

Fluorescence “Turn-Off” and Colorimetric Sensor for Fe²⁺, Fe³⁺, and Cu²⁺ Ions Based on a 2,5,7-Triarylimidazopyridine Scaffold.

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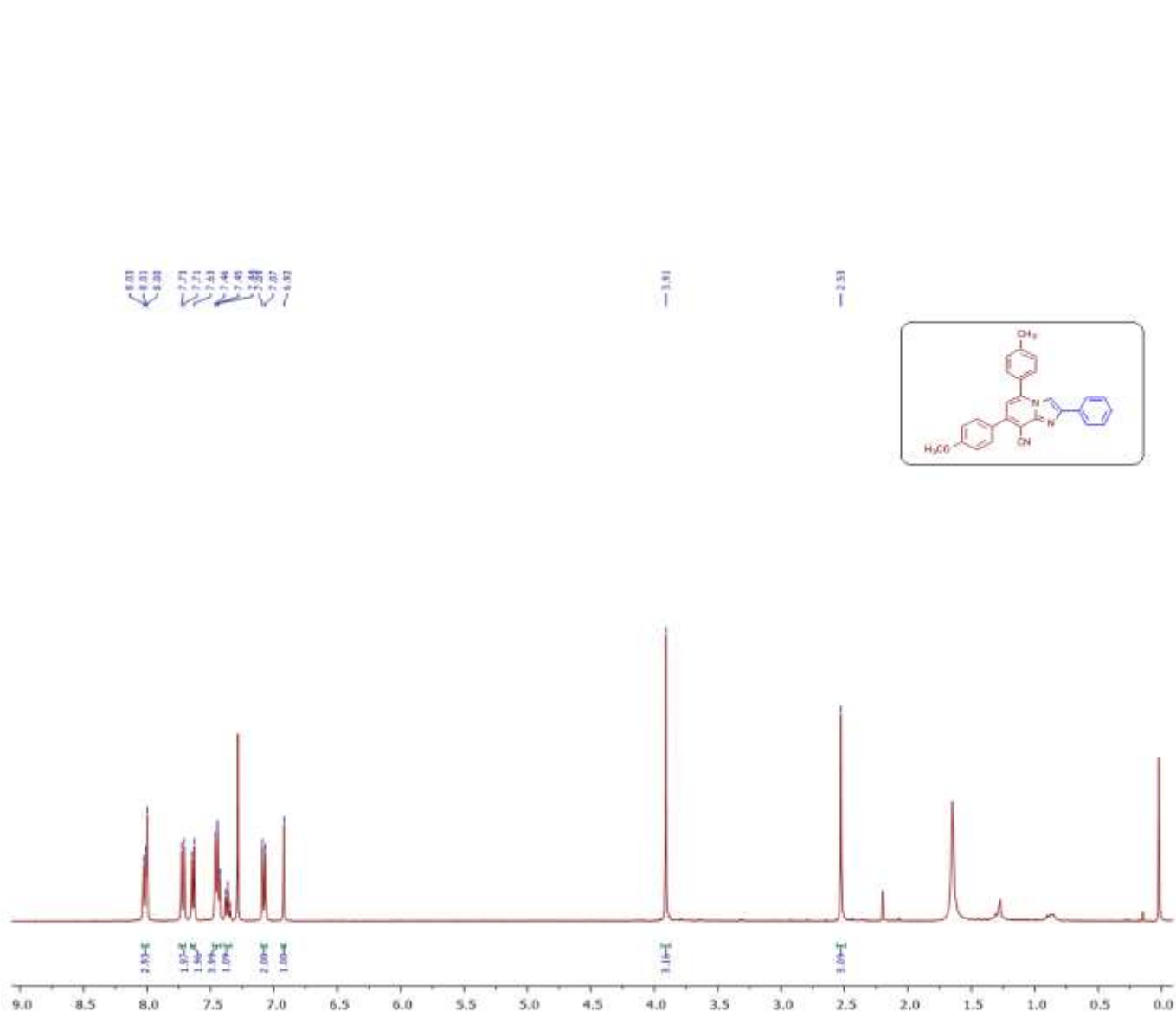
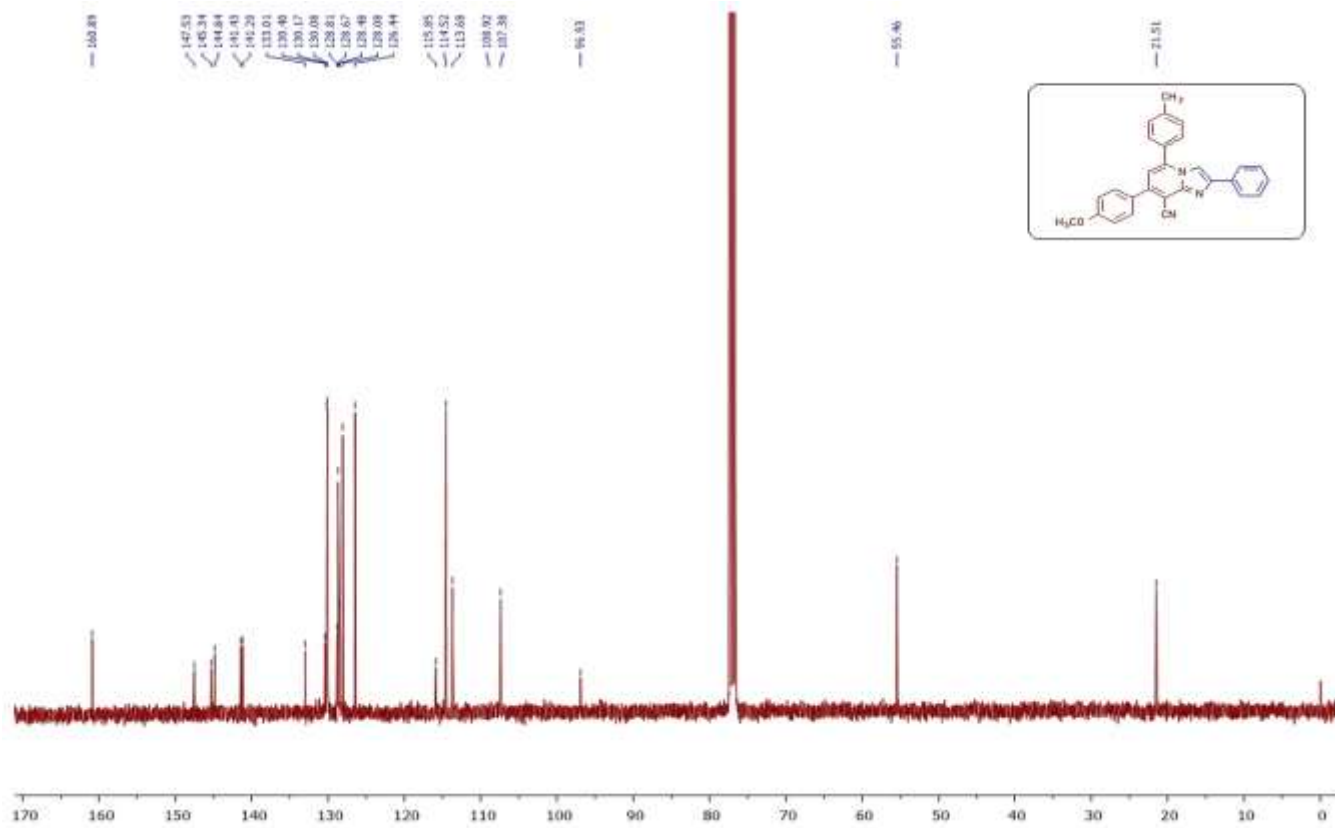


