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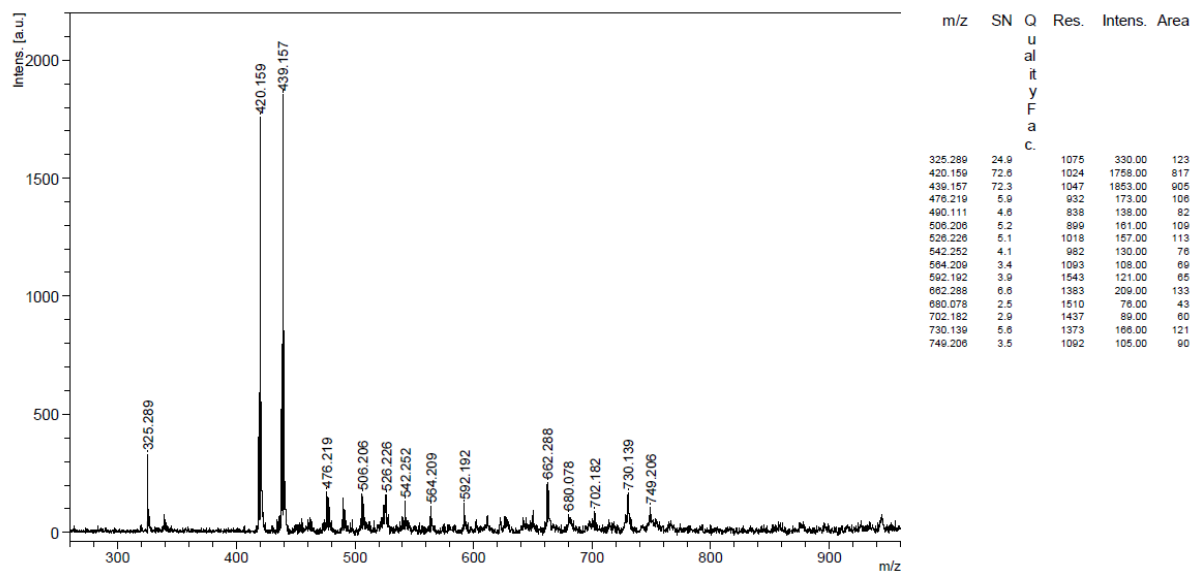
Novel probes for selective fluorometric sensing of Fe(II) and Fe(III) based on BODIPY dyes

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- 13 Figure S1. MALDI- MS spectrum of Compound **2**
- 14 Figure S2. MALDI- MS spectrum of compound **3**
- 15 Figure S3. ¹H- NMR spectrum of Compound **2** in CDCl₃
- 16 Figure S4. ¹H- NMR spectrum of Compound **3** in CDCl₃
- 17 Figure S5. ¹³C- NMR spectrum of Compound **2** in CDCl₃
- 18 Figure S6. ¹³C- NMR spectrum of Compound **3** in CDCl₃
- 19 Figure S7. Absorbance spectrum of **2** in THF at different concentration
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- 23 Figure S11. Fluorescence spectra of **2** (5×10⁻⁷M) in different solvents
- 24 Figure S12. Fluorescence spectra of **3** (2×10⁻⁷M) in different solvents.
- 25 Figure S13. The proposed structures between (a) **2** and Fe³⁺ (b) **2** and Fe²⁺ ions (c) **3** and Fe³⁺
- 26 (d) **3** and Fe²⁺ ions as 2:1 complexes in aqueous solution.
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28 **Figure S1:** MALDI- MS spectrum of compound **2**.

