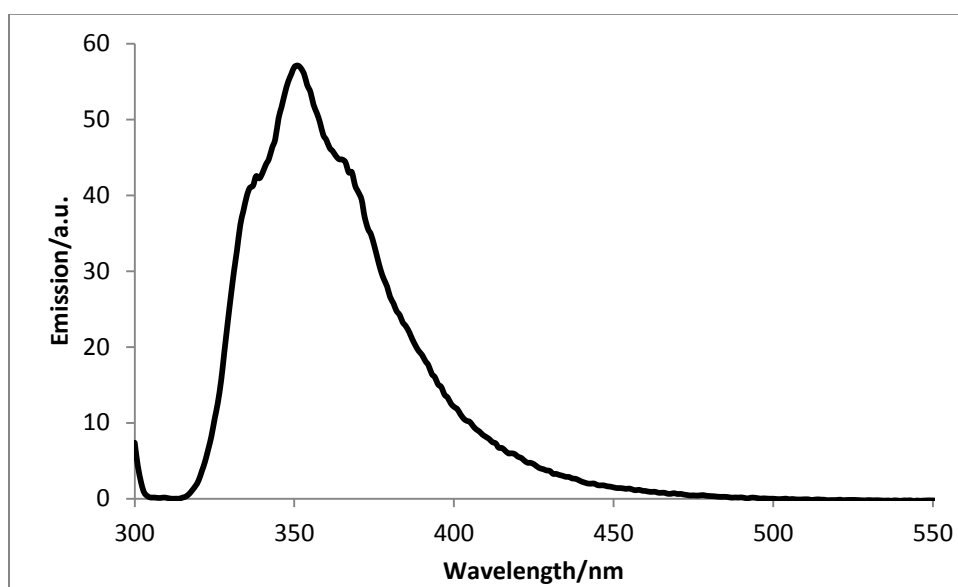
ESI Figure S16. ^1H NMR Spectrum of Polymer 4a



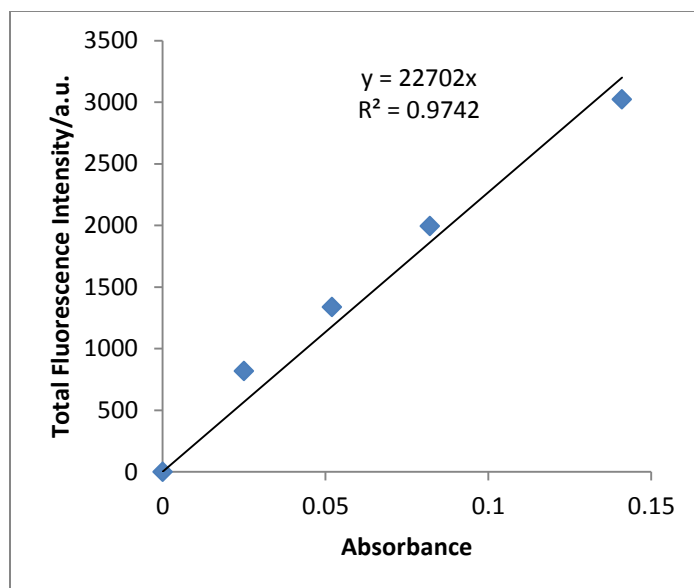
ESI Figure S17. EPR Spectrum of Polymer 4a