Figure S1: ¹H NMR of SS1.



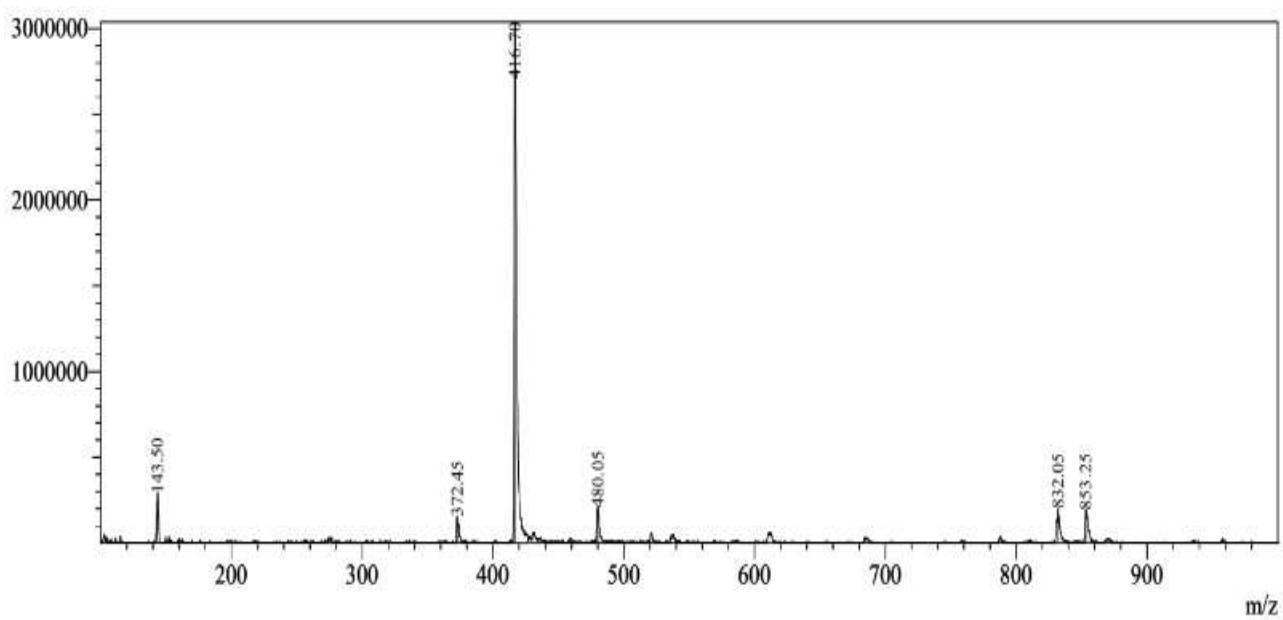


Figure S3: Mass spectra of SS1.

