

Supporting Information for

A nonconjugated macromolecular luminogen for speedy, selective and sensitive detection of picric acid in water

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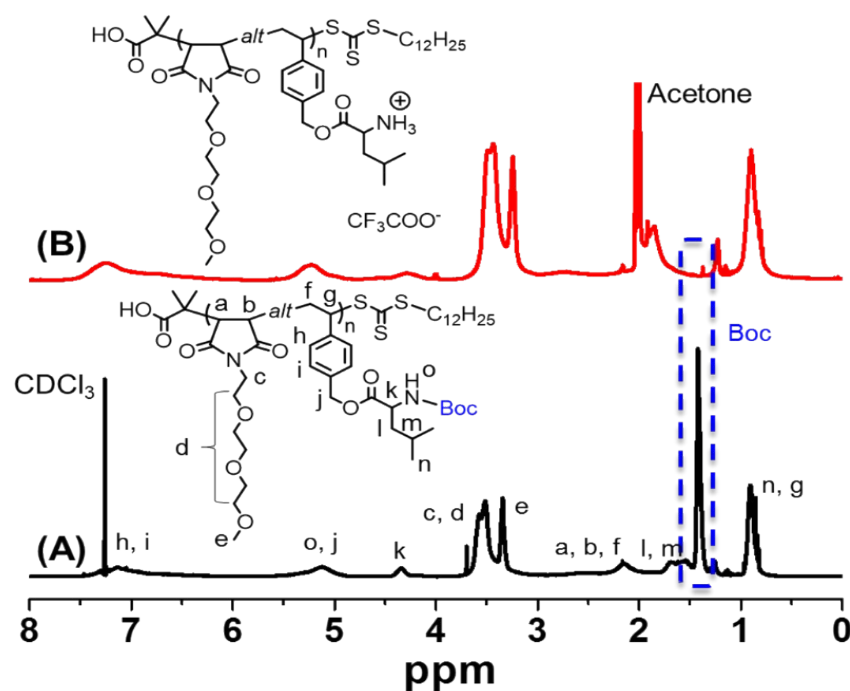


Fig. S1 ¹H NMR spectra of PP in CDCl₃ (A) and DP in acetone-*d*₆ (B).

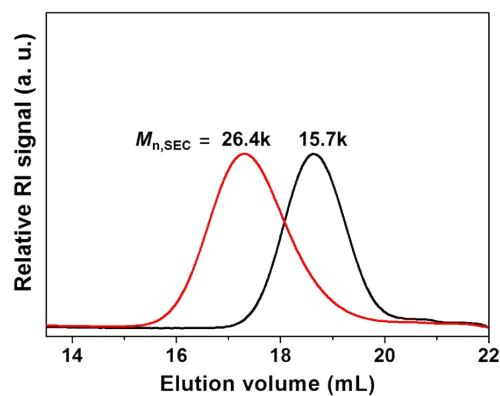


Fig. S2 SEC RI traces of **PP** having two different molecular weights (26400 and 15700 g/mol).

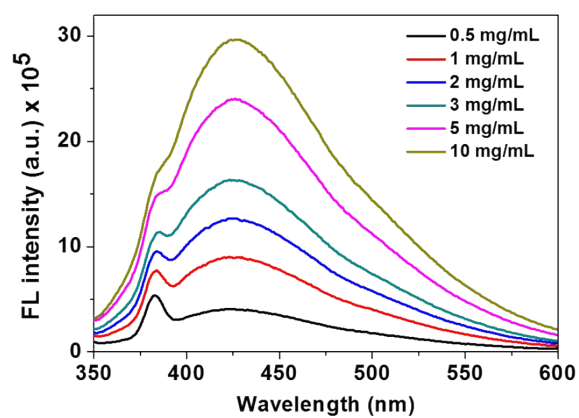


Fig. S3 Fluorescence spectra of polymer at different concentrations in water.

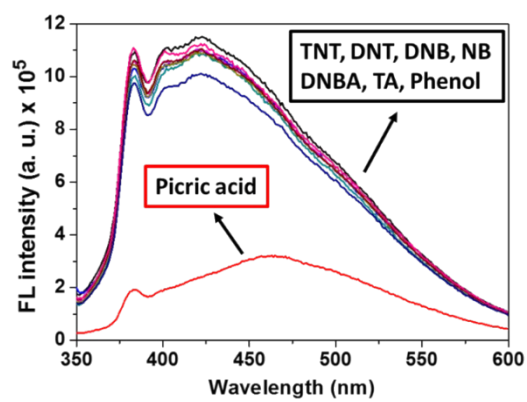


Fig. S4 Fluorescence response of **DP** towards picric acid and different organic analytes.