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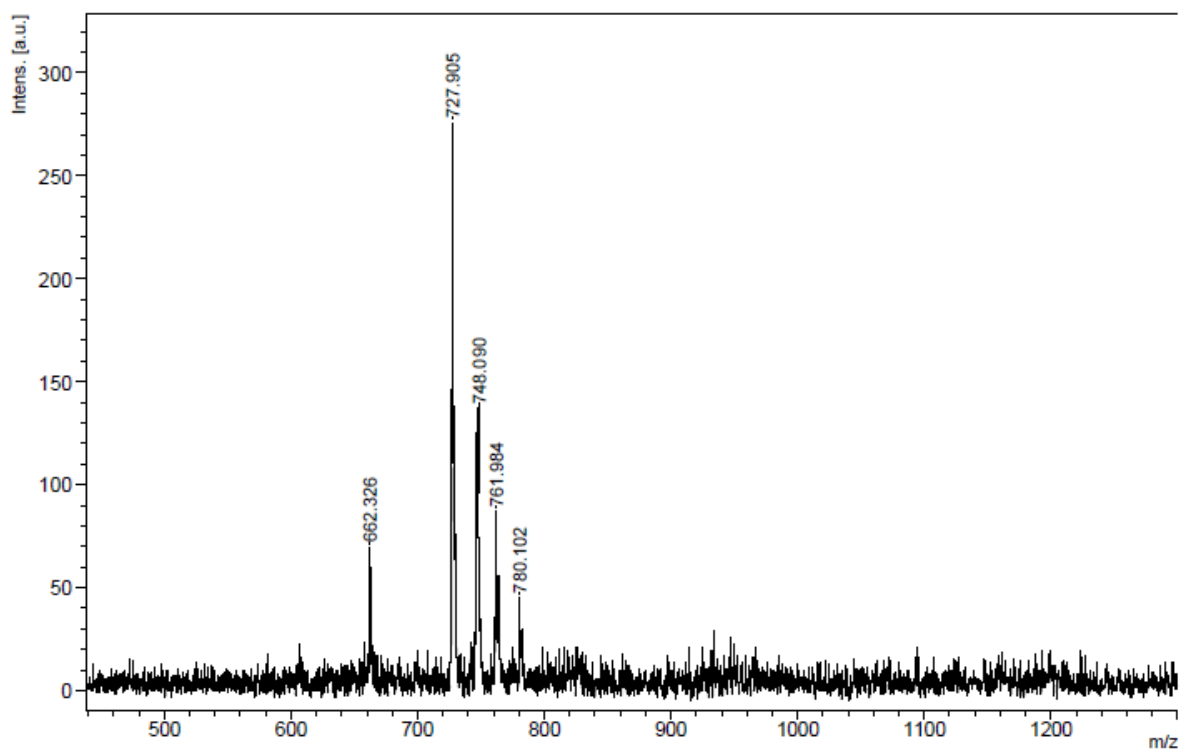


Figure S2: MALDI- MS spectrum of compound **3**.

