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-d₆ (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** $^1$H 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.