Supplementary Material

Synthesis and characterization of a substituted indolizine and investigation of its photoluminescence quenching via electron deficient nitroaromatics

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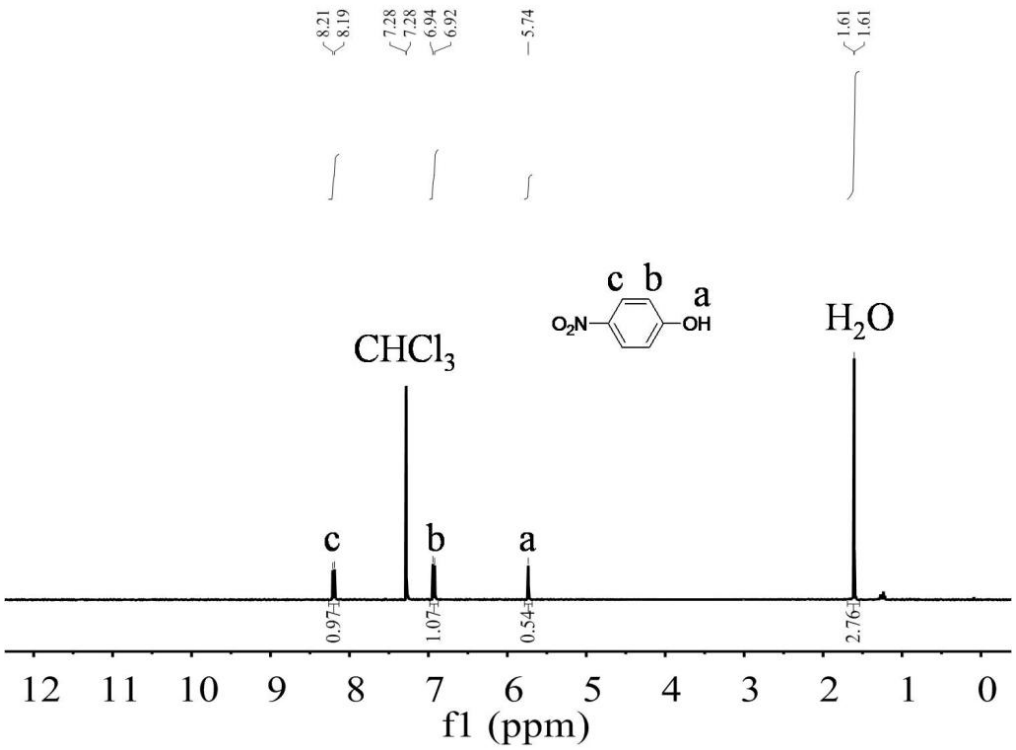

Figure S1. ^{1}H NMR spectrum of **2d** (in $CDCl_3$).