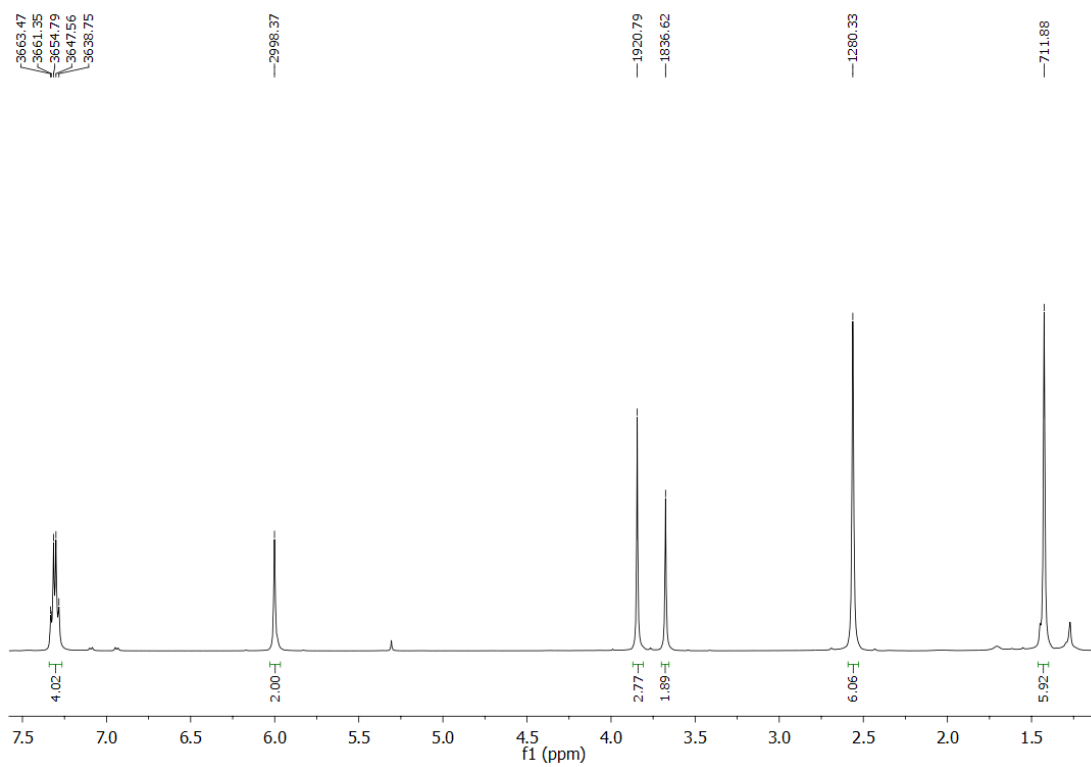
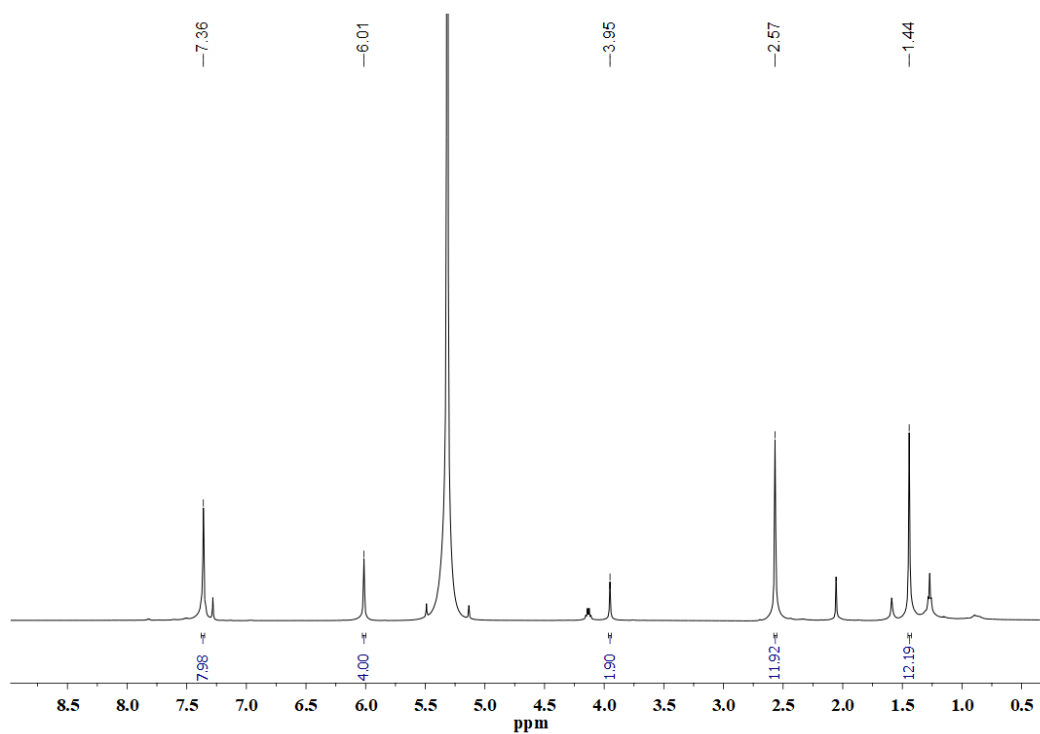
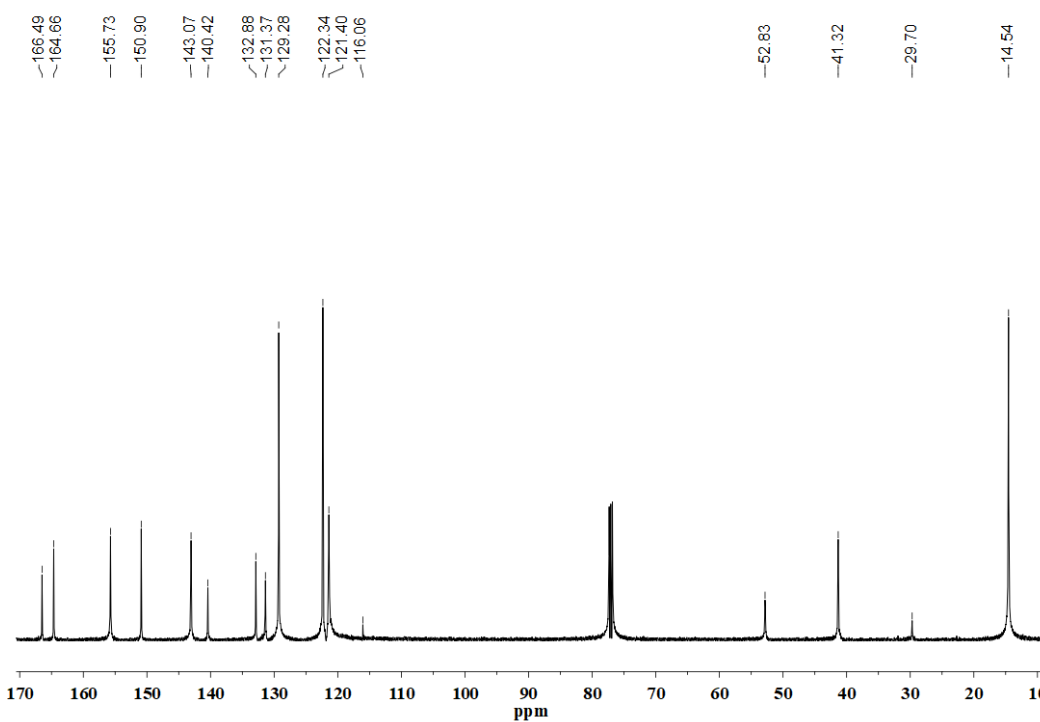


