

Supporting Information

Cationic Polythiophene for Specific Detection of Cyanide Ions in Water Using Fluorometric Technique

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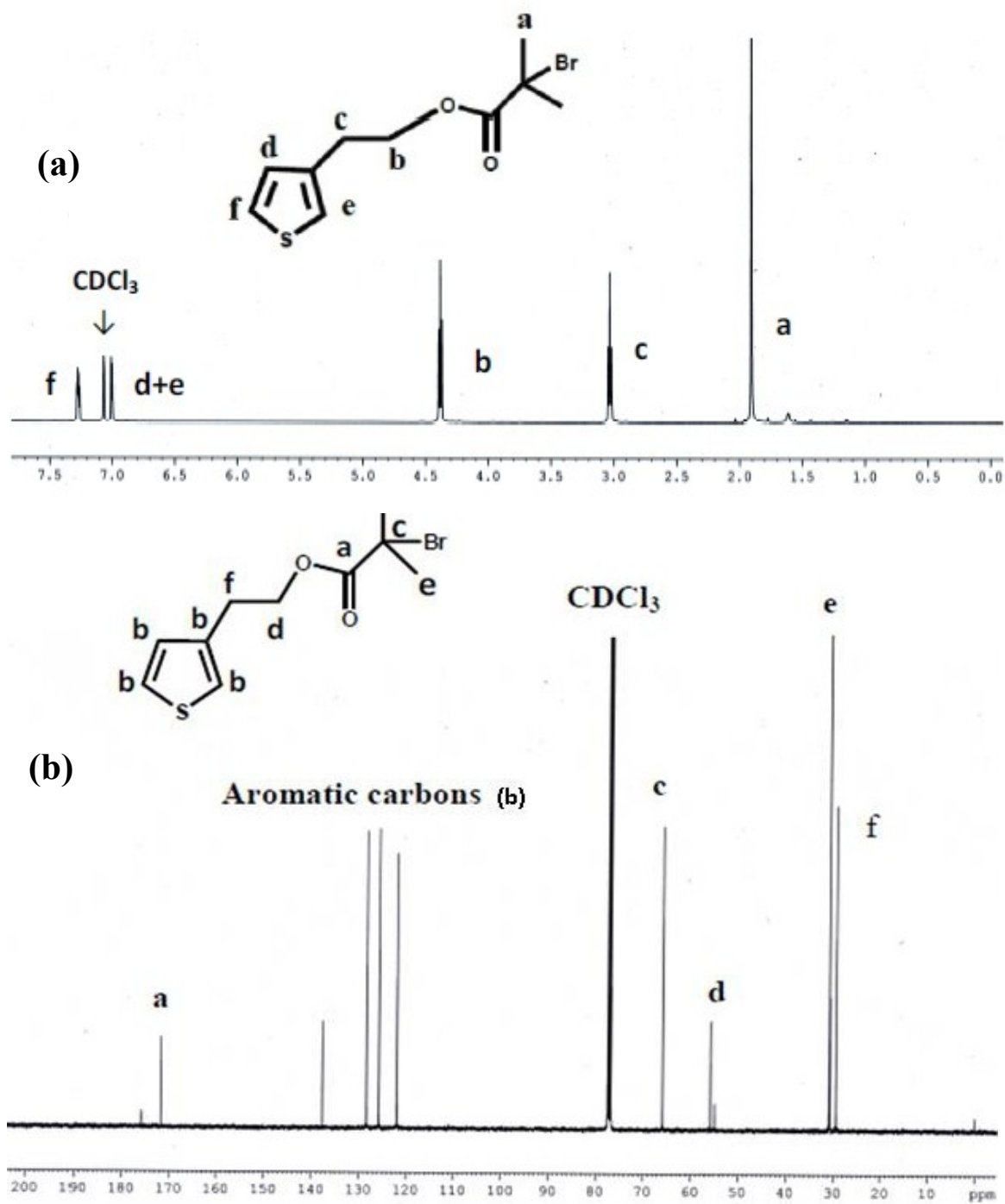


Fig. S1 (a) ^1H NMR spectrum and (b) ^{13}C NMR of TI in CDCl_3 .