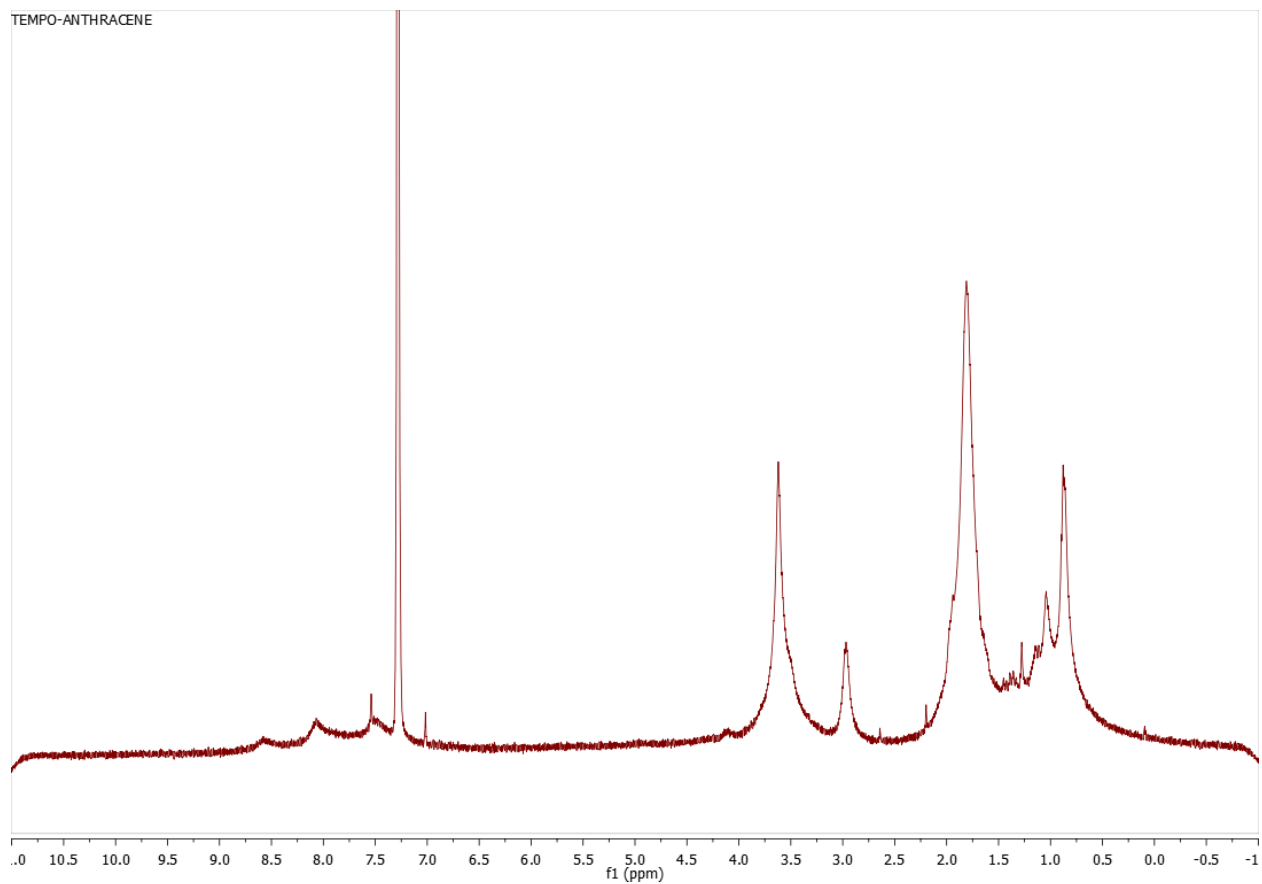
ESI Figure S18. UV-Vis Absorbance Spectrum of Polymer **4a**