Figure S3: ^1H NMR spectrum of compound **2** in CDCl_3 .



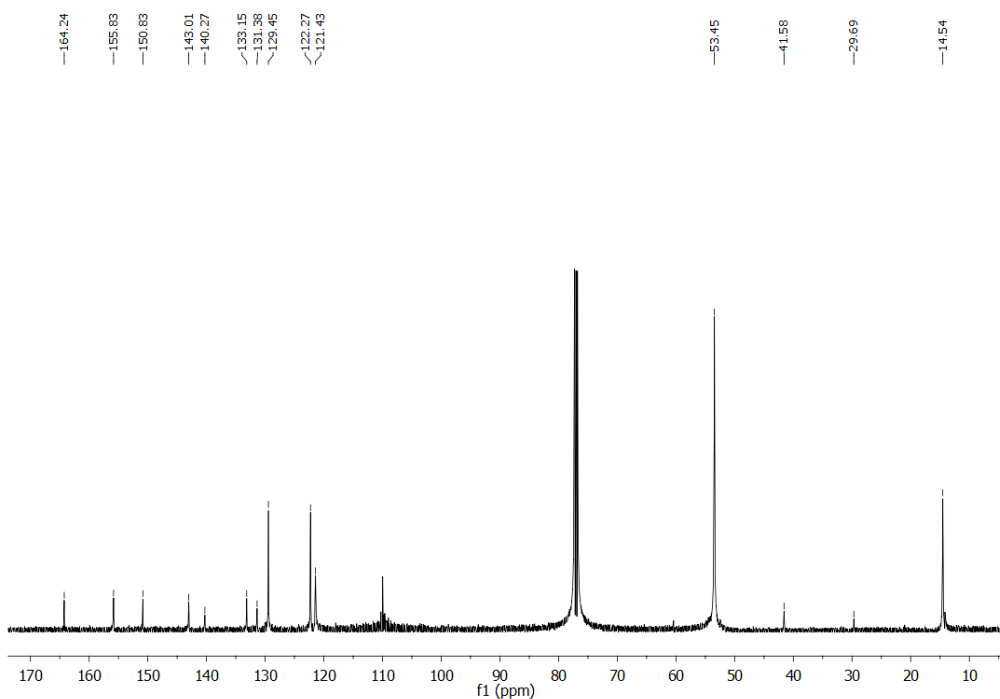
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Figure S4: ^1H NMR spectrum of compound **3** in CDCl_3 .