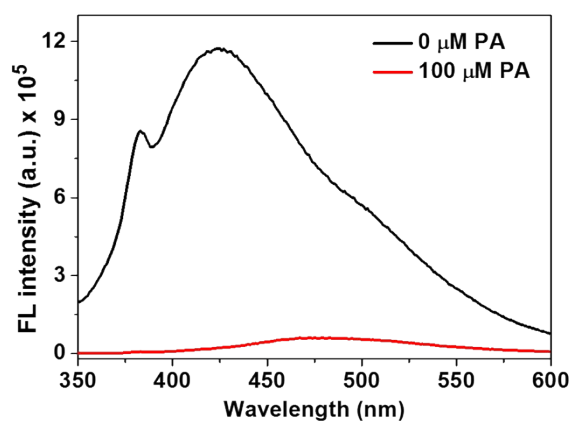


Fig. S5 Fluorescence quenching of DP using 100 μM PA.

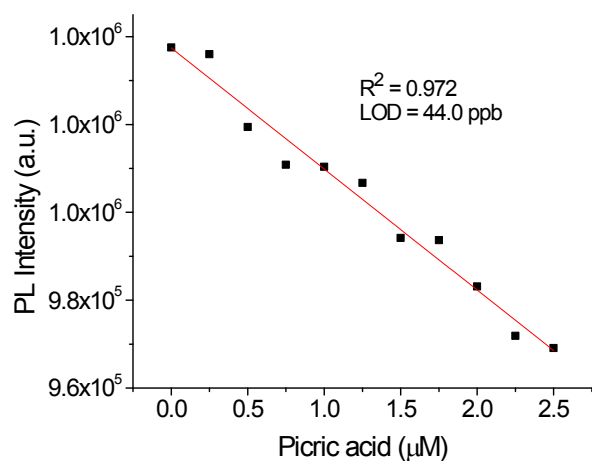


Fig. S6 Plot of fluorescence intensity of **DP** *versus* picric acid concentration.

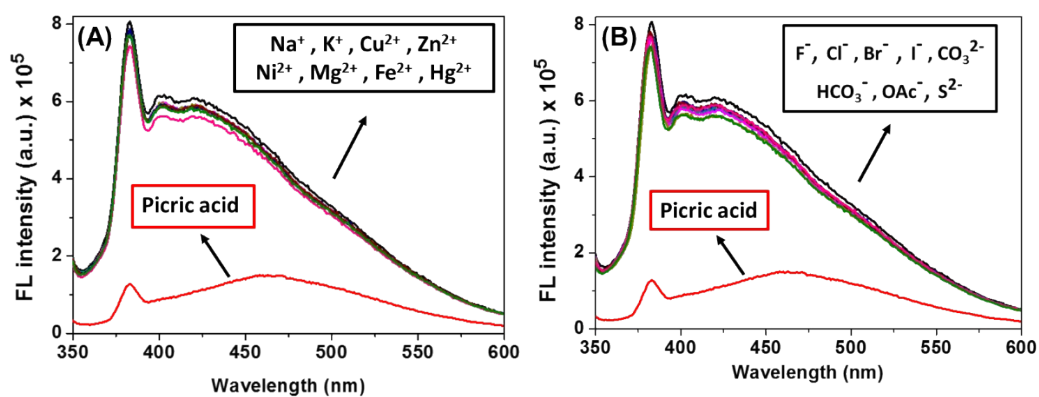


Fig. S7 Comparison of fluorescence response of **DP** towards picric acid with metal ions (A) and anions (B) in water.