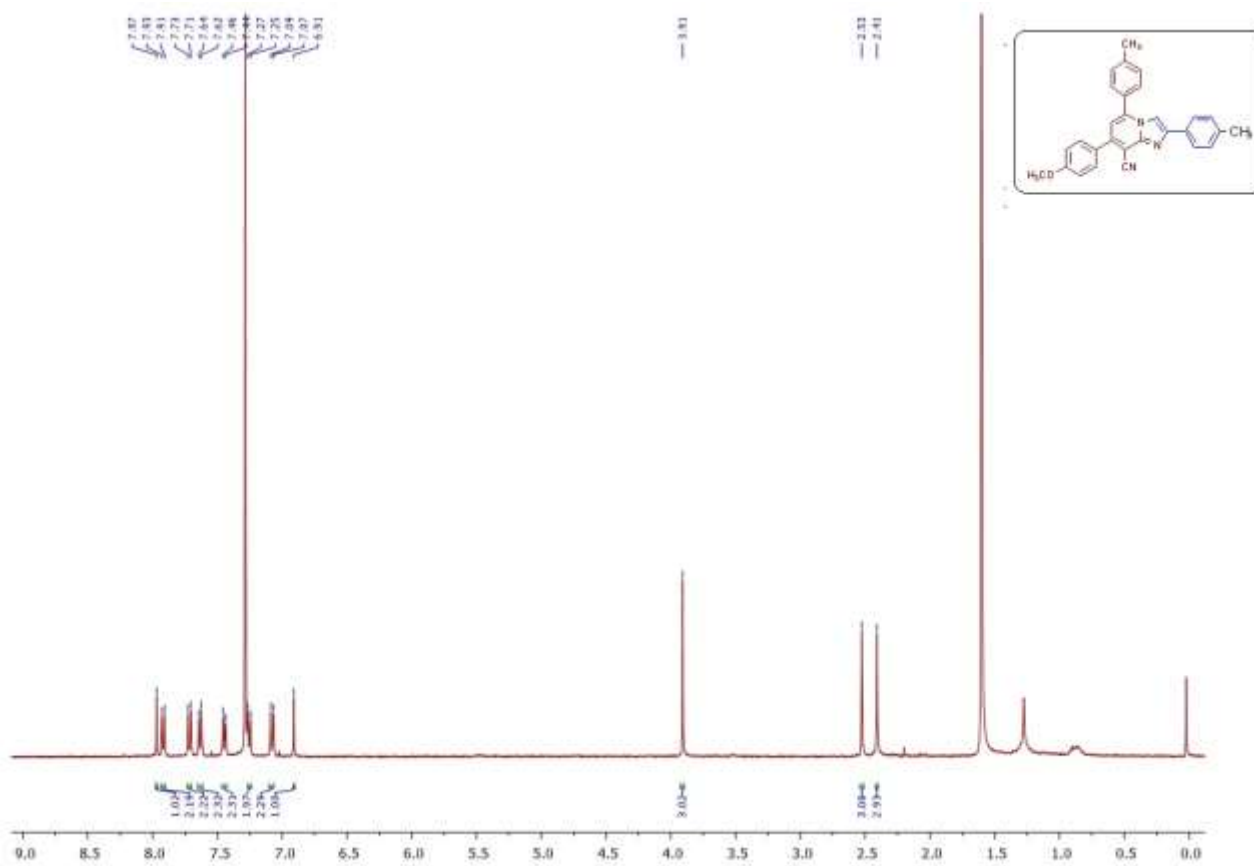


Figure S4: ^1H NMR of SS2.

