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Electronic Supplementary Information

**A Novel pH Sensor which Could Respond Multi-Scale pH Changes
via Different Fluorescence Emissions**

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List of Figures

Fig. S1 Fluorescence spectra of **L6** in various pH values (pH ranged from 1.0 to 13.0, DMSO/H₂O (v/v, 1/1) HEPES buffered solution, $c_{\text{L6}} = 2.0 \times 10^{-5}$ M).

Fig. S2. UV-vis absorption of **L6** in various pH values (pH ranged from 1.0 to 13.5, DMSO/H₂O (v/v, 1/9) HEPES buffered solution, $c_{\text{L6}} = 2.0 \times 10^{-5}$ M),

Fig. S3 Fluorescence spectra of **L6** in various pH values (pH ranged from 1.0 to 13.5, DMSO/H₂O (v/v, 1/9) HEPES buffered solution, $c_{\text{L6}} = 2.0 \times 10^{-5}$ M).

Fig. S4 Fluorescence intensity change of **L6** (2.0×10^{-5} M) at 497 nm upon the addition of different ions (50 equiv. of anions and 10 equiv. of cations, respectively, pH=7.0).

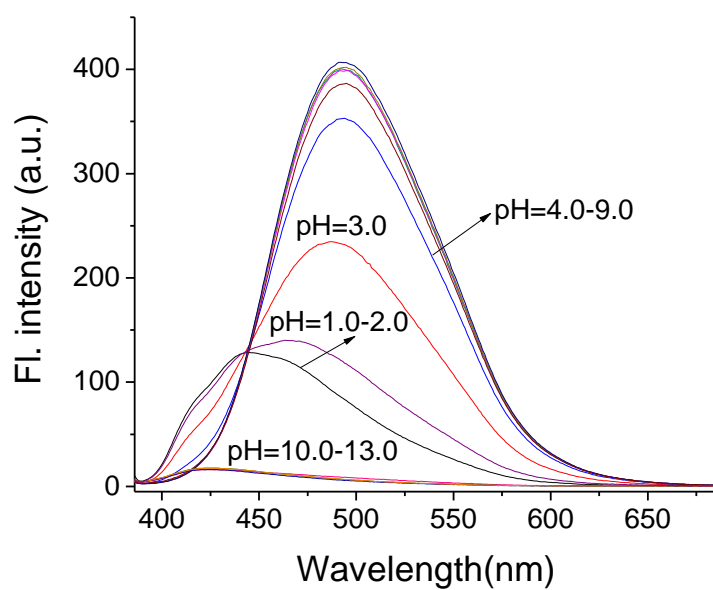


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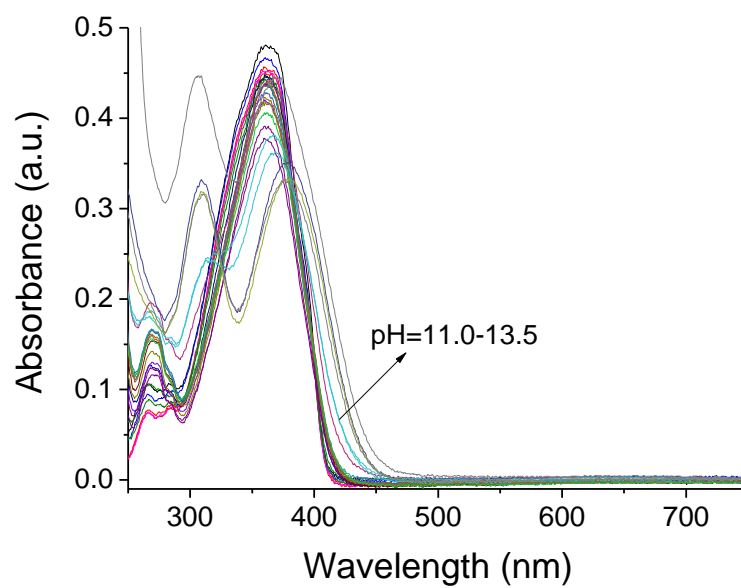


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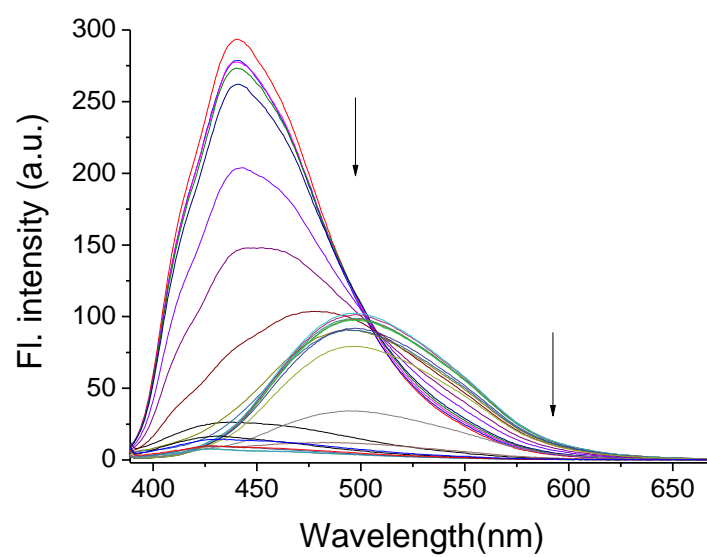


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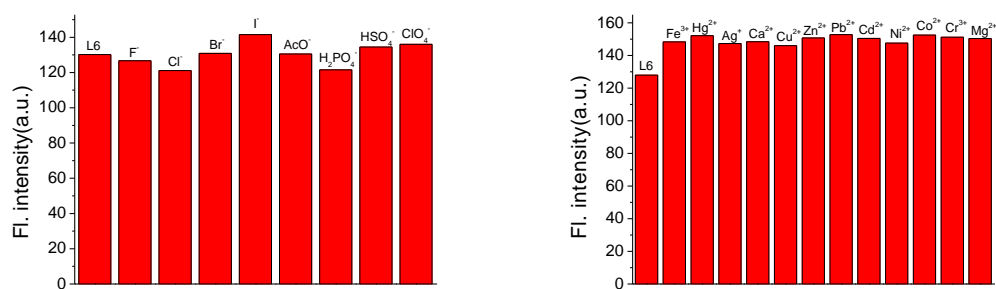


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