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Supporting Information for

**A Simple Highly Sensitive and Selective TURN-ON Fluorescent Chemosensor for the
Detection of Cadmium Ions in Physiological Condition**

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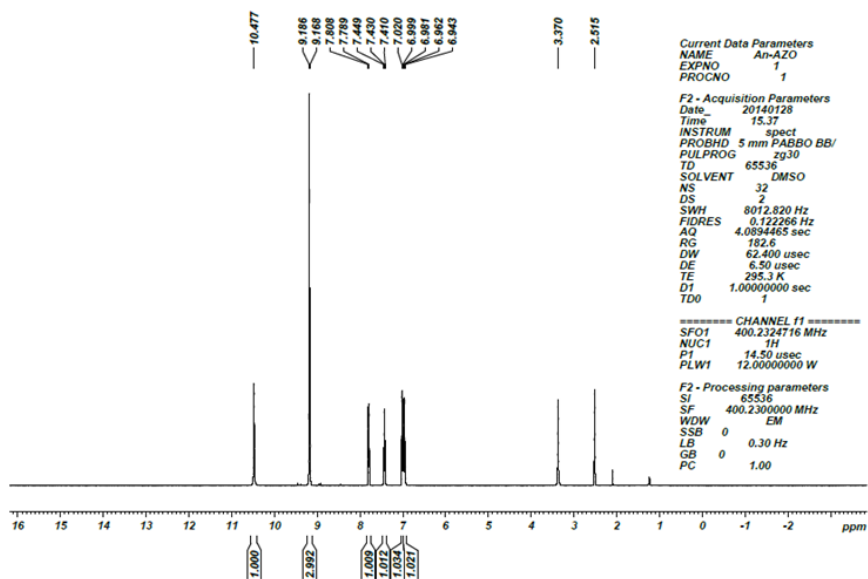


Fig. S1 ¹H NMR of the probe synthesized.

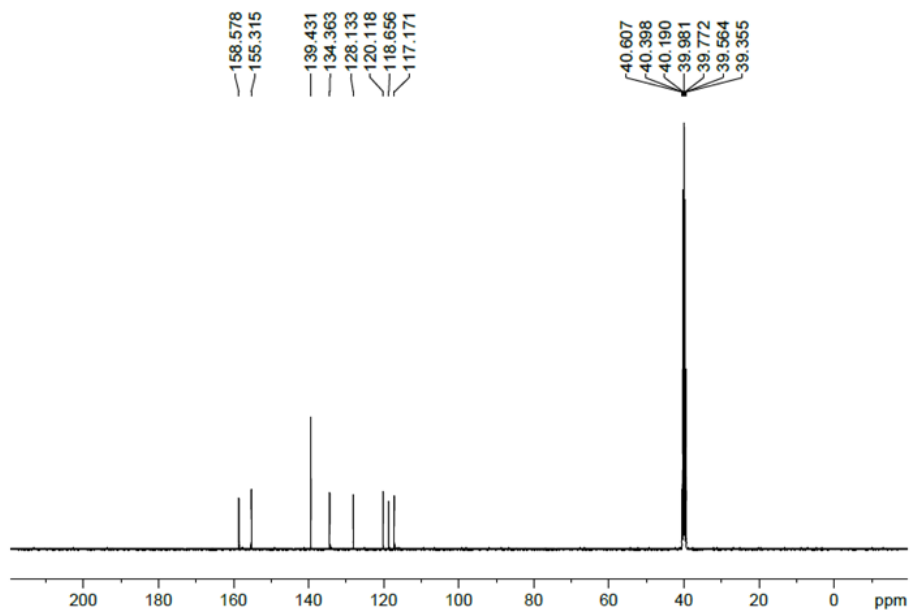


Fig. S2 ¹³C NMR of the probe synthesized.

