

## New Journal of Chemistry

### Supporting Information

#### **N-Unsubstituted-1,2,3-triazole-tethered, AIEE Type Conjugated Polymer as Ratiometric Fluorescence Probe for Silver Ion**

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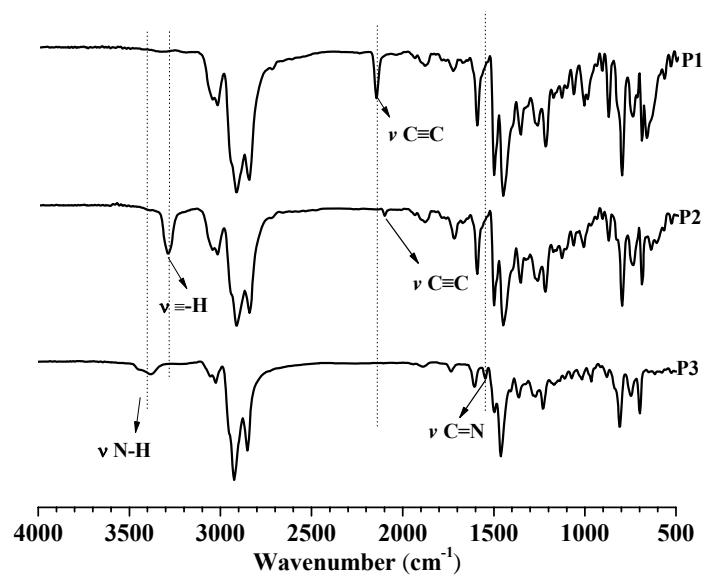
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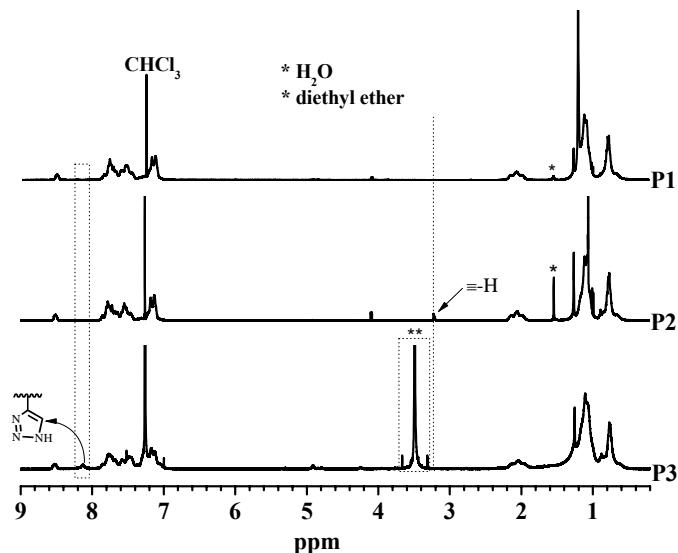
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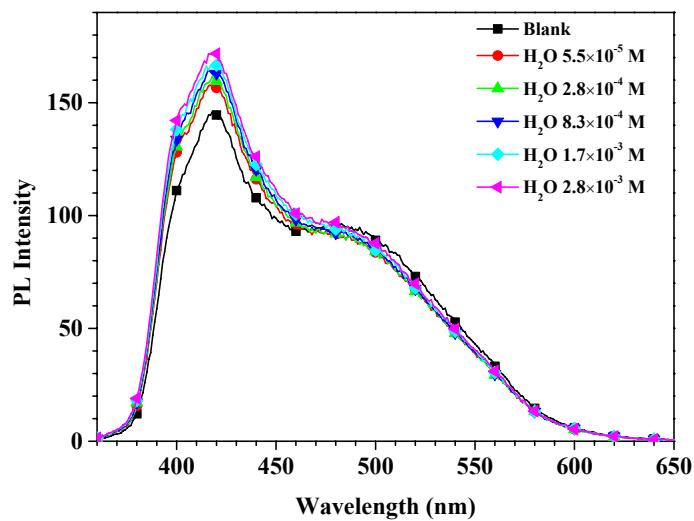
[xiezhf@swpu.edu.cn](mailto:xiezhf@swpu.edu.cn) (ZF Xie)



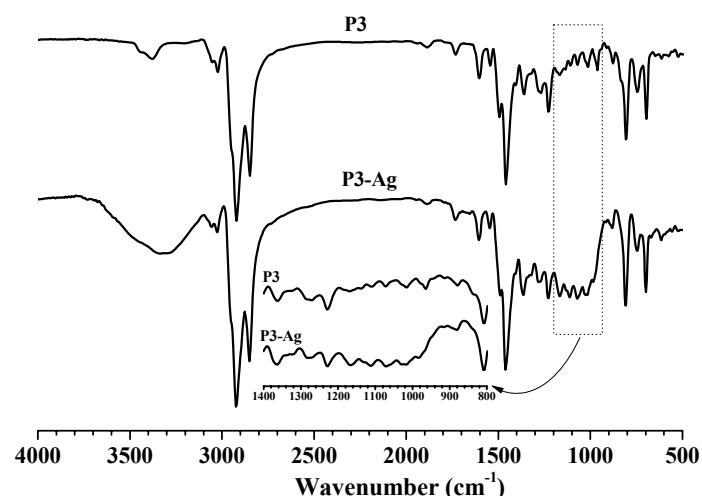
**Fig. S1** FT-IR spectra of **P1**, **P2** and **P3**.