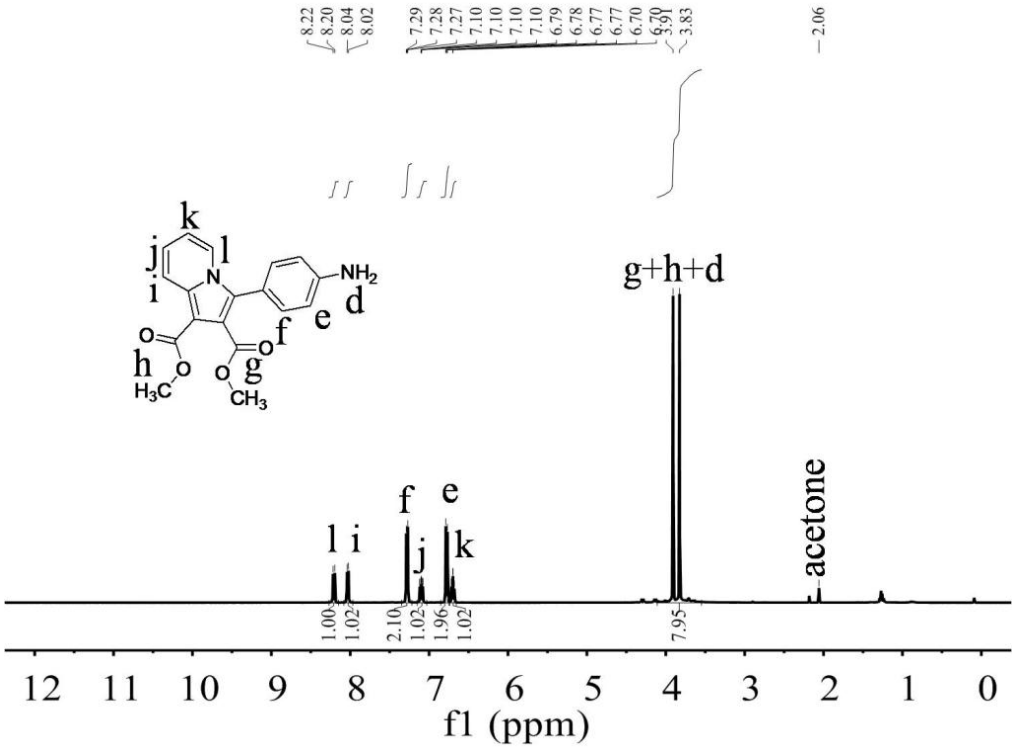

Figure S2. ^{1}H NMR spectrum of **1** (in $CDCl_3$).

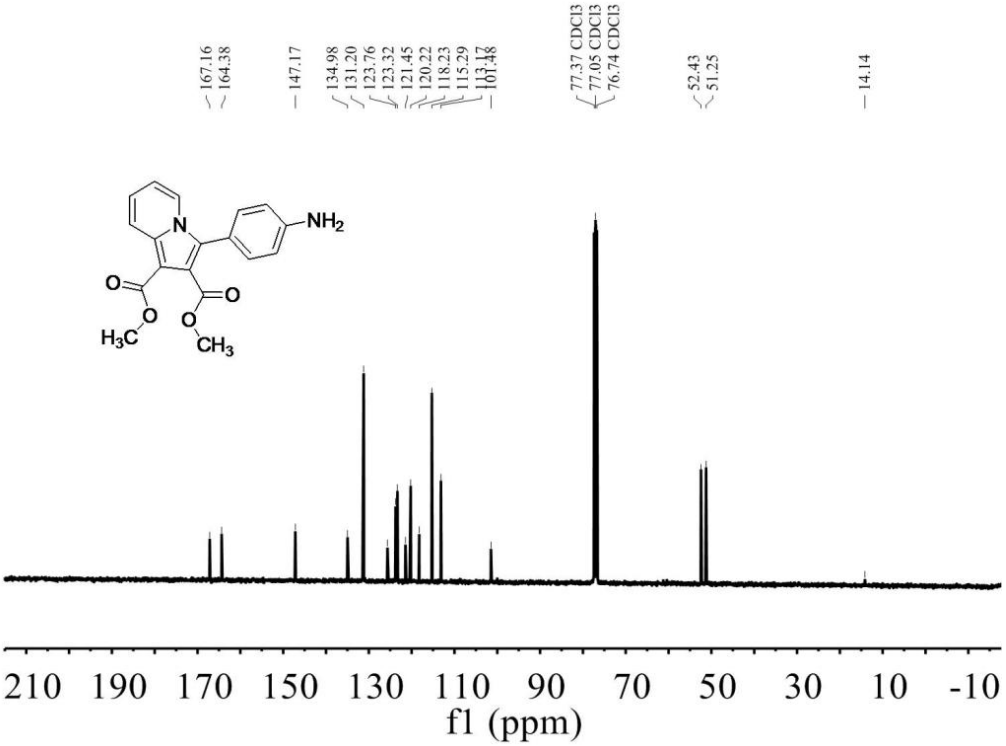

Figure S3. ^{13}C NMR spectrum of **1** (in $CDCl_3$).