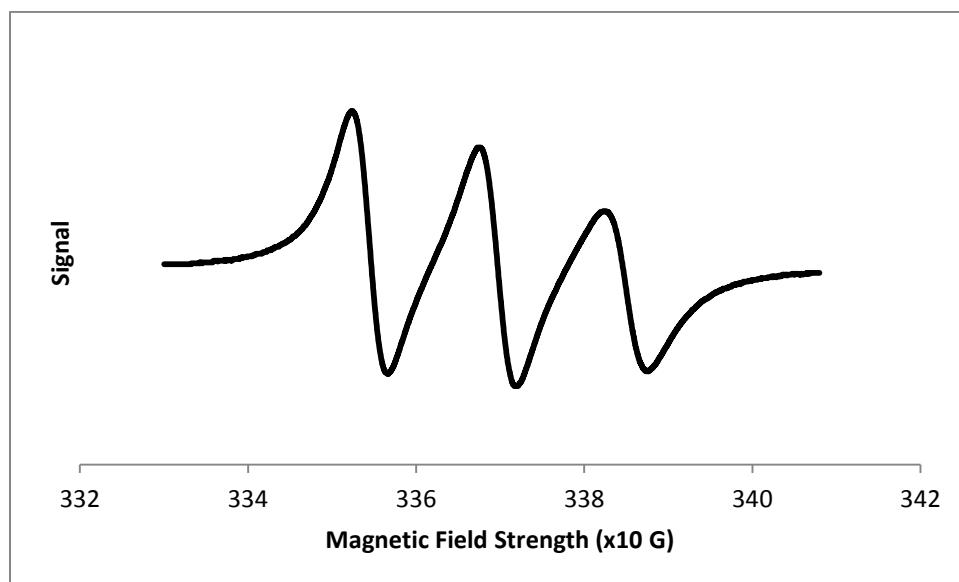
ESI Figure S19. Fluorescence Emission Spectrum of Polymer **4a** (excitation 294nm, Detector Voltage 500V)



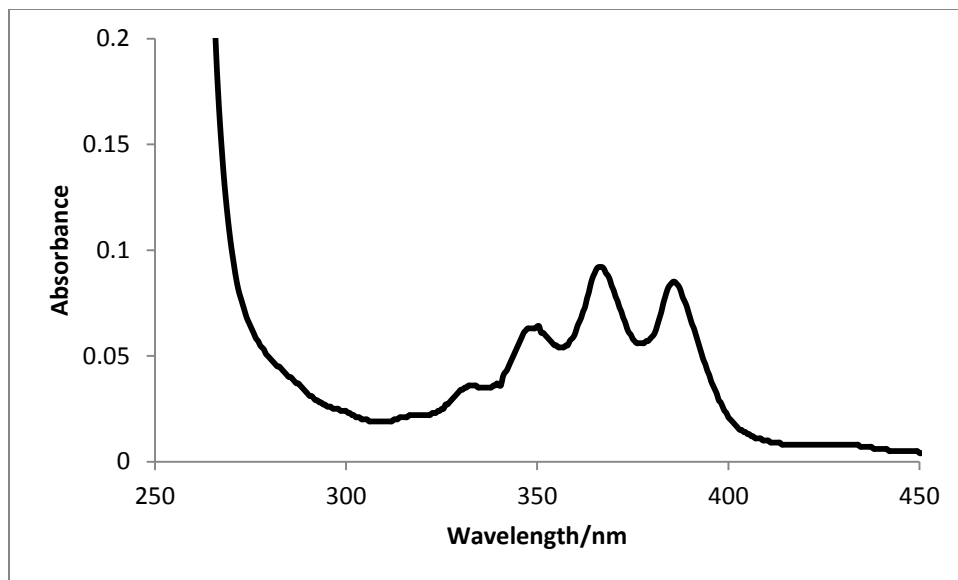
ESI Figure S20. Absorbance vs Total Fluorescence Emission (Excitation 294 nm) for Polymer **4a**