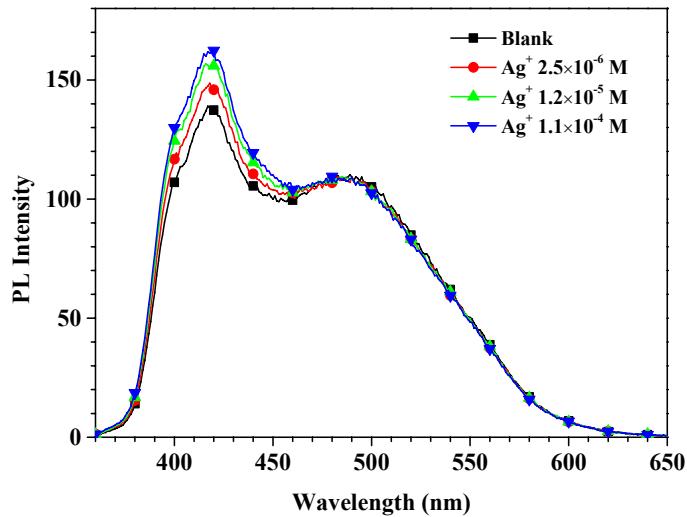
**Fig. S2** <sup>1</sup>H-NMR spectra of **P1**, **P2** and **P3** (in CDCl<sub>3</sub>).



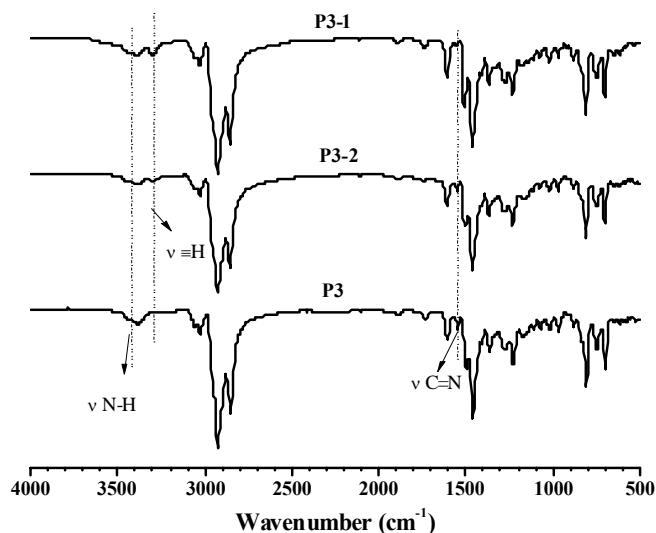
**Fig. S3** PL intensity alteration of **P3** ( $\sim 1.5 \times 10^{-5}$  M) in THF-water mixture ( $V_{\text{THF}}/V_{\text{Water}} = 4/1$ ) (buffered with Tris-CA, 1 mM, pH=7.4) ( $\lambda_{\text{ex}} = 350$  nm) in the presence of incremental H<sub>2</sub>O.



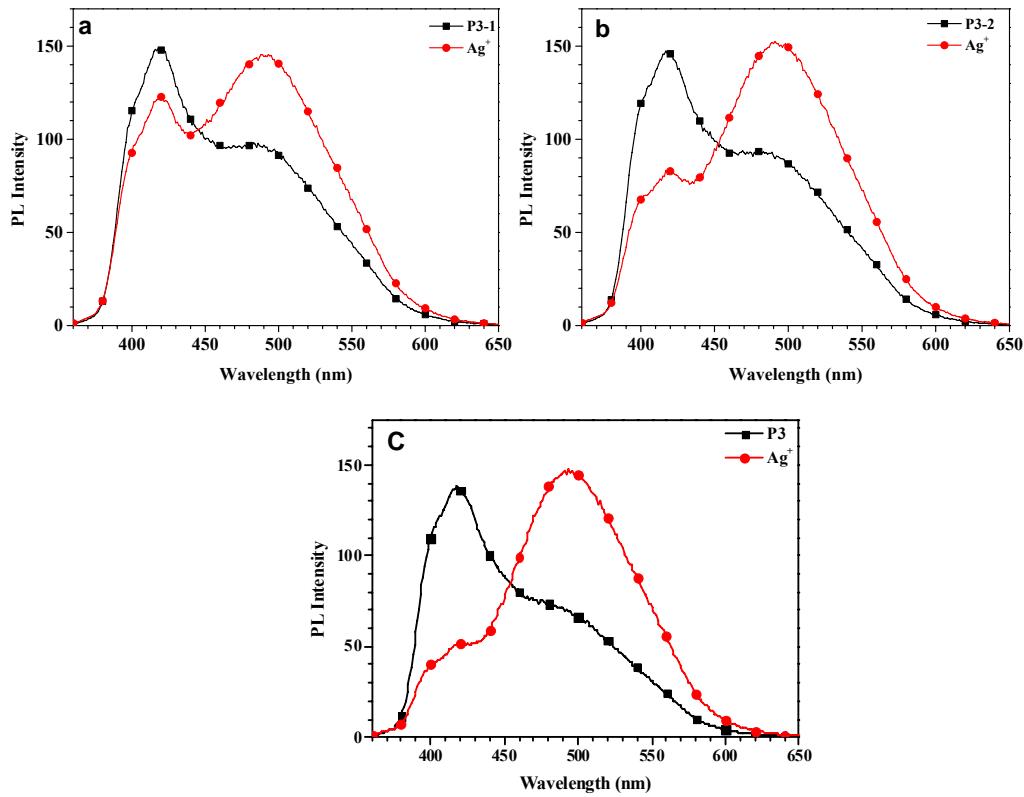
**Fig. S4** FT-IR spectra of **P3** and **P3/Ag<sup>+</sup>** complex.