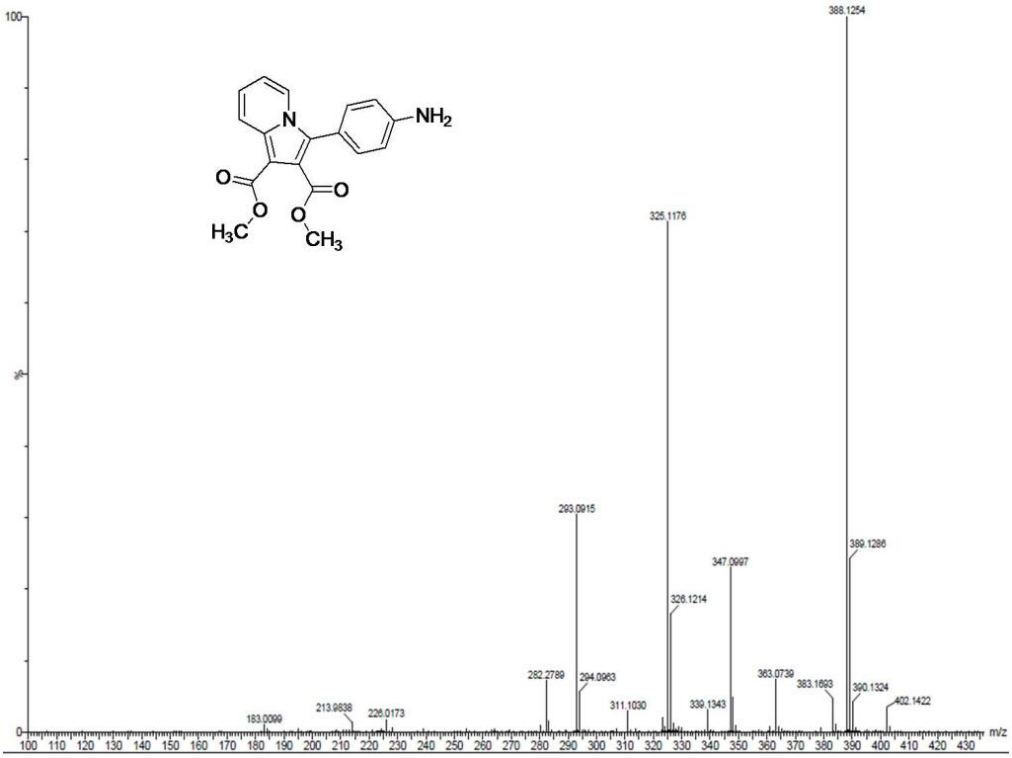

Figure S4. Mass spectrum of **1.**

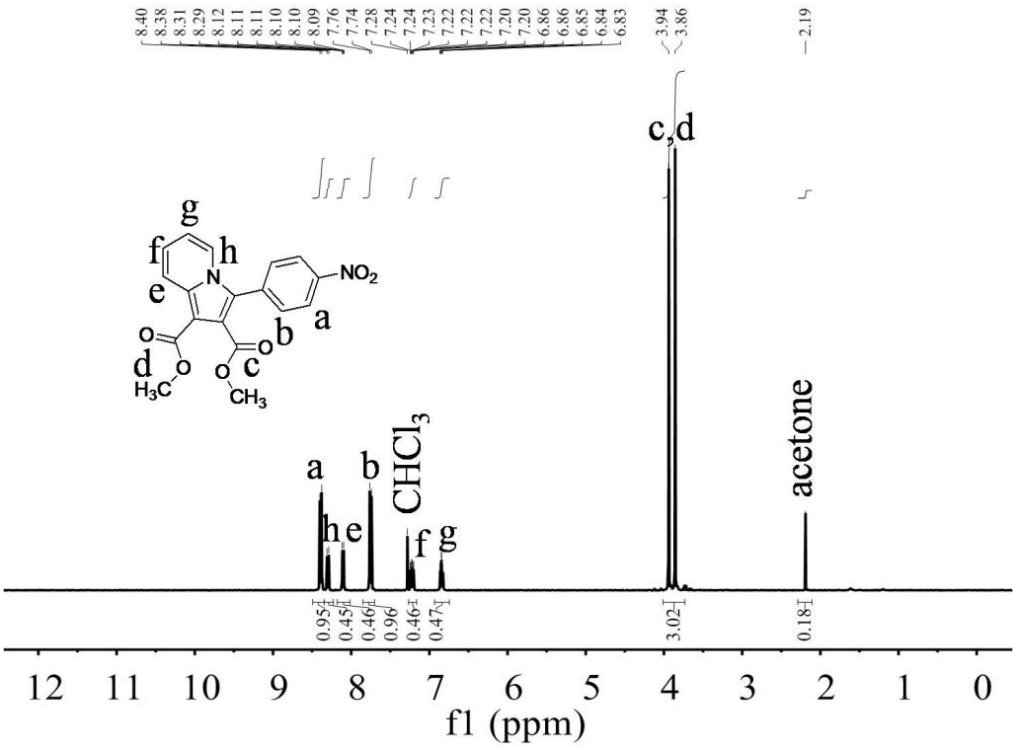

Figure S5. ^{1}H NMR spectrum of **5** (in $CDCl_3$).