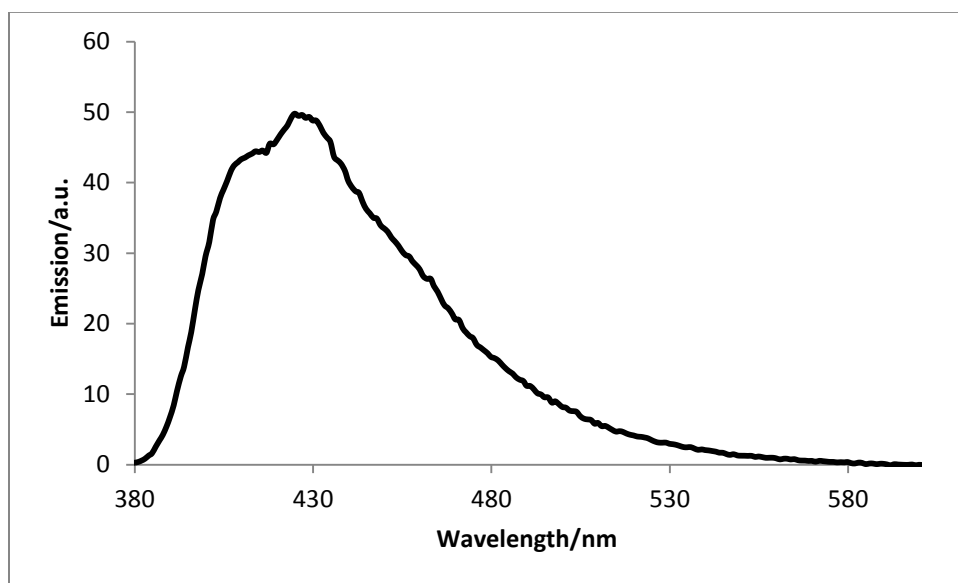
ESI Figure S21. ¹H NMR Spectrum of Polymer 4b



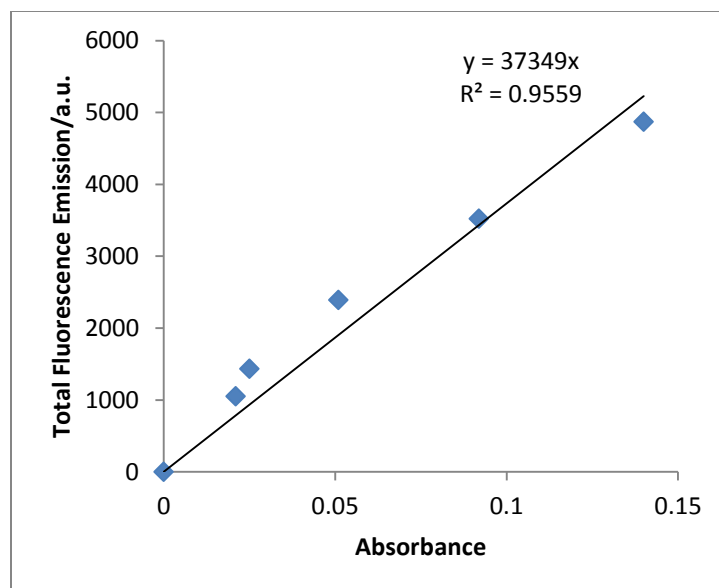
ESI Figure S22. EPR Spectrum of polymer 4b