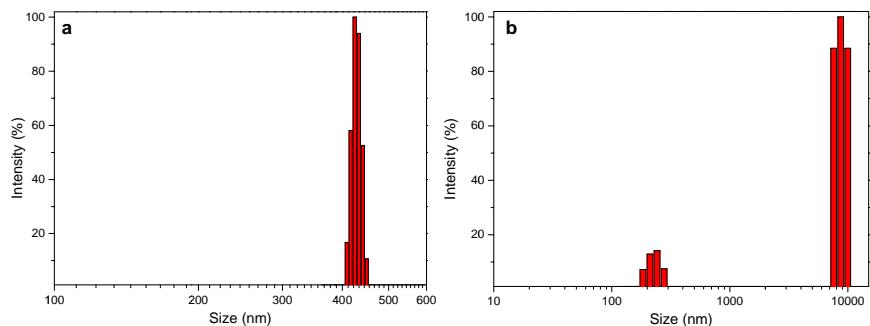
**Fig. S5** PL intensity alteration of **P2** ( $\sim 1.5 \times 10^{-5} \text{ M}$ ) in THF-water mixture ( $V_{\text{THF}}/V_{\text{Water}} = 4/1$ ) (buffered with Tris-CA, 1 mM, pH=7.4) ( $\lambda_{\text{ex}} = 350 \text{ nm}$ ) in the presence of incremental  $\text{Ag}^+$ .



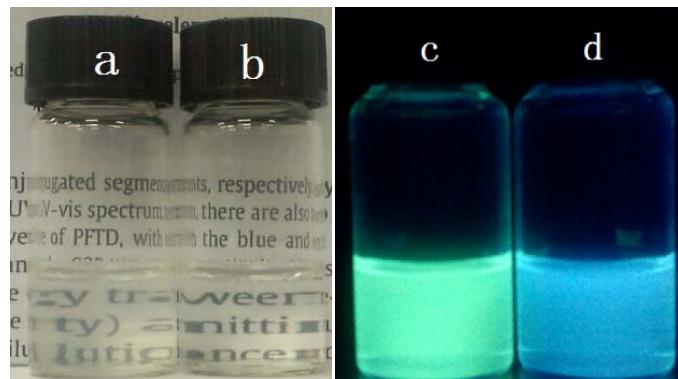
**Fig. S6** FT-IR spectra of **P3**, **P3-1**and **P3-2**.



**Fig. S7** PL spectra of **P3-1 (a)**, **P3-2 (b)** and **P3 (c)** in the presence of  $\text{Ag}^+$  in THF-water mixture ( $V_{\text{THF}}/V_{\text{Water}} = 4/1$ ) (buffered with Tris-CA, 1 mM, pH=7.4) ( $\lambda_{\text{ex}} = 350 \text{ nm}$ ) (concentrations of polymers and  $\text{Ag}^+$  were controlled at  $\sim 1.5 \times 10^{-5} \text{ M}$  and  $2.0 \times 10^{-4} \text{ M}$ , respectively).



**Fig. S8** Dynamic light-scattering (DLS) investigation of **P3** ( $\sim 1.5 \times 10^{-5}$  M) in the mixing solvent ( $V_{\text{THF}}/V_{\text{Water}} = 4/1$ ) before (a) and after the addition of  $\text{Ag}^+$  (b) ( $[\text{Ag}^+] = 5.0 \times 10^{-5}$  M).



**Fig. S9** Visual photographs of **P3** ( $\sim 1.5 \times 10^{-5}$  M) with (a, c) and without (b, d) the addition of  $\text{Ag}^+$  ( $[\text{Ag}^+] = 5.0 \times 10^{-5}$  M) (UV excitation was provided by portable UV lamp, 365 nm).