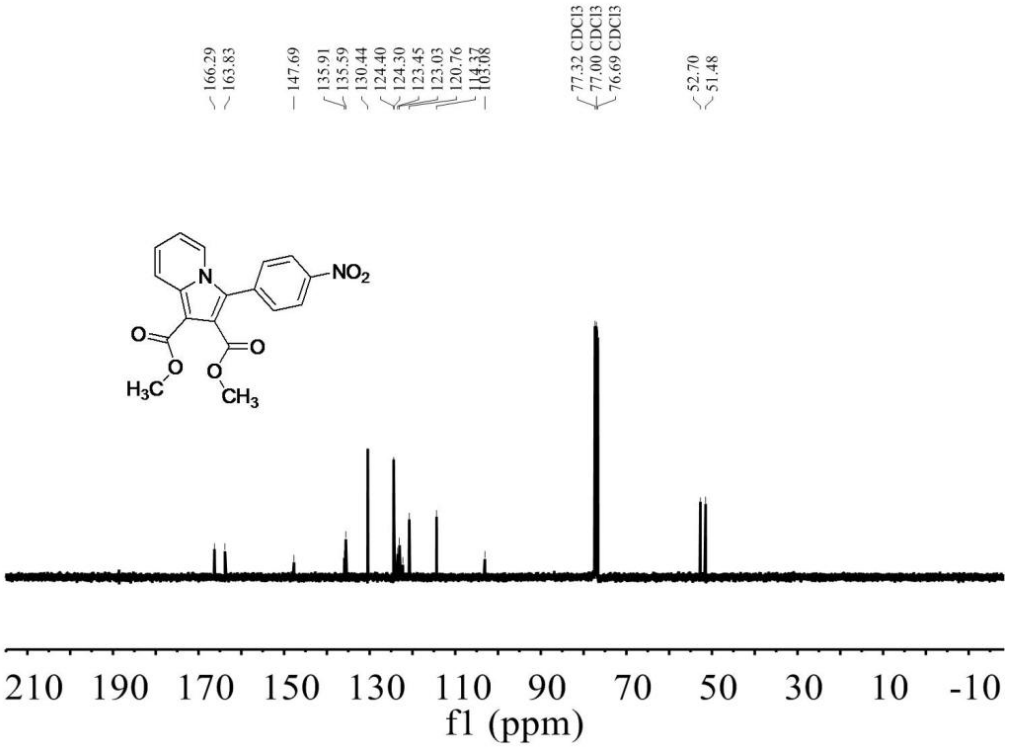

Figure S6. ^{13}C NMR spectrum of **5** (in $CDCl_3$).