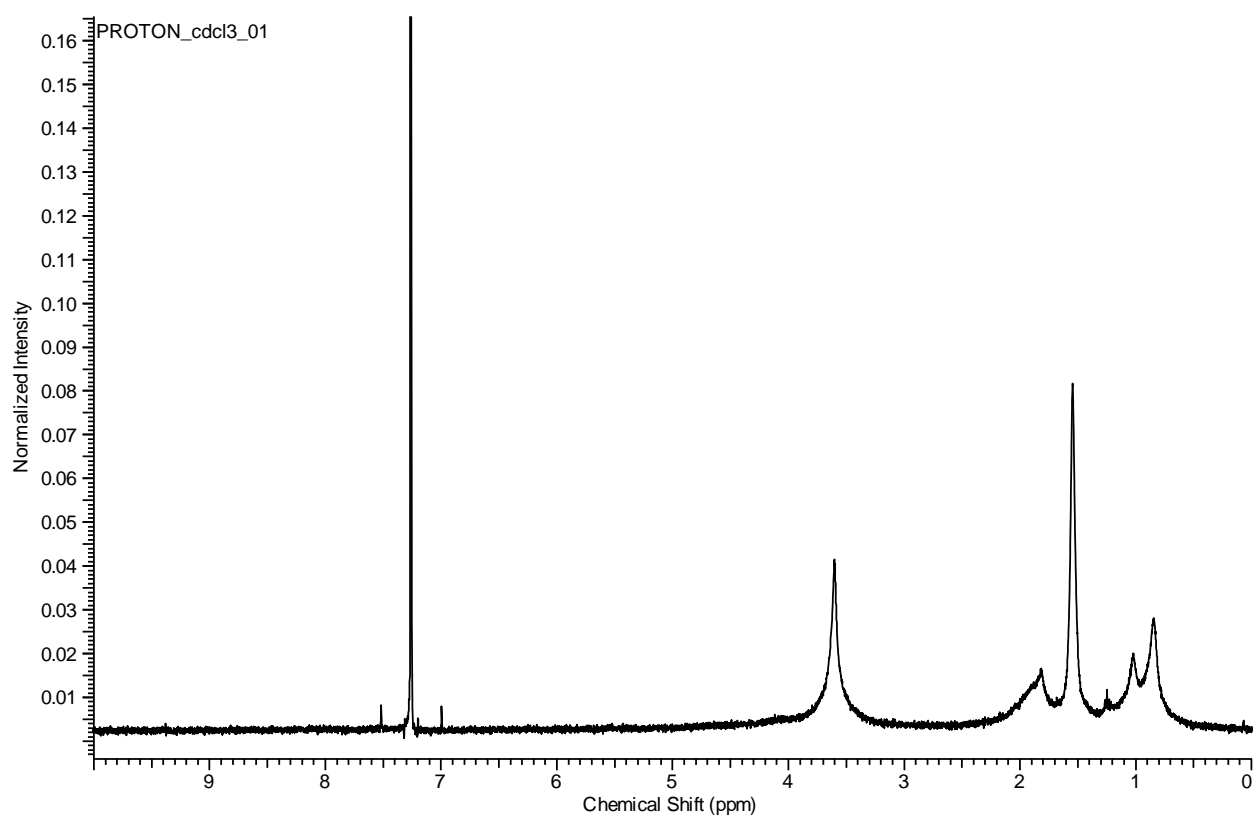
ESI Figure S23. UV-Vis Absorbance Spectrum of Polymer **4b**



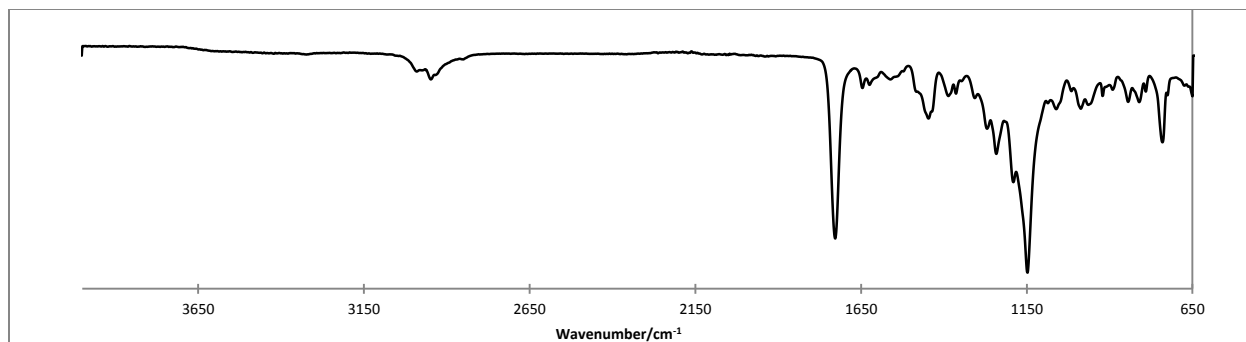
ESI Figure S24. Fluorescence of Polymer **4b** (Excitation 365nm, Detector Voltage 500V)