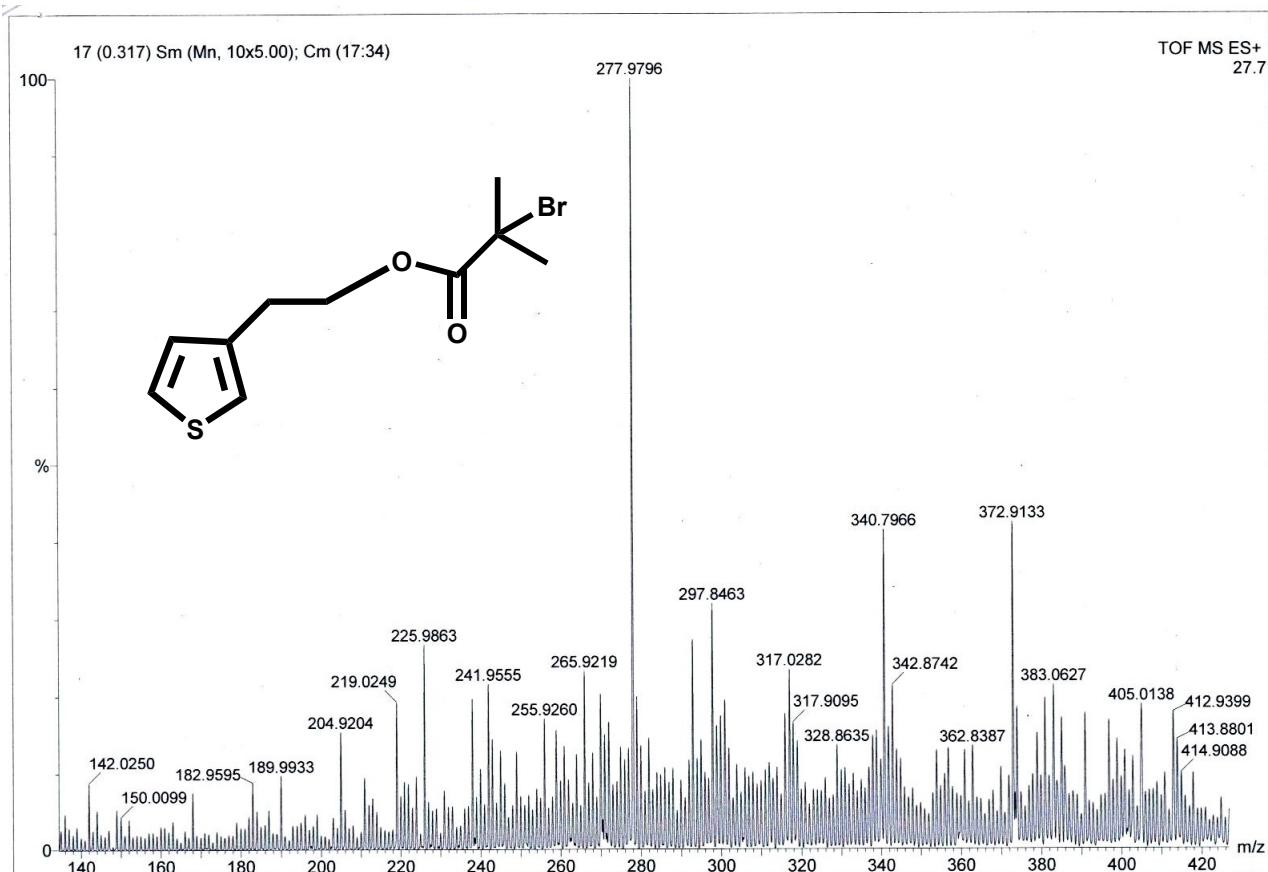


Fig. S2 MASS spectrum of T1.