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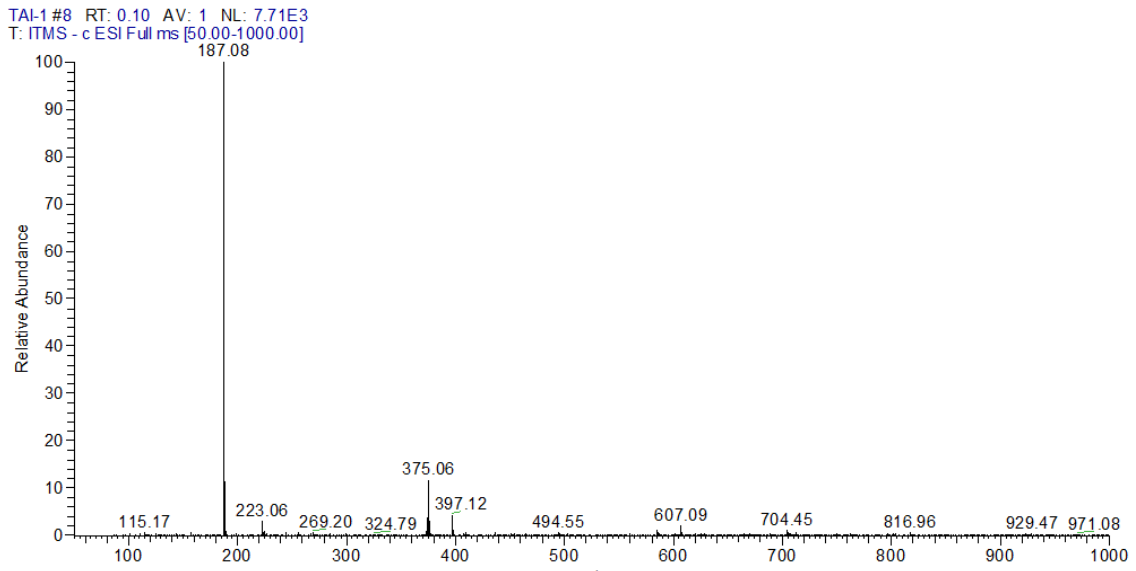


Fig. S3 Mass Spectra of the synthesized probe.

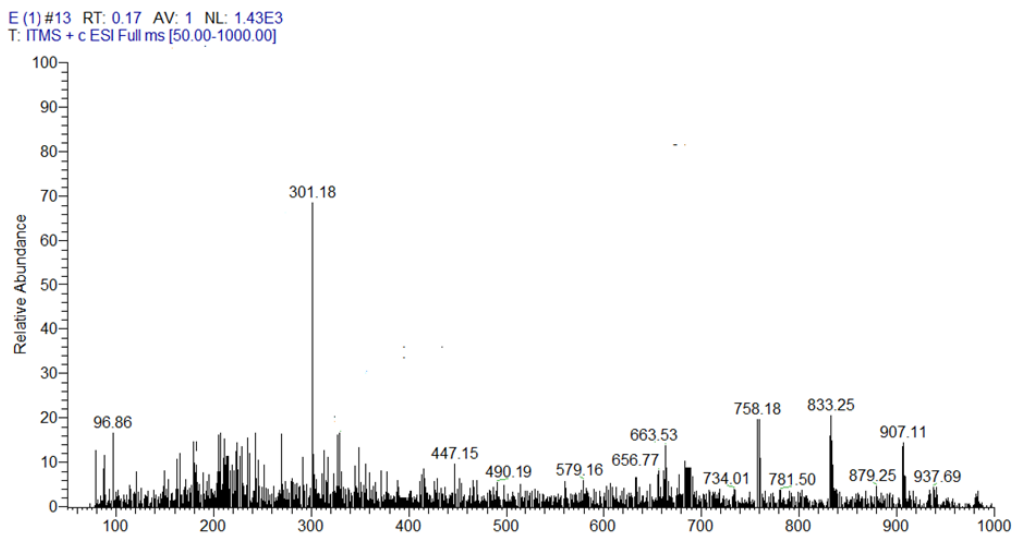


Fig. S4 Mass Spectra of the synthesized probe-Cd²⁺ ions

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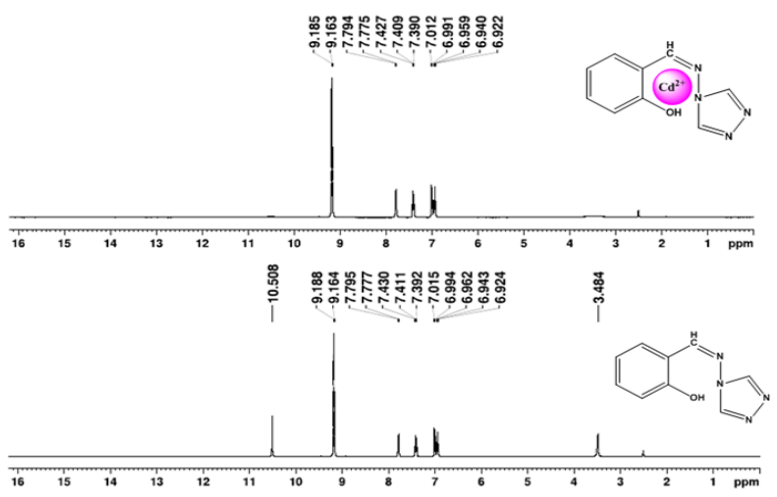


