

Electronic Supporting Information (ESI)

Selective chromo-fluorogenic detection of trivalent cations in aqueous environments using a dehydration reaction

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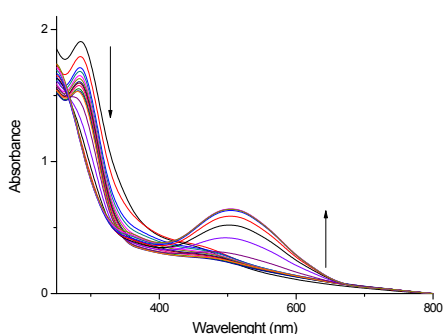


Figure S-1 Uv-visible titration of **3** (1.0×10^{-4} mol L⁻¹) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of Fe³⁺.

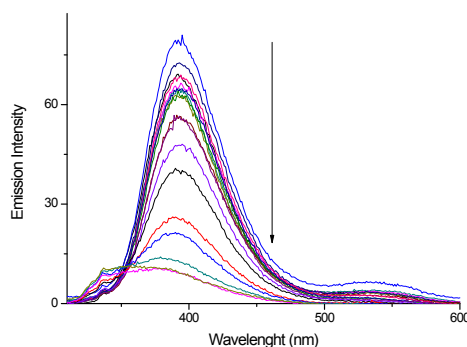


Figure S-2 Fluorescence titration of **3** (1.0×10^{-4} mol L⁻¹) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of Fe³⁺.

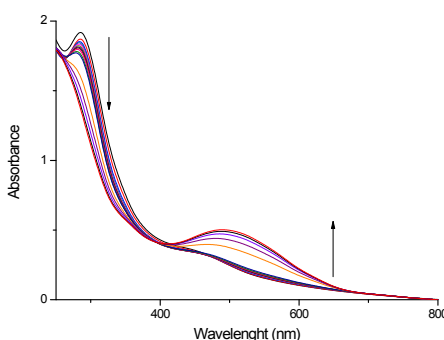


Figure S-3 Uv-visible titration of **3** (1.0×10^{-4} mol L⁻¹) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of Al³⁺.

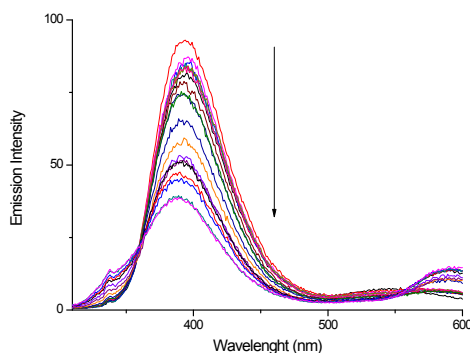


Figure S-4 Fluorescence titration of **3** (1.0×10^{-4} mol L⁻¹) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of Al³⁺.

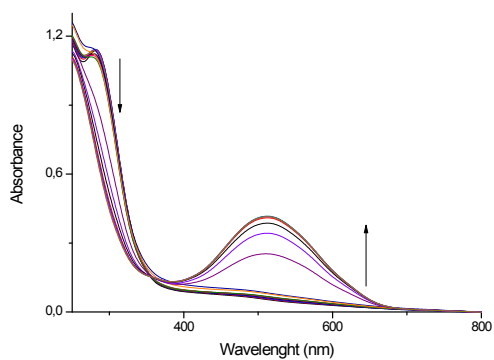


Figure S-5 Uv-visible titration of **3** ($1.0 \times 10^{-4} \text{ mol L}^{-1}$) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of Ga^{3+} .

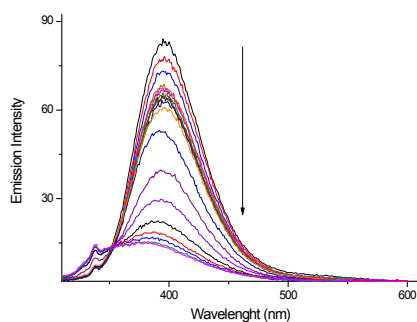


Figure S-6 Fluorescence titration of **3** ($1.0 \times 10^{-4} \text{ mol L}^{-1}$) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of Ga^{3+} .

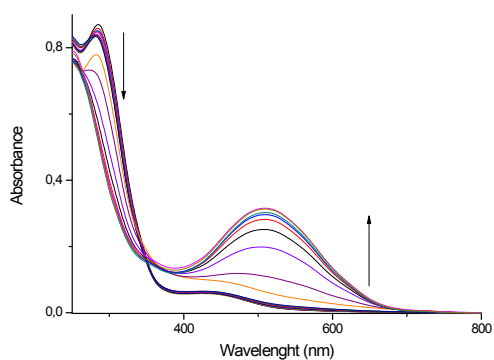


Figure S-7 Uv-visible titration of **3** ($1.0 \times 10^{-4} \text{ mol L}^{-1}$) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of In^{3+} .

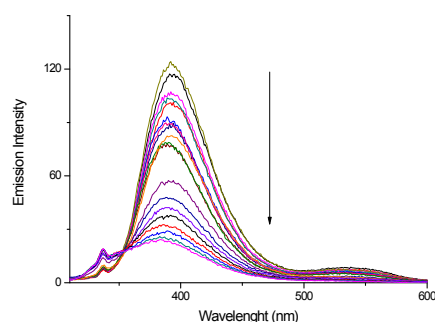


Figure S-8 Fluorescence titration of **3** ($1.0 \times 10^{-4} \text{ mol L}^{-1}$) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of In^{3+} .