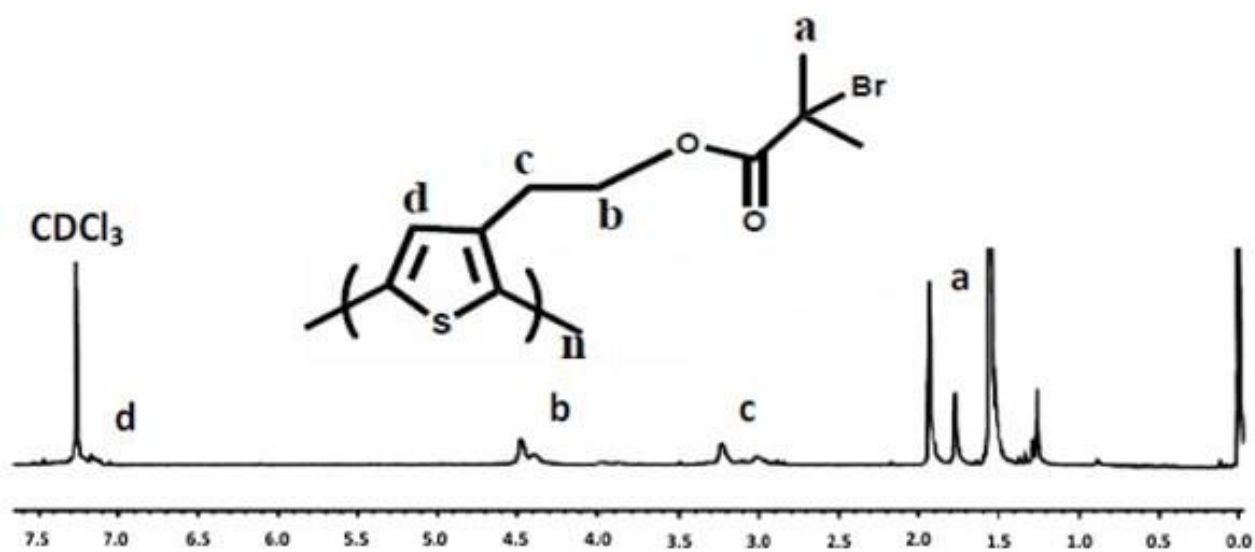


Fig. S3 ¹H NMR spectrum of PTI in CDCl₃.

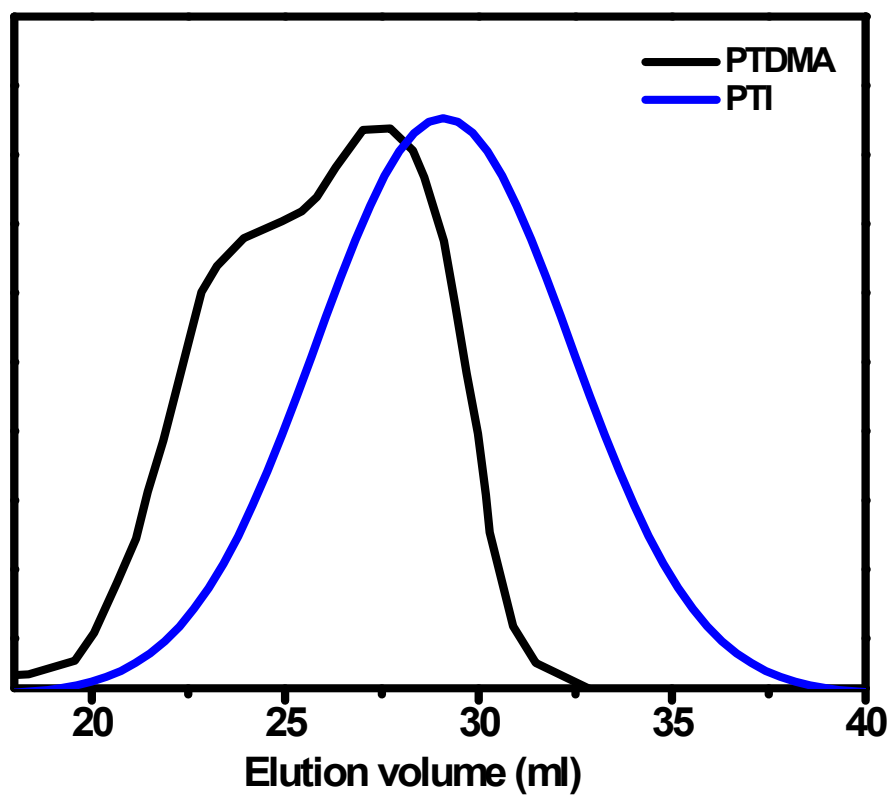


Fig. S4 GPC traces of PTI and PTDMA.