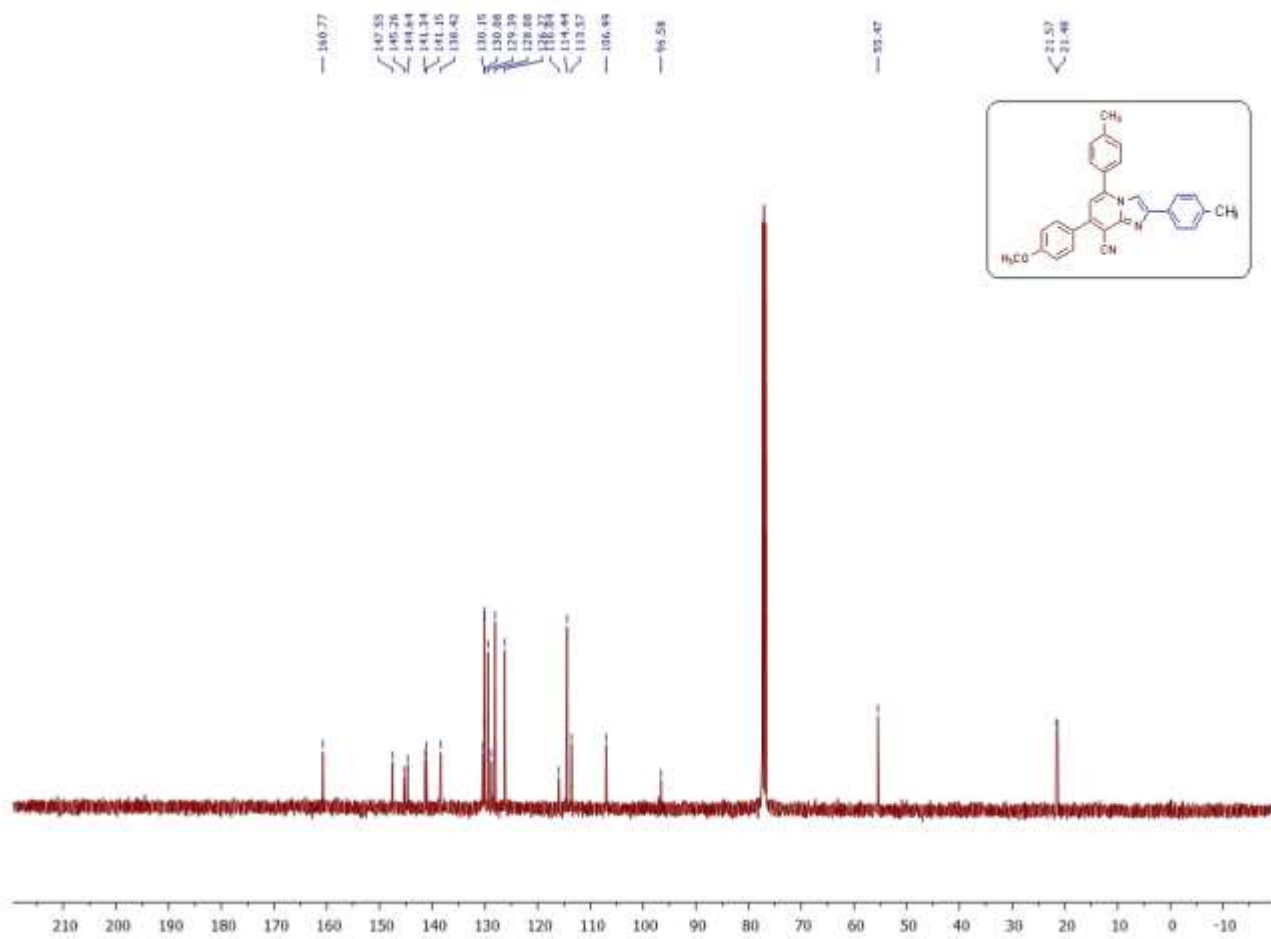


Figure S5: ^{13}C NMR of SS2.

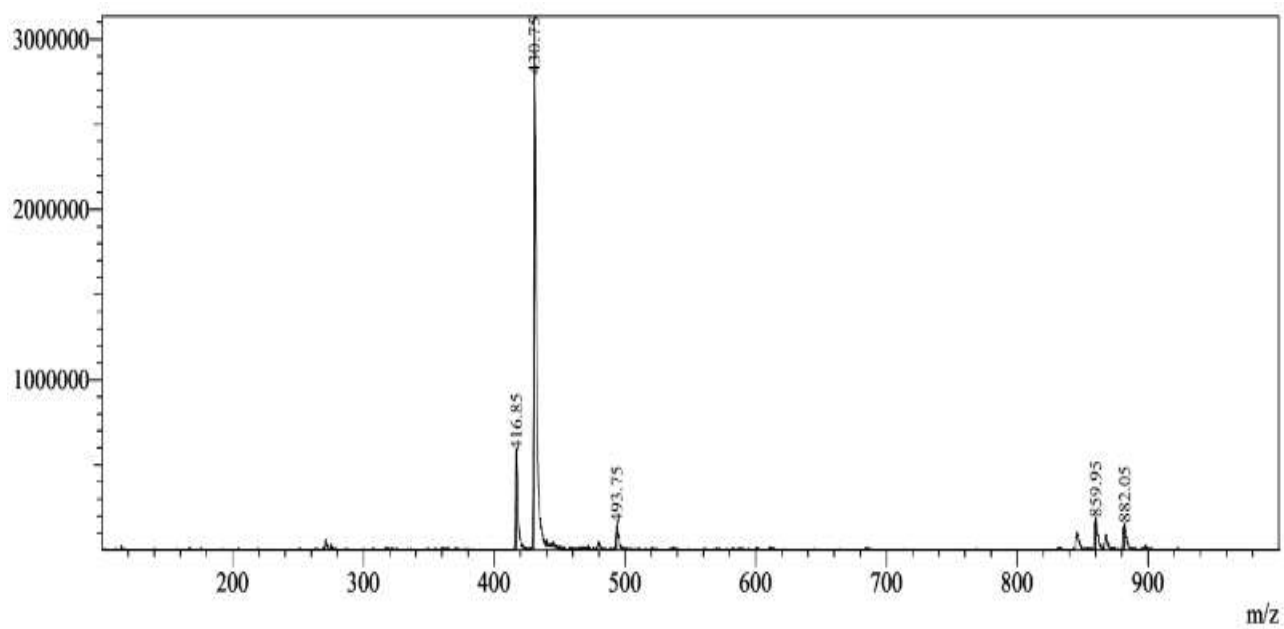


Figure S6: Mass spectra of **SS2**.