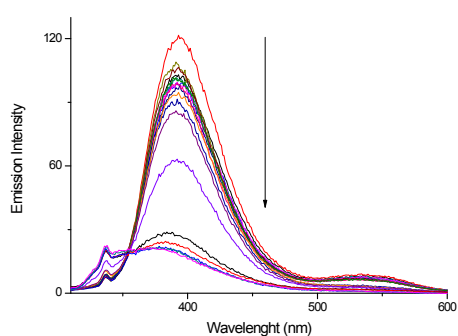
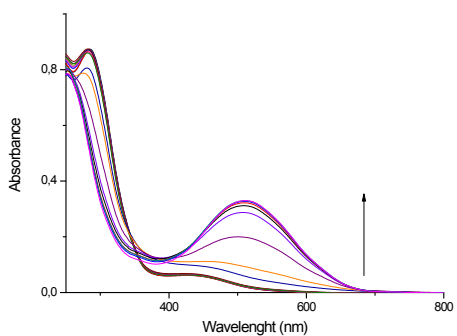


Figure S-9 UV-visible titration of **3** ($1.0 \times 10^{-4} \text{ mol L}^{-1}$) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of As^{3+} .

Figure S-10 Fluorescence titration of **3** ($1.0 \times 10^{-4} \text{ mol L}^{-1}$) in water-acetonitrile 95:5 v/v solution at pH 7.0 upon addition of increasing quantities of As^{3+} .

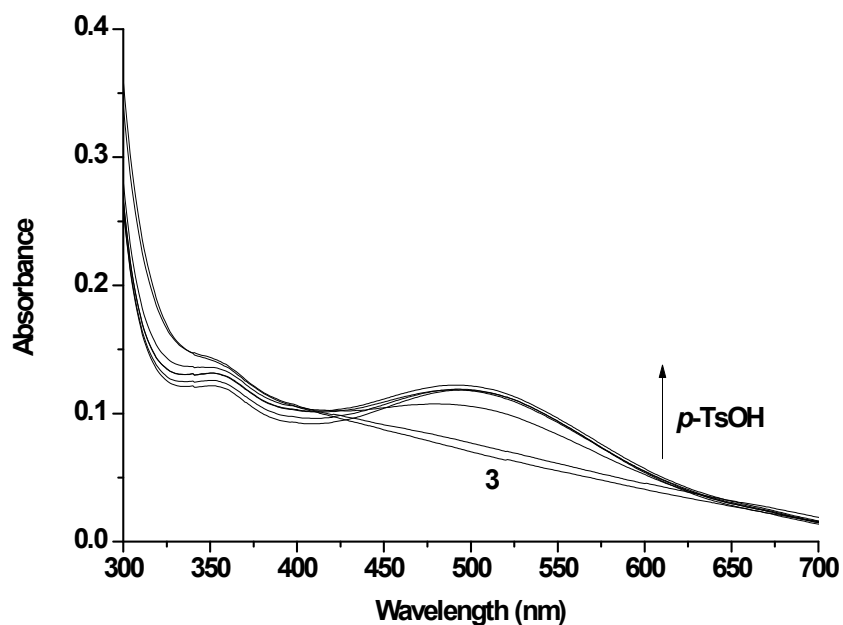


Figure S-11 UV-visible titration of probe **3** ($1.0 \times 10^{-4} \text{ mol L}^{-1}$) in water-acetonitrile 95:5 v/v at pH 7.0 upon addition of increasing quantities of *p*-toluenesulfonic acid.

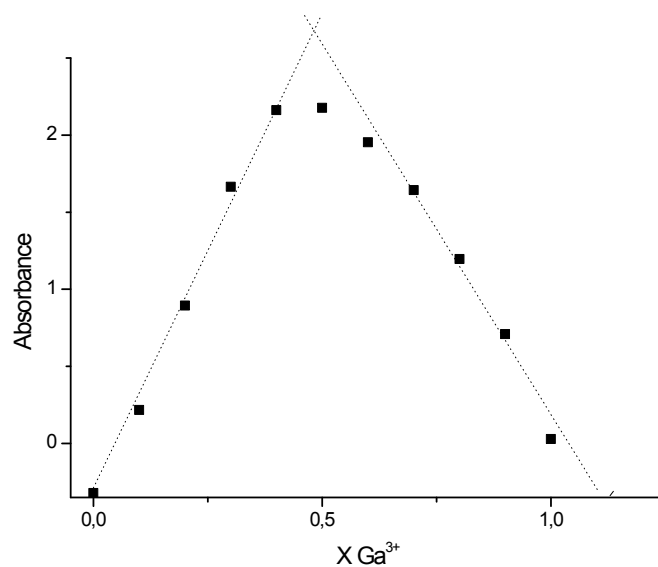


Figure S-12 Job's plot for probe **3** ($1.0 \times 10^{-3} \text{ mol L}^{-1}$) and Ga^{3+} cation in water-acetonitrile 95:5 v/v solution at pH 7.0.