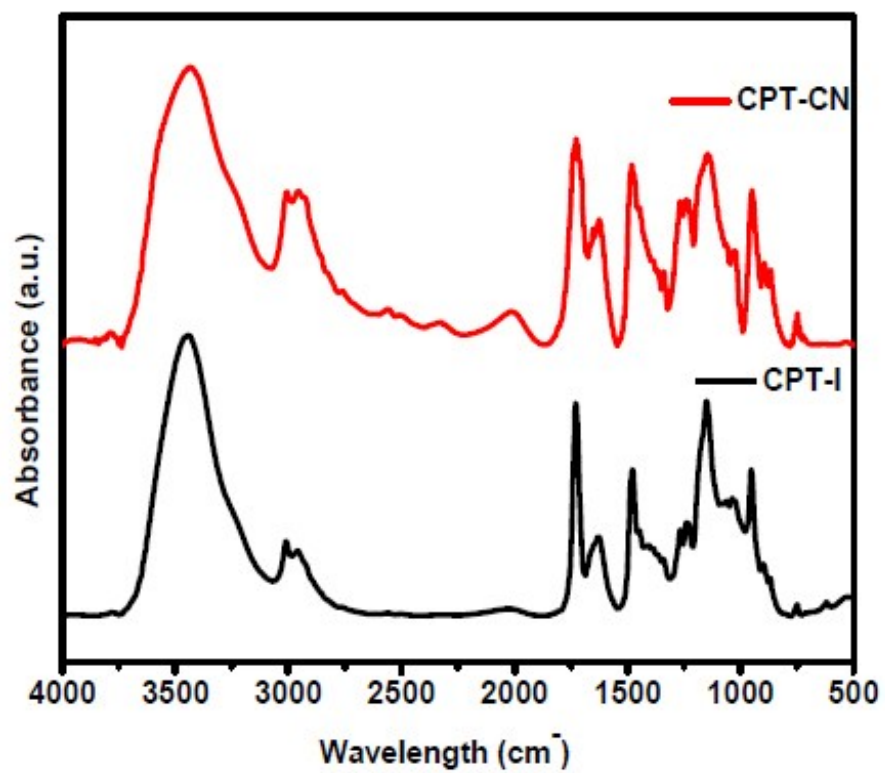


Fig. S5 FTIR spectra of CPT-I before and after addition of CN⁻ ion.

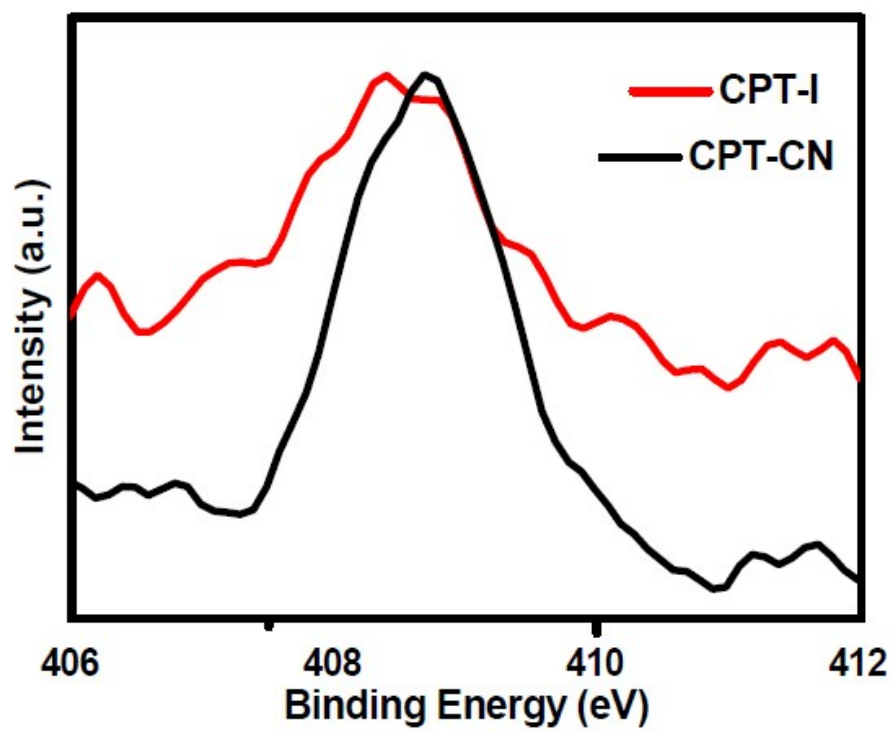


Fig. S6 XPS spectra of N 1s of CPT-I before and after addition of CN^- ion.