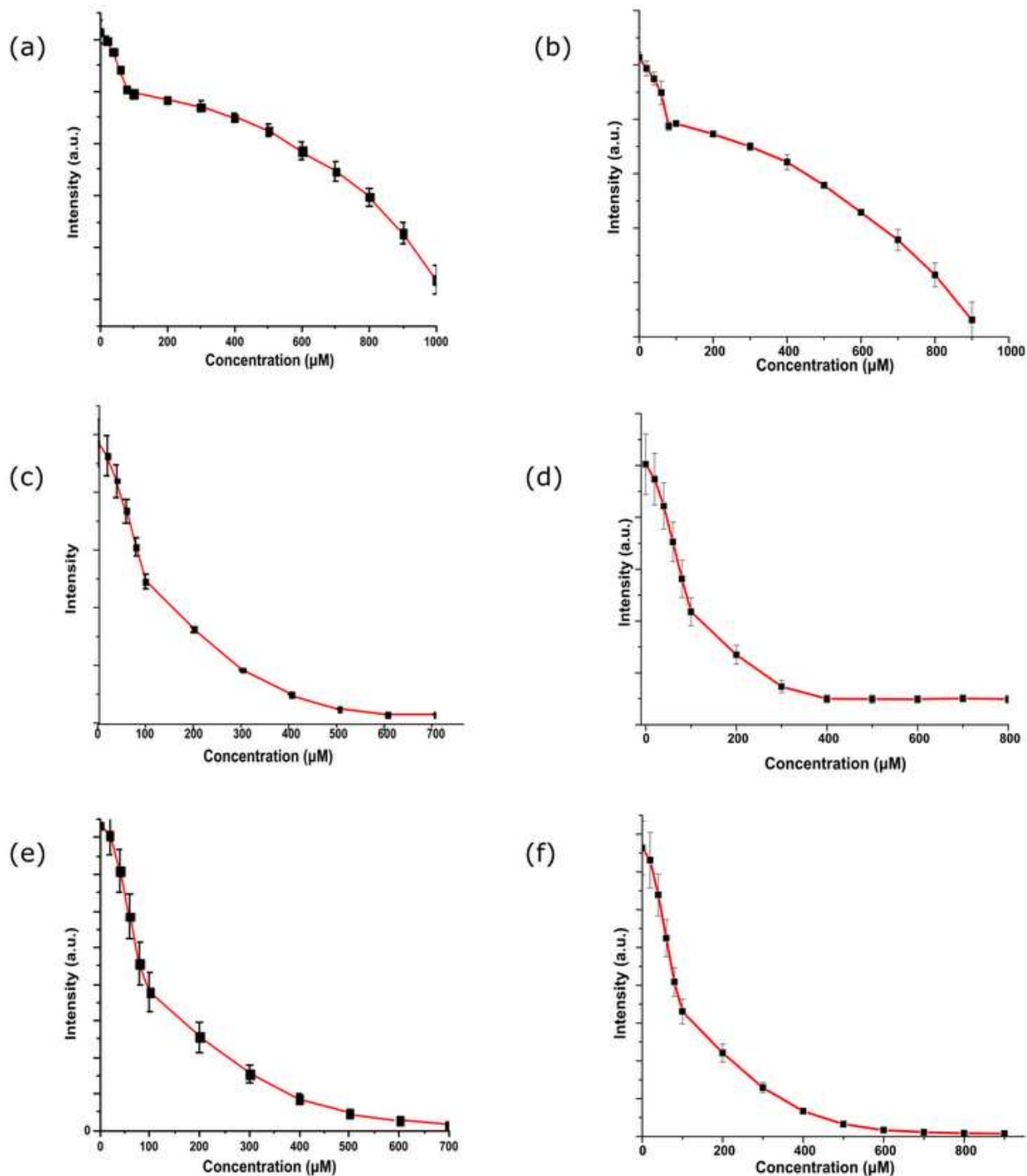


Figure S7: (a) Variation in the intensity of emission band of SS1 (10 μM at 470 nm on the incremental addition of Cu^{2+} ions (0-100 equiv) in THF/water (7:3, v/v) solution; (b) Variation in the intensity of emission band of SS2 (10 μM at 470 nm on the incremental addition of Cu^{2+} ions (0-90 equiv) in THF/water (7:3, v/v) solution; (c) Variation in the intensity of emission band of SS1 (10 μM at 470 nm on the incremental addition of Fe^{2+} ions (0-70 equiv) in THF/water (7:3, v/v) solution; (d) Variation in the intensity of emission band of SS2 (10 μM at 470 nm on the incremental addition of Fe^{2+} ions (0-100 equiv) in THF/water (7:3, v/v) solution; (e) Variation in the intensity of emission band of SS1 (10 μM at 470 nm on the incremental addition of Fe^{3+} ions (0-70 equiv) in THF/water (7:3, v/v) solution; (f) Variation in the intensity of emission band of SS2 (10 μM at 470 nm on the incremental addition of Fe^{3+} ions (0-80 equiv) in THF/water (7:3, v/v) solution.