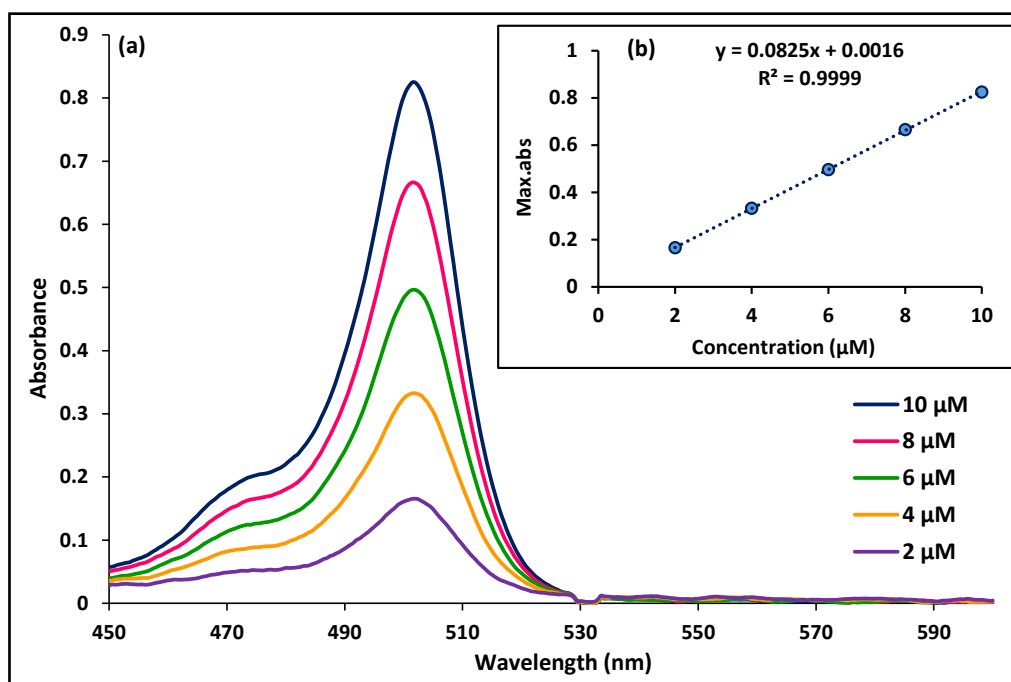
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Figure S5: ^{13}C - NMR spectrum of Compound **2** in CDCl_3 .



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Figure S6: ^{13}C - NMR spectrum of Compound **3** in CDCl_3 .



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Figure S7: Absorbance spectrum of **2** in THF at different concentration.

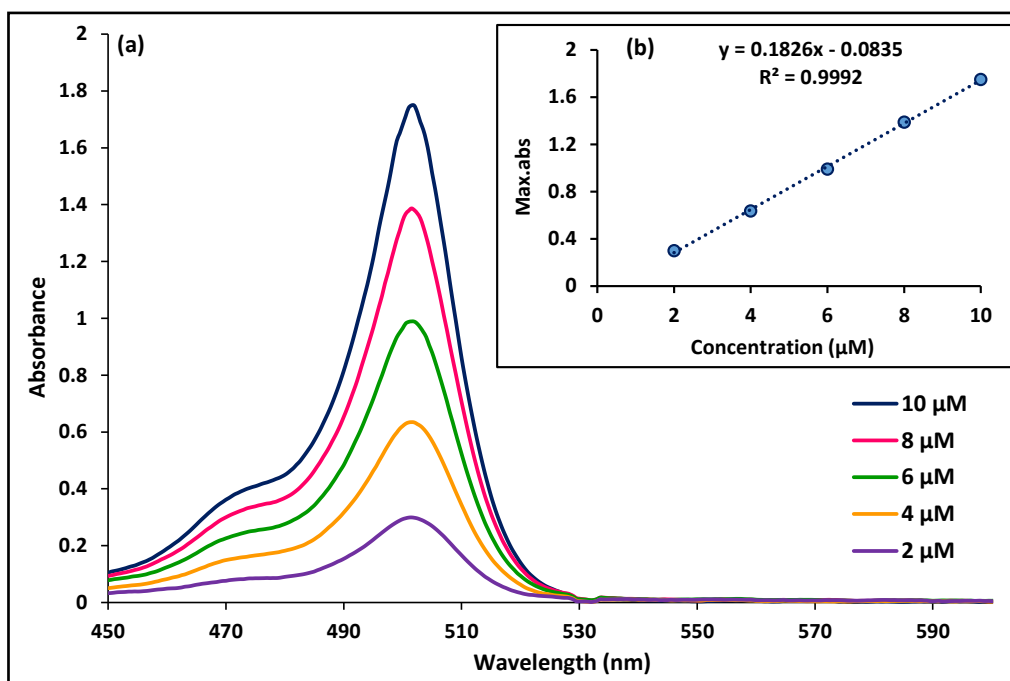


Figure S8: Absorbance spectrum of **3** in THF at different concentration.