Fig. S5 ¹H-NMR spectral titrations (400 MHz) of probe (1 equiv) in DMSO (Bottom); Probe + 1.0 equiv Cd²⁺ ions (Top)

125 **Reversibility test with EDTA**

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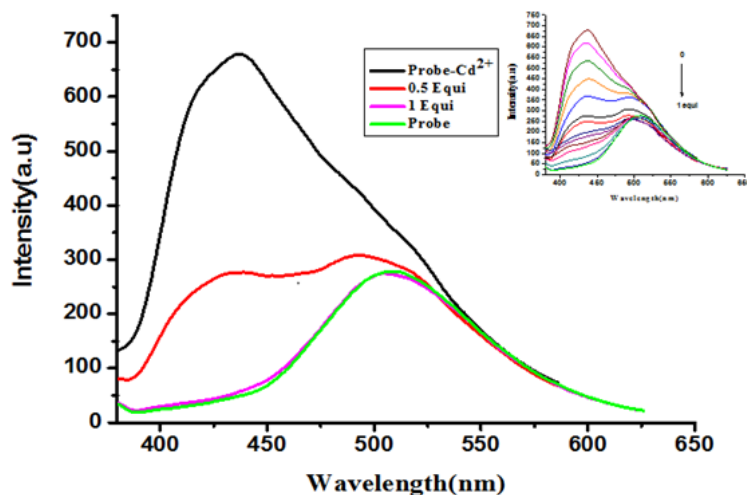
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136 **Fig. S6 Reversibility test of the developed chemosensor with EDTA. (green) probe alone; (pink)**
137 **EDTA (1 equivalent) in presence of probe-Cd²⁺ ion ; (Red) EDTA (0.5 equivalent) in presence of**
138 **probe-Cd²⁺ ion ; (black) the initial fluorescence intensity of probe –Cd²⁺ ion. The concentration of**
139 **probe and EDTA is 5μM and the excitation wavelength was 332 nm. Excitation and emission slit**
140 **widths are 5 nm and 2.5 nm respectively. The emission intensity at 436 nm was used for this study.**
141 **[Inset: The complete emission spectra for the variation of EDTA with probe –Cd²⁺ ion.**

142 **Fluorescence quenching in presence of interfering metal ions**

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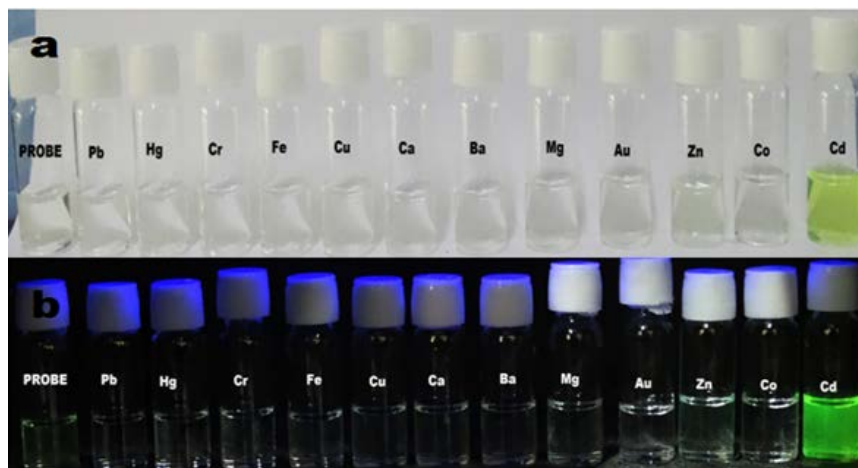
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152 **Fig. S7 Color changes observed during selectivity assay (a) Naked eye (b) Under UV lamp**