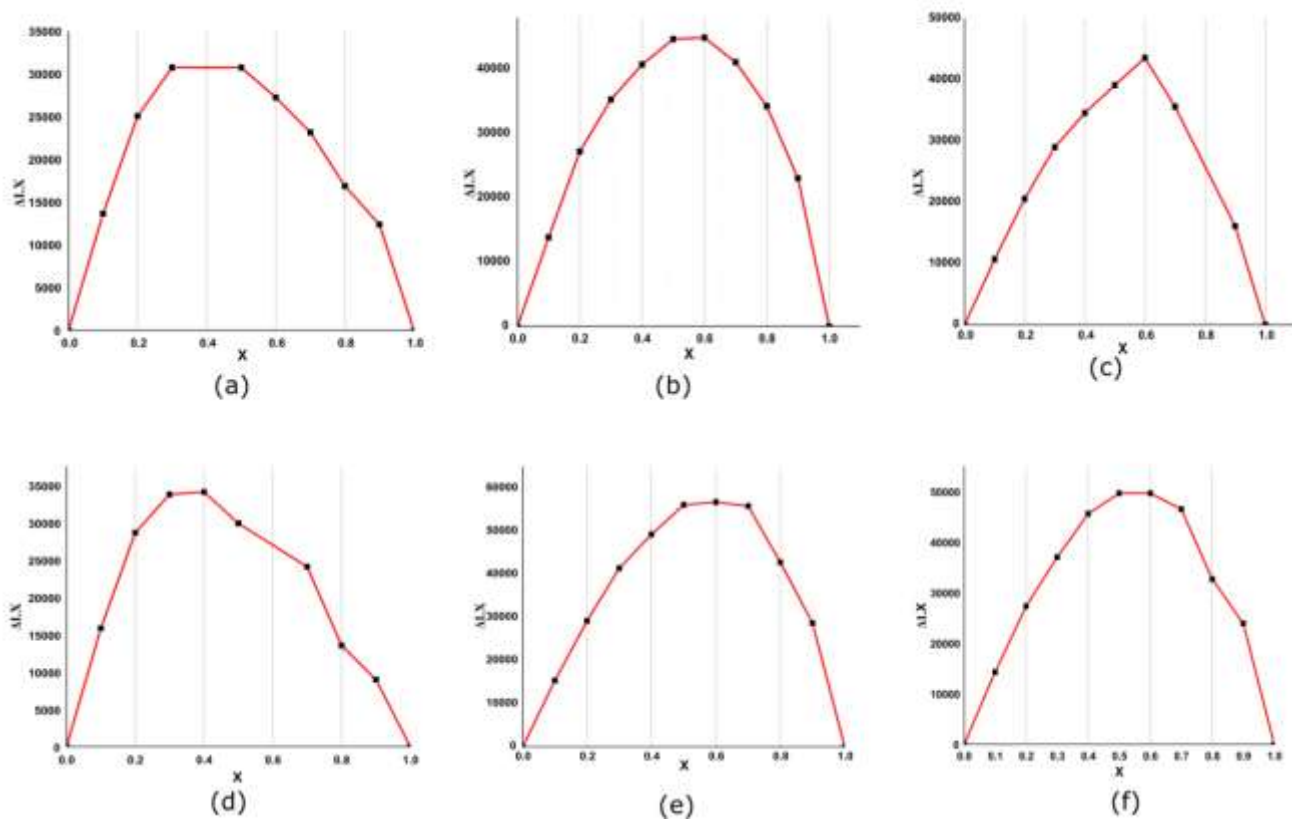


Figure S8: (a-c) Job's plot of SS1 with Cu^{2+} , Fe^{2+} , and Fe^{3+} using the emission at 470 nm and (d-f) Job's plot of SS2 with Cu^{2+} , Fe^{2+} , and Fe^{3+} and using the emission at 470 nm.