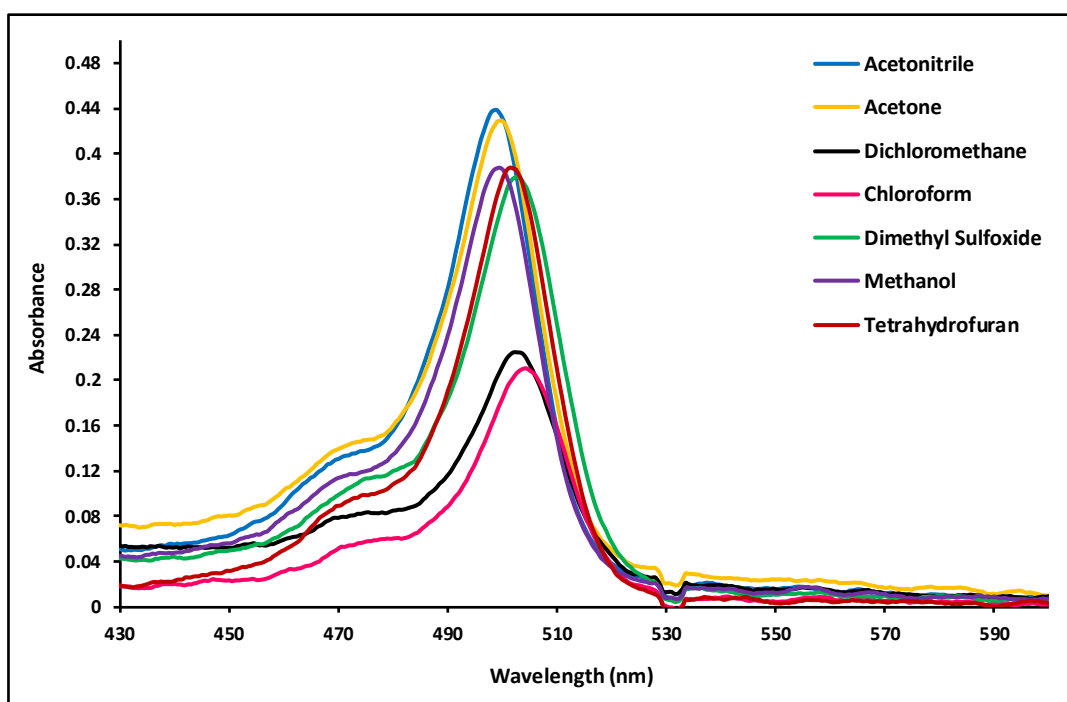


Figure S9: Absorbance spectra of **2** ($5 \times 10^{-6} \text{M}$) in different solvents.

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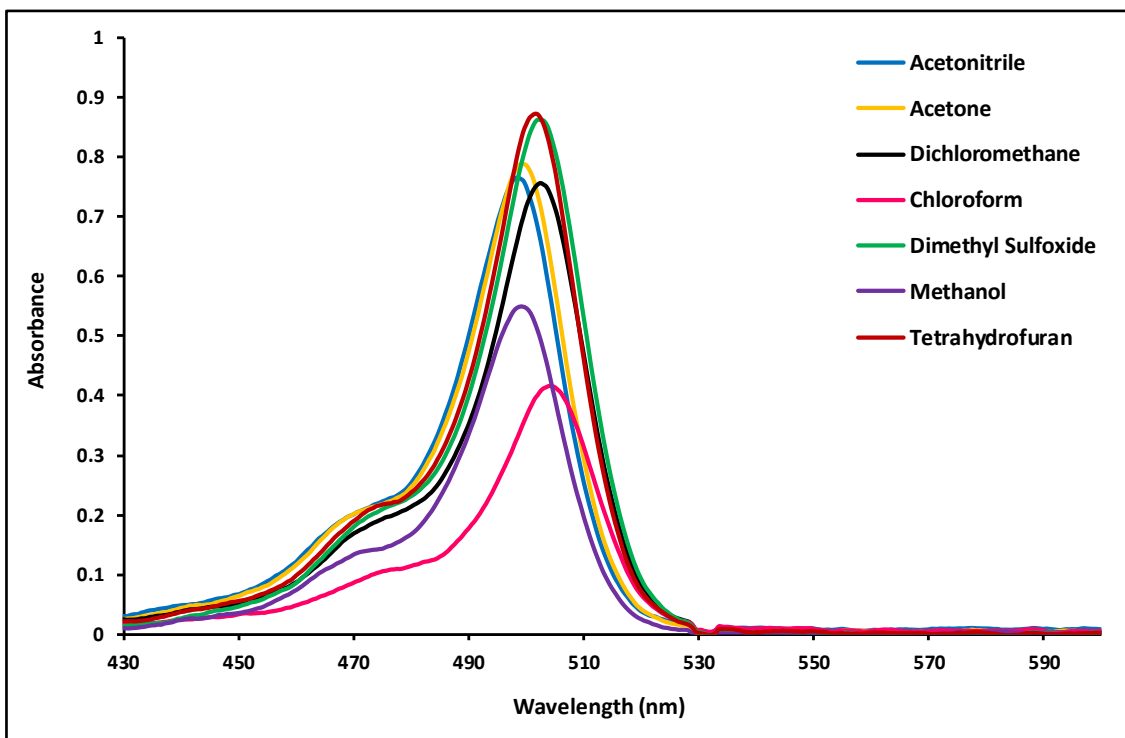