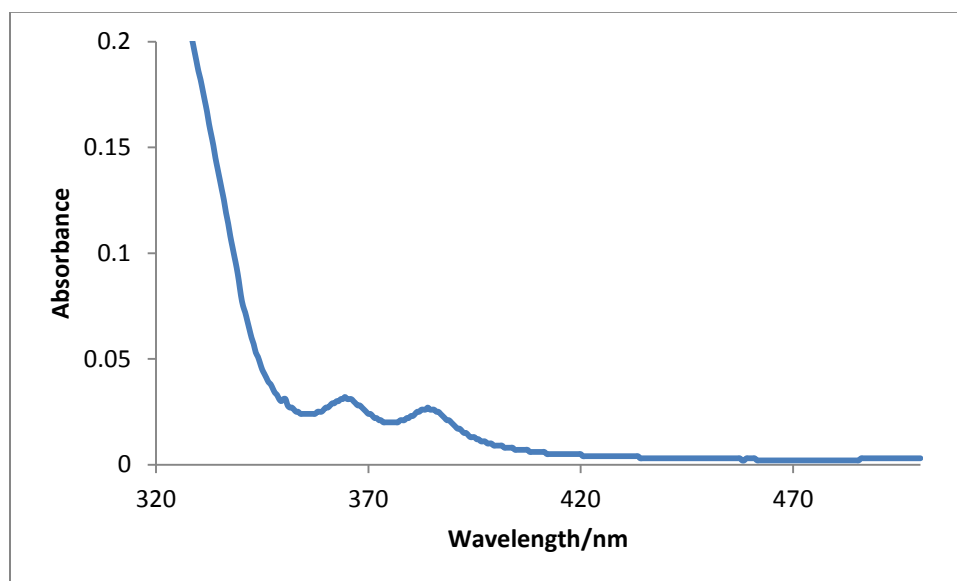
ESI Figure S25. Absorbance vs Total Fluorescence Emission (Excitation 365 nm) for Polymer 4b



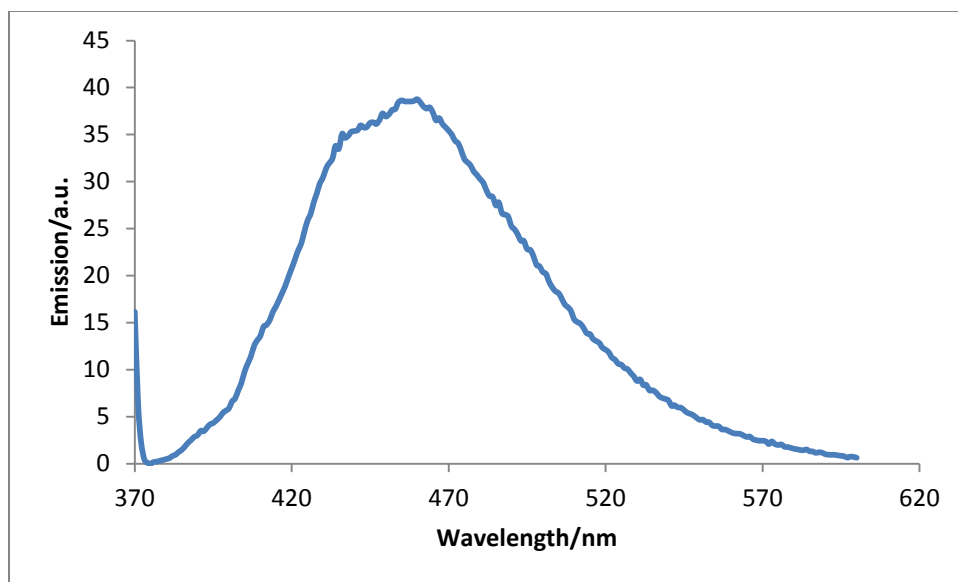
ESI Figure S26. ¹H NMR Spectrum of Polymer 4c