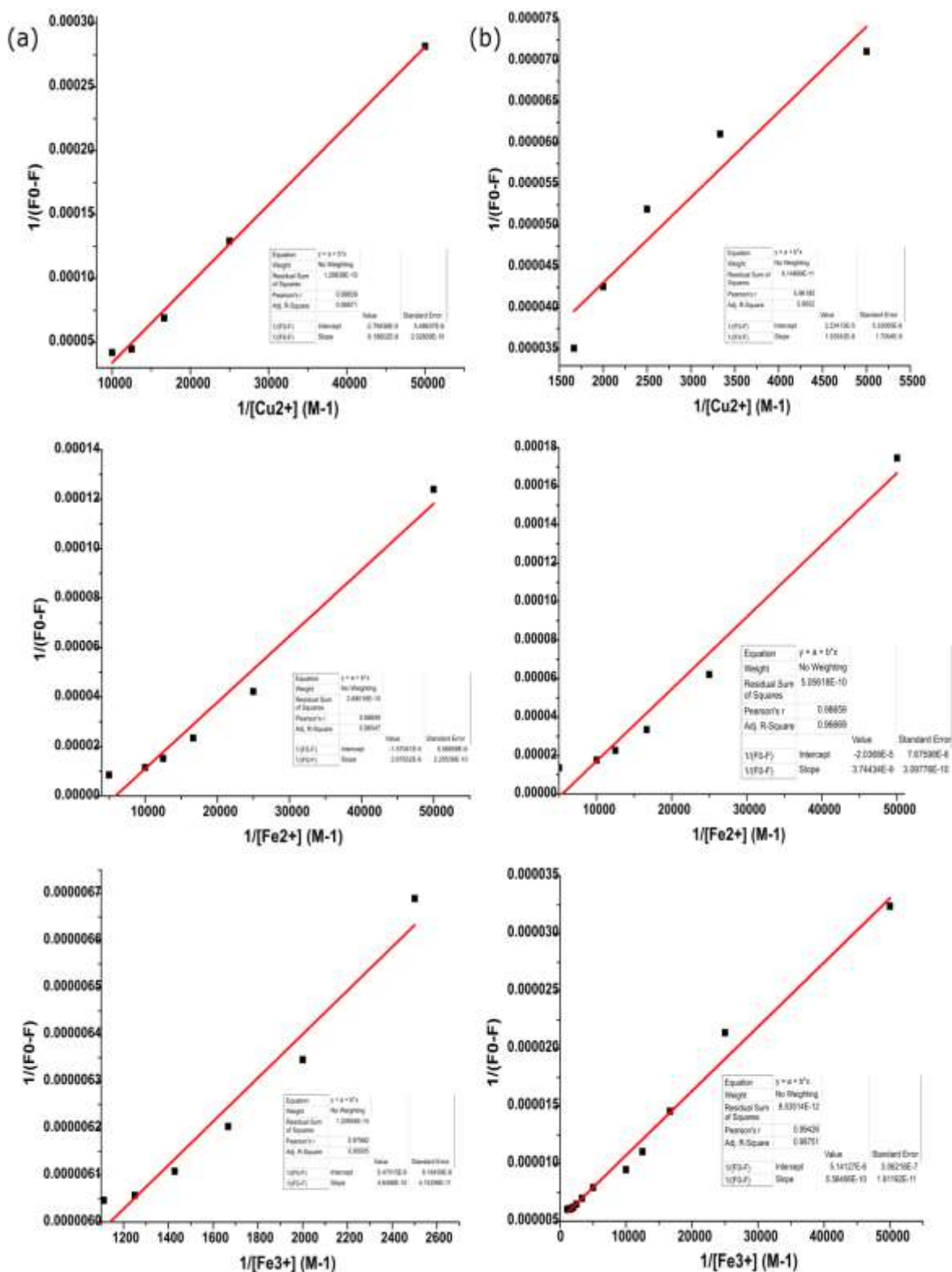


Figure S9: (a) Benesi- Hildebrand plot of SS1 (10 μM) with Fe³⁺, Fe²⁺, and Cu²⁺ (0-100 equiv.) using the emission at 470 nm and (b) Benesi- Hildebrand plot of SS2 (10 μM) with Fe³⁺, Fe²⁺, and Cu²⁺ (0-100 equiv.) using the emission at 470 nm.