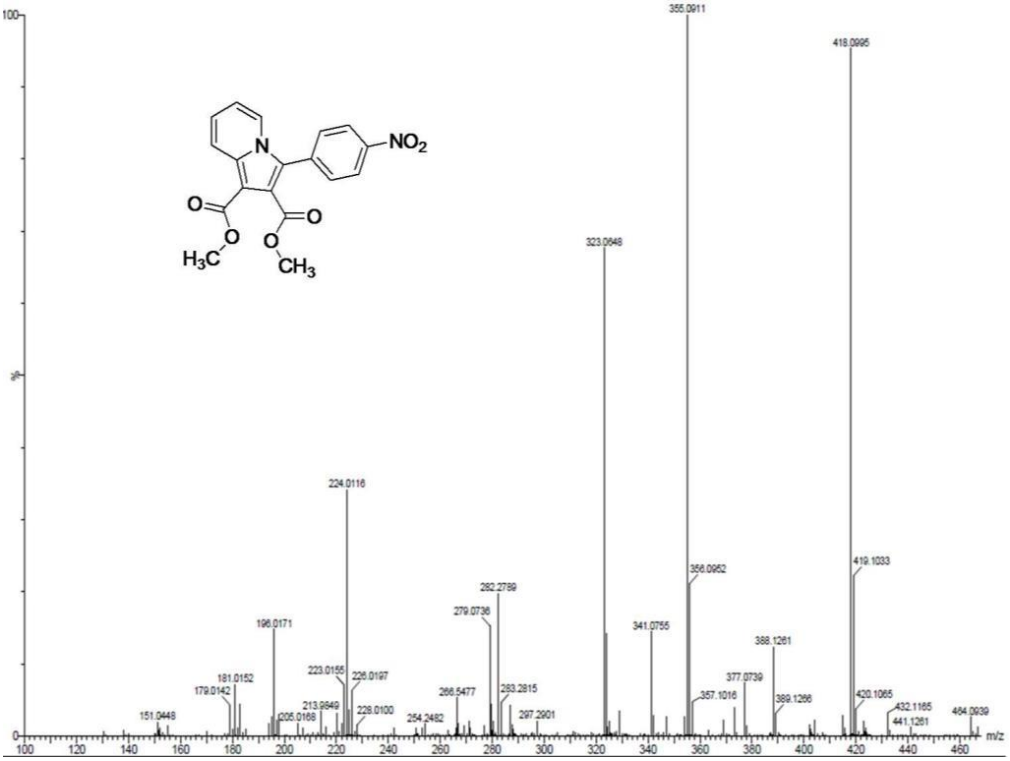

Figure S7. Mass spectrum of **5.**

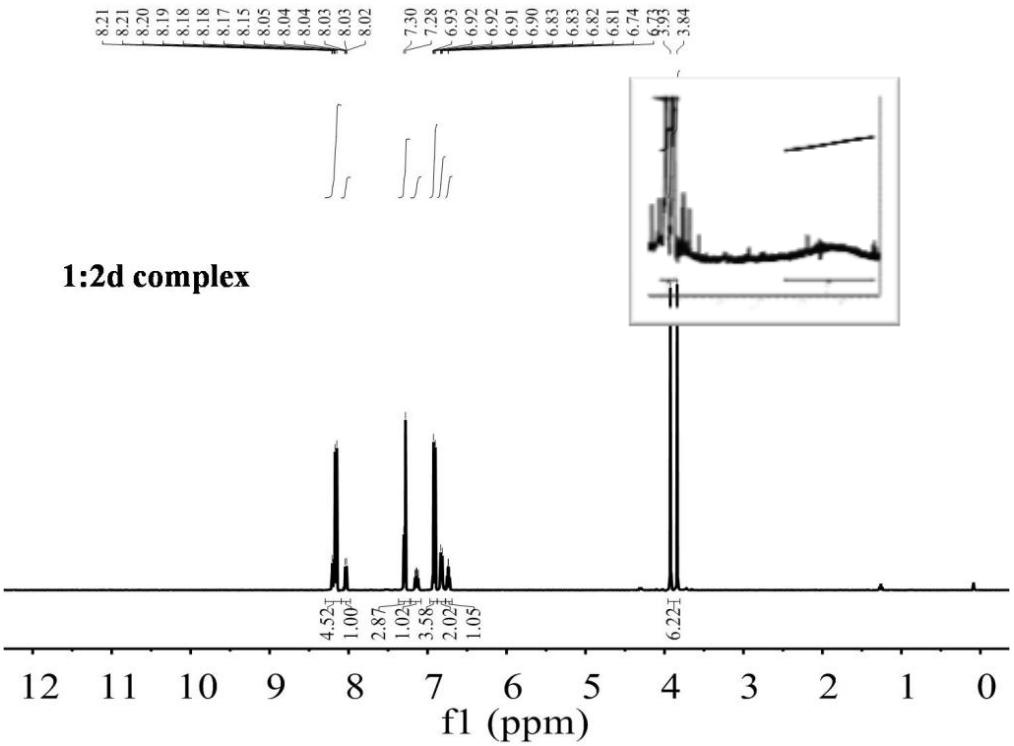

Figure S8. ^{1}H NMR spectrum of **1:2d** complex (in $CDCl_3$) Inset: Expanded ^{1}H NMR region showing the broad NH protons.

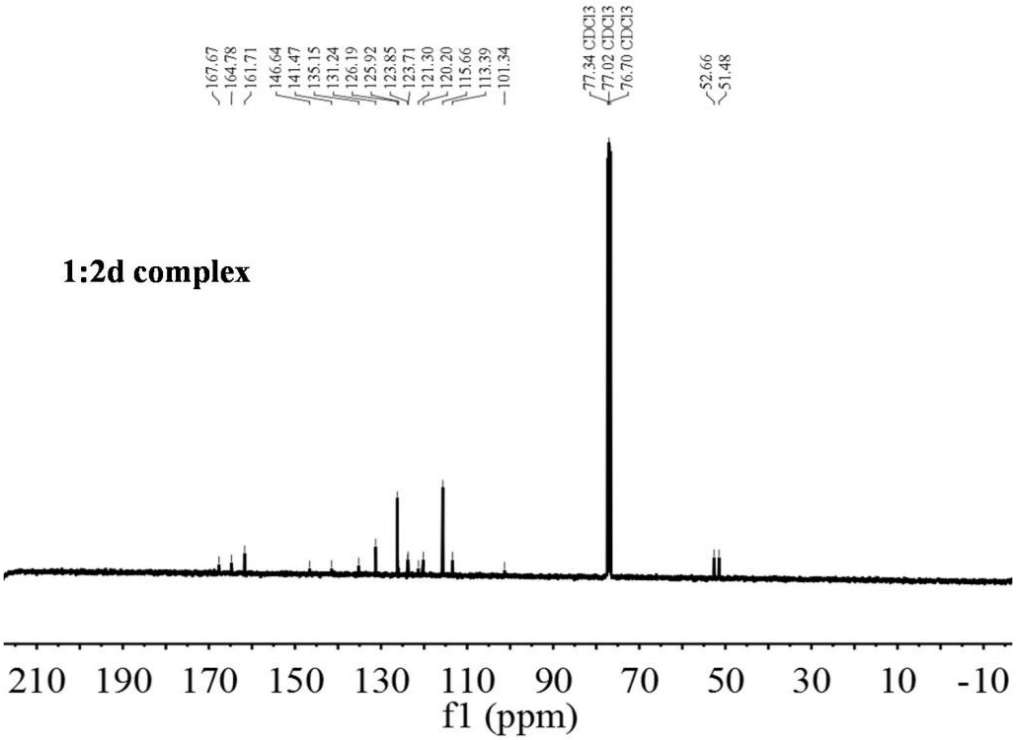

Figure S9. ^{13}C NMR spectrum of **1:2d** complex (in $CDCl_3$).

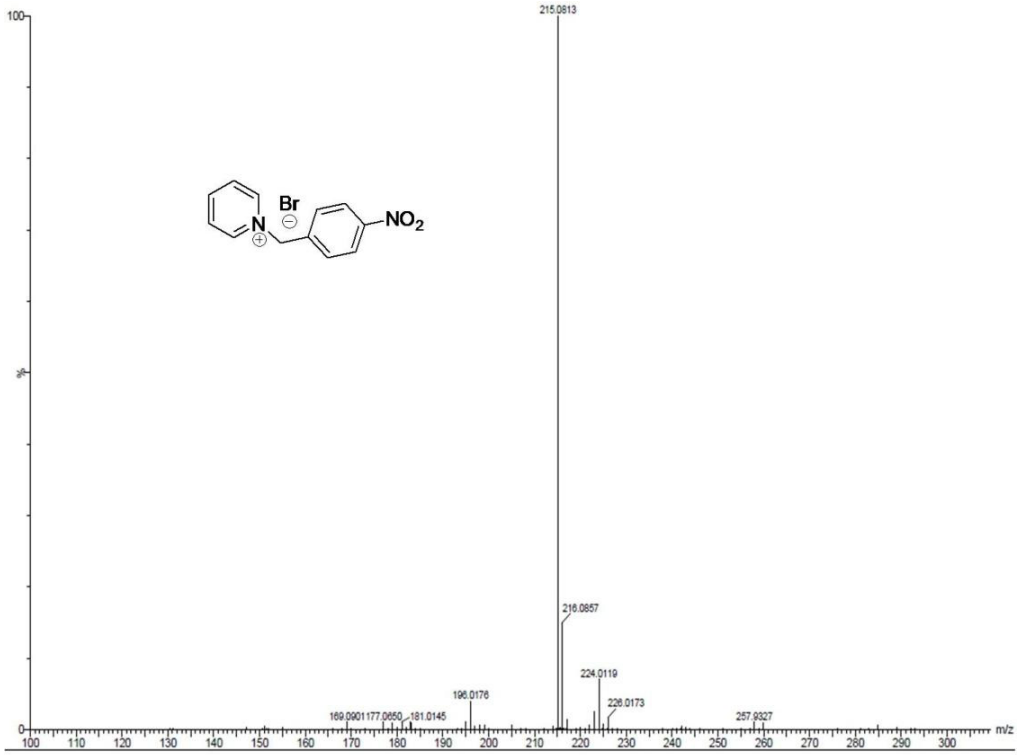

Figure S10. Mass spectrum of **4.**