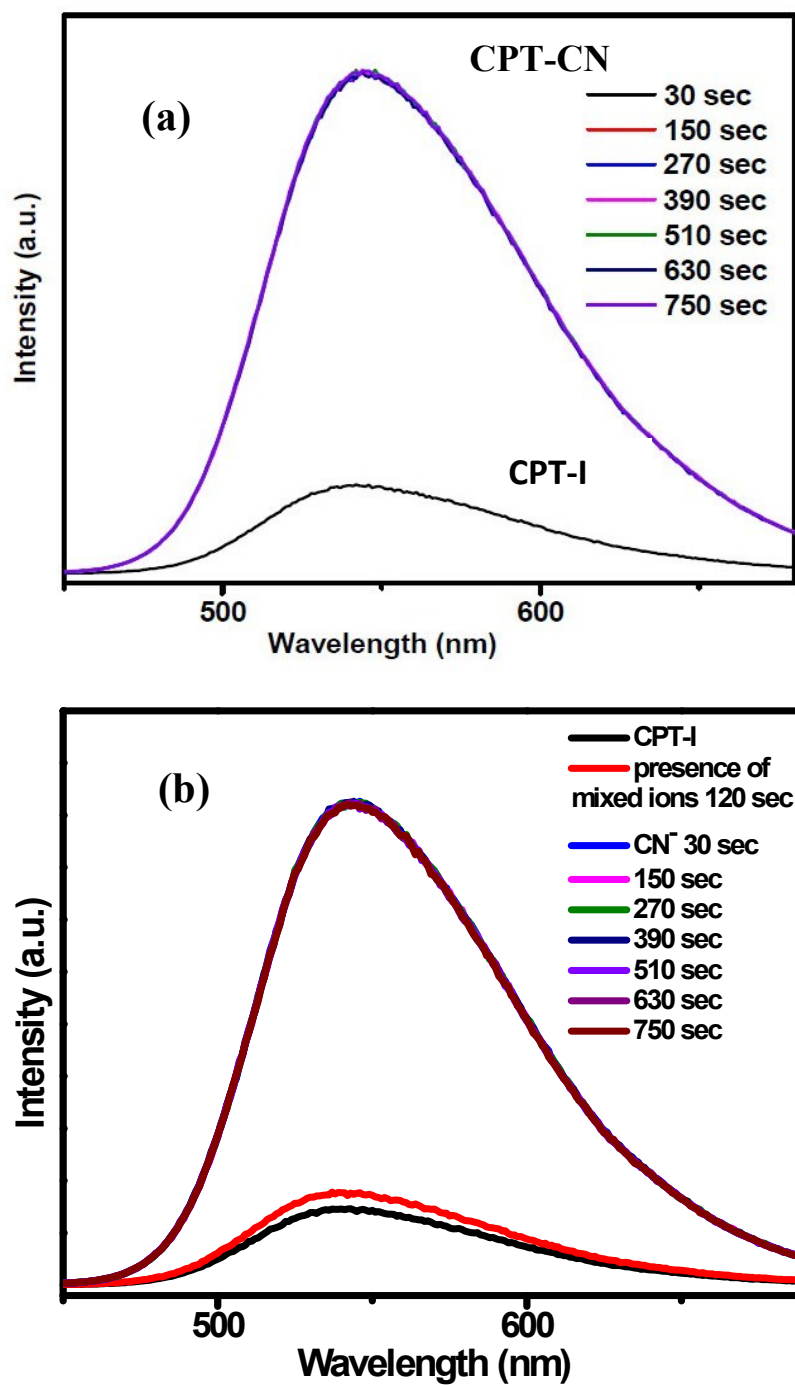


Fig. S7 (a) Time dependent PL intensity vs wavelength plot of CPT-I after addition of 19.6 μM CN^- ion in HPLC water without other anions and **(b)** in presence of mixed ions.