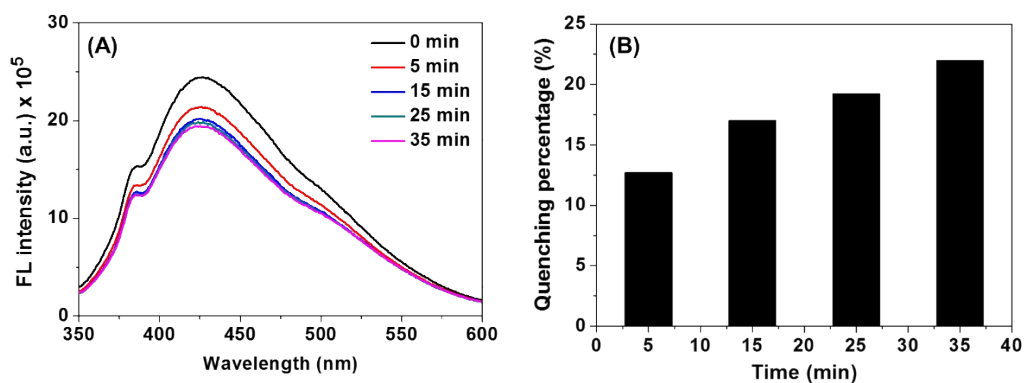


Fig. S8 (A) Change in fluorescence spectra and (B) quenching percentage of fluorescence intensity of DP on exposure to PA vapour at different time intervals.

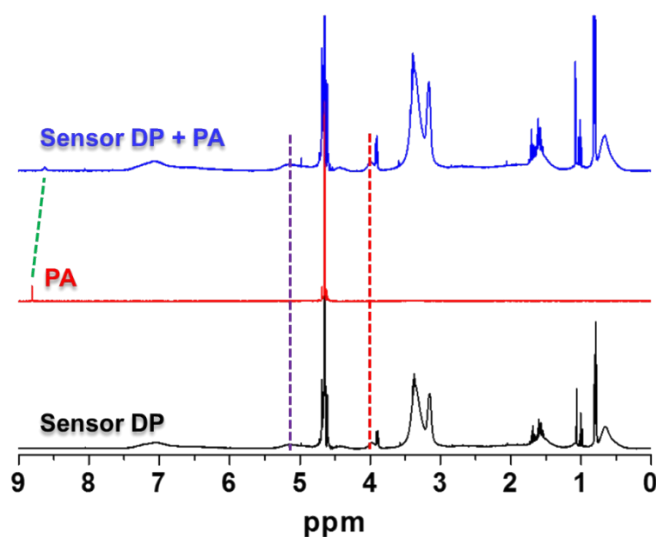


Fig. S9 ^1H NMR spectra of sensor **DP** (bottom), PA (middle) and a mixture of sensor DP and PA (top).

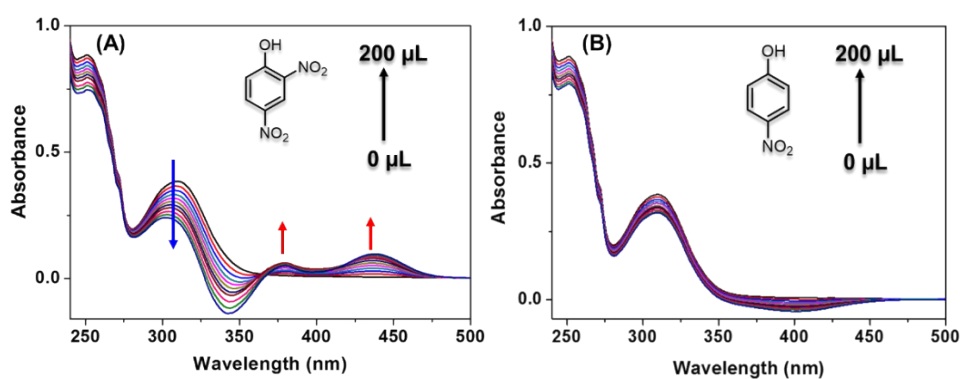


Fig. S10 UV-vis titration curves of sensor **DP** with DNP (A) and NP (B) in water.

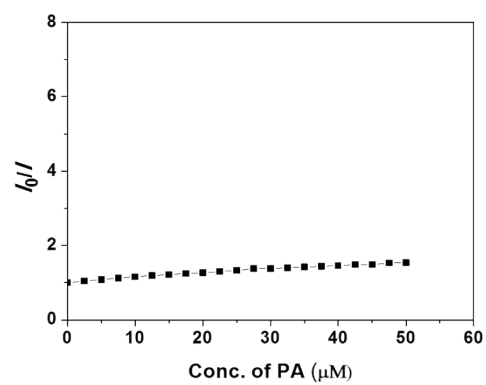


Fig. S11 Stern-Volmer plot for 2,4-dinitrophenol.