Figure S10: Absorbance spectra of **3** ($5 \times 10^{-6} \text{M}$) in different solvents.

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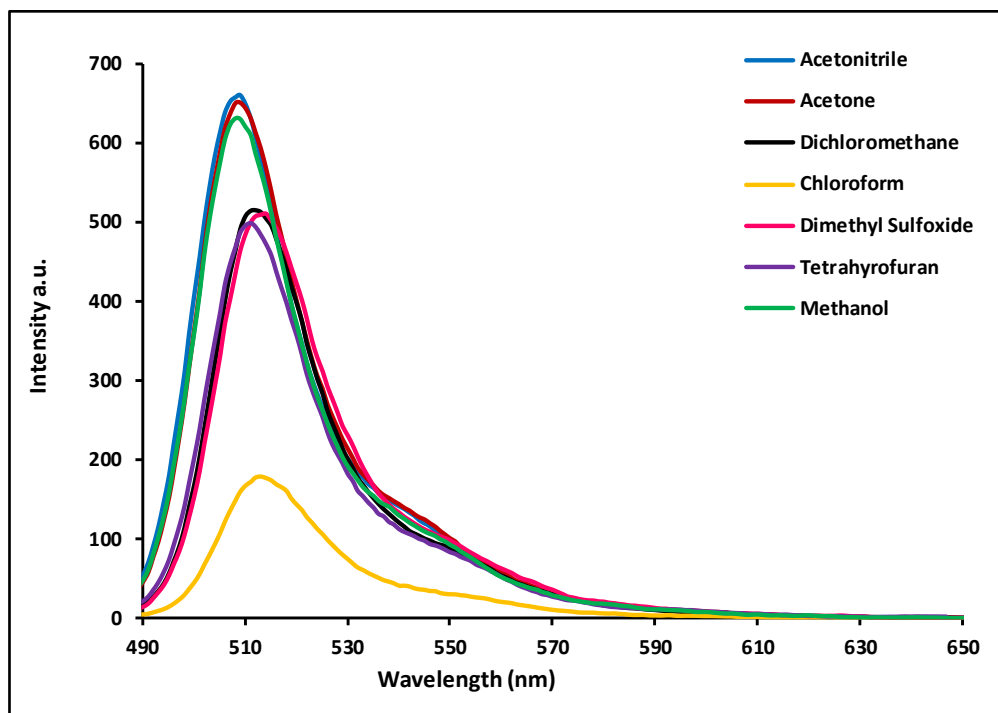


Figure S11: Fluorescence spectra of **2** ($5 \times 10^{-7} \text{M}$) in different solvents.