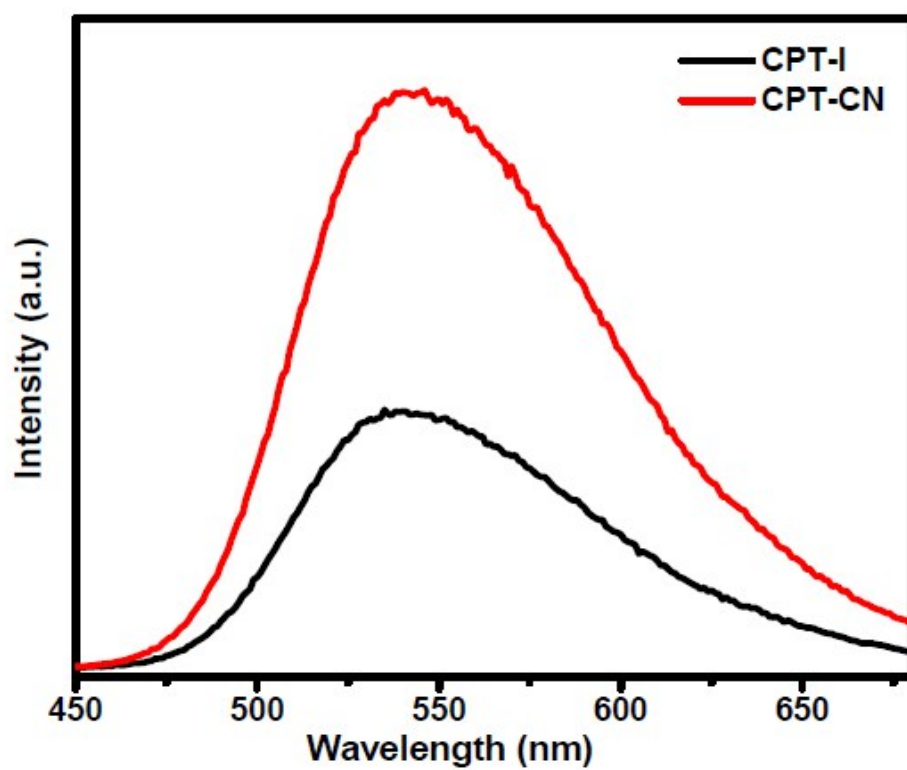


Fig. S8 PL intensity vs wavelength plot of CPT-I before and after addition of 19.6 μM CN^- ion in pH 7.4 PBS buffer.

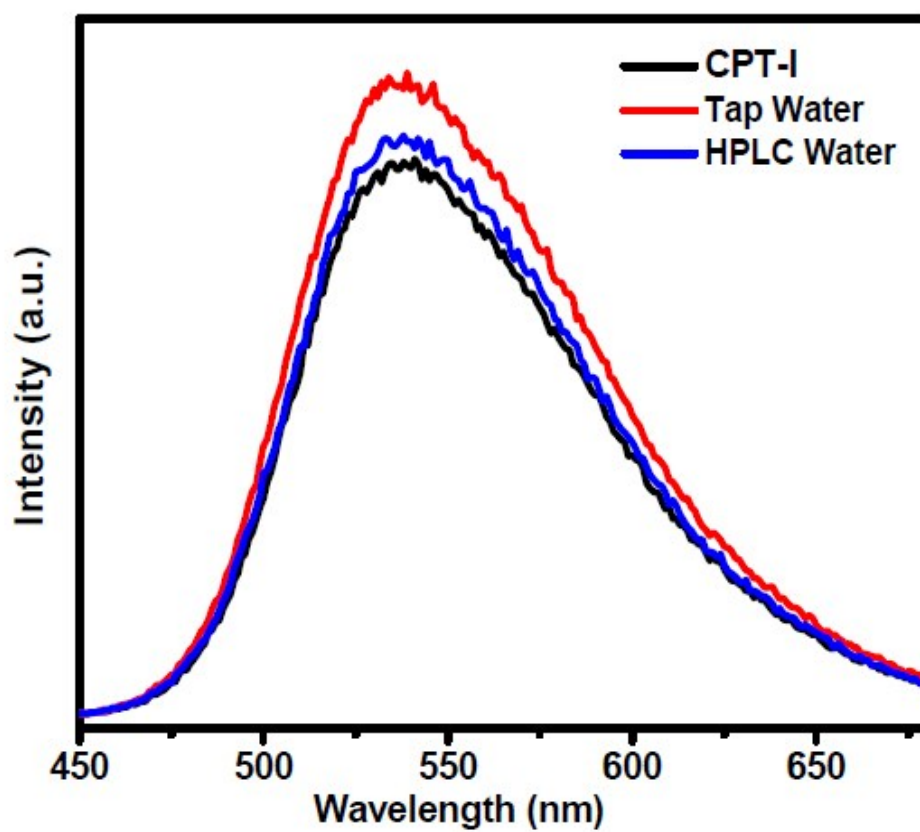


Fig. S9 PL intensity vs wavelength plot of CPT-I in HPLC water and underground tap water.