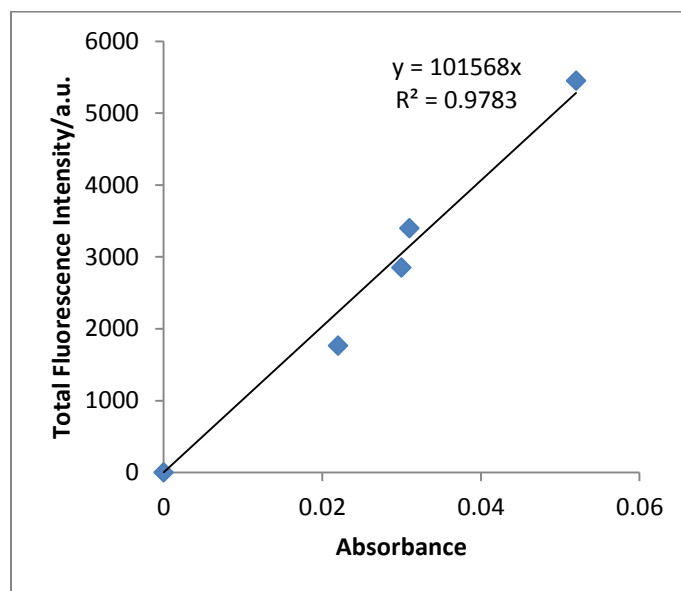
ESI Figure S27. FTIR Spectrum of Polymer **4c**



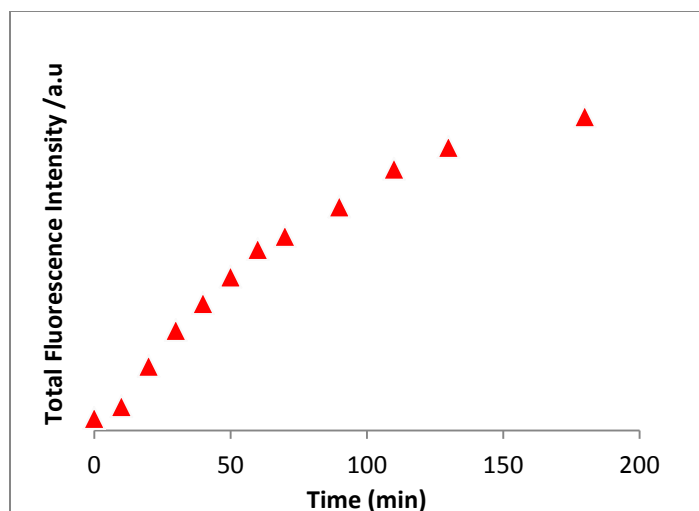
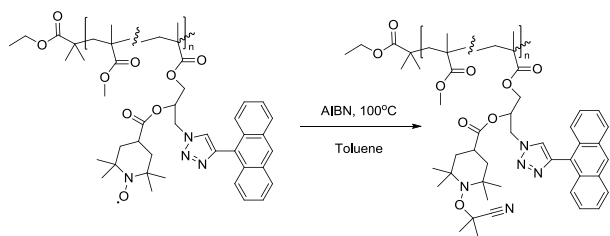
ESI Figure S28. UV-Vis Absorbance Spectrum of Polymer **4c**



ESI Figure S29. Fluorescence of Polymer 4c (Excitation 365nm, Detector Voltage 500V)



ESI Figure S30. Absorbance vs Total Fluorescence Emission (Excitation 365 nm) for Polymer 4c



ESI Figure S31 Evolution of total fluorescence over time when polymer **4b** is heated at 100 °C in a degassed solution of toluene containing 2.5 equivalents of AIBN.