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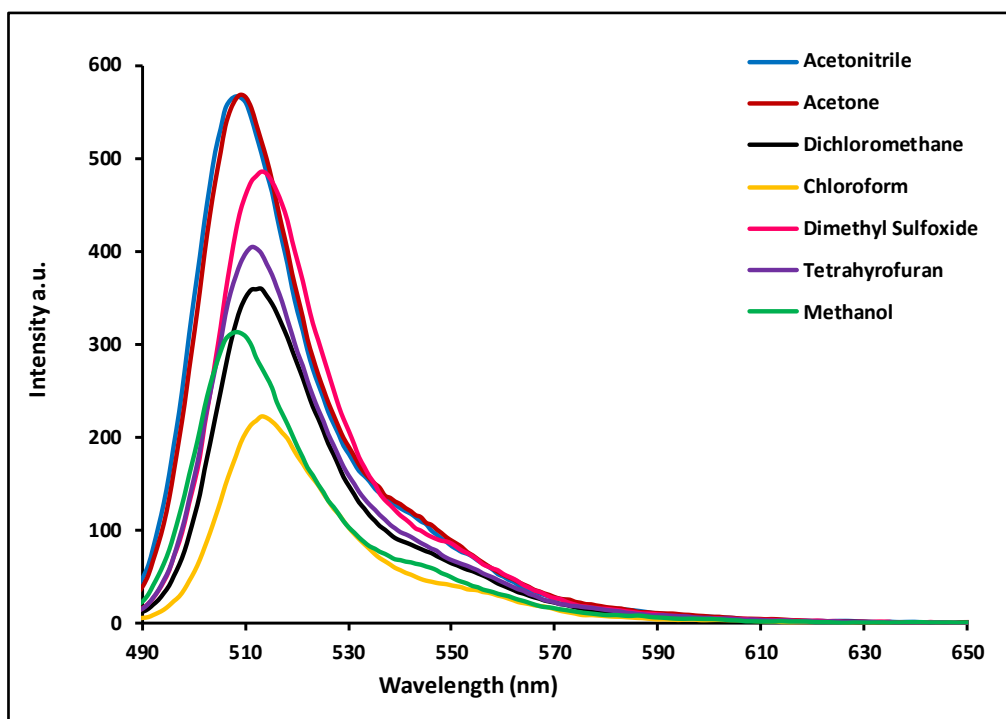


Figure S12: Fluorescence spectra of **3** ($2 \times 10^{-7} \text{M}$) in different solvents.

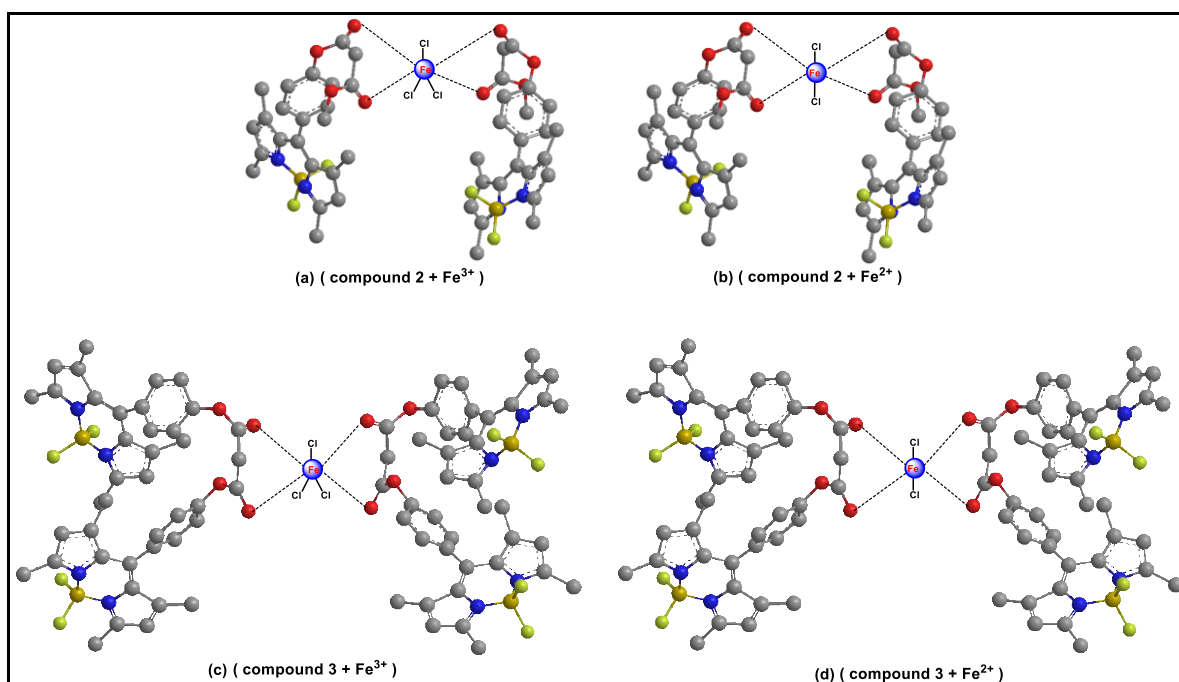


Figure S13: The proposed structures between (a) **2** and Fe^{3+} (b) **2** and Fe^{2+} ions (c) **3** and Fe^{3+} (d) **3** and Fe^{2+} ions as 2:1 complexes in aqueous solution.