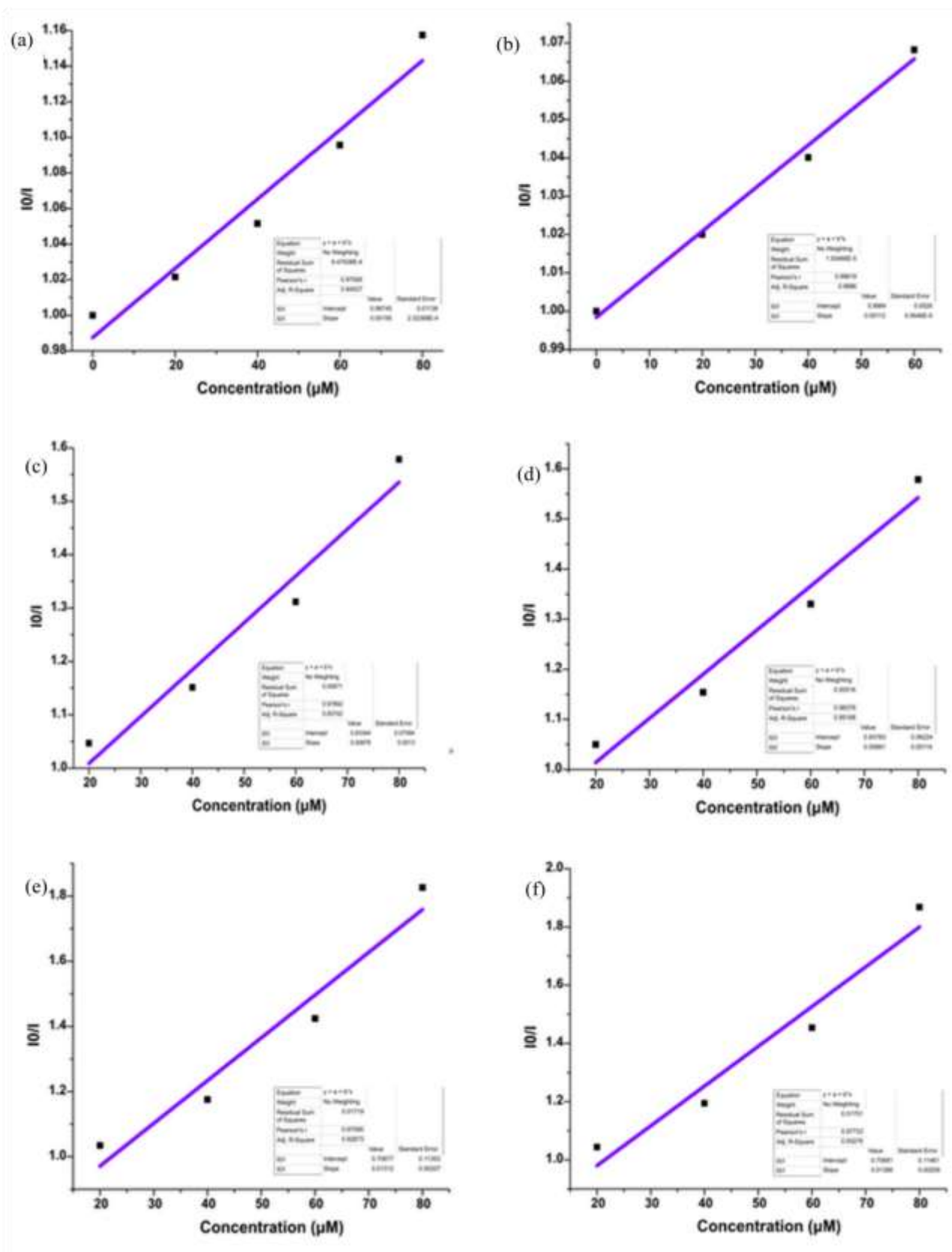


Figure S10: Stern-Volmer plots of SS1 with Cu^{2+} , Fe^{2+} , and Fe^{3+} (a-c) and SS2 with Cu^{2+} , Fe^{2+} , and Fe^{3+} (d-f) at 470 nm.

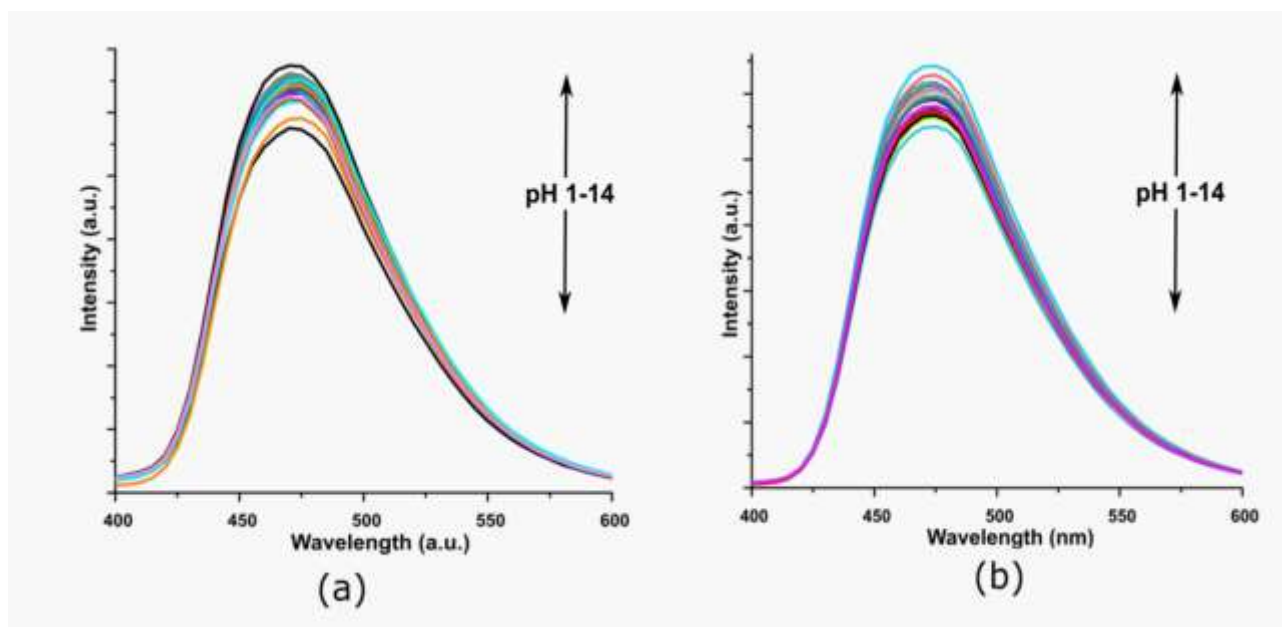


Figure S11: Fluorescence response of (a) SS1 and (b) SS2 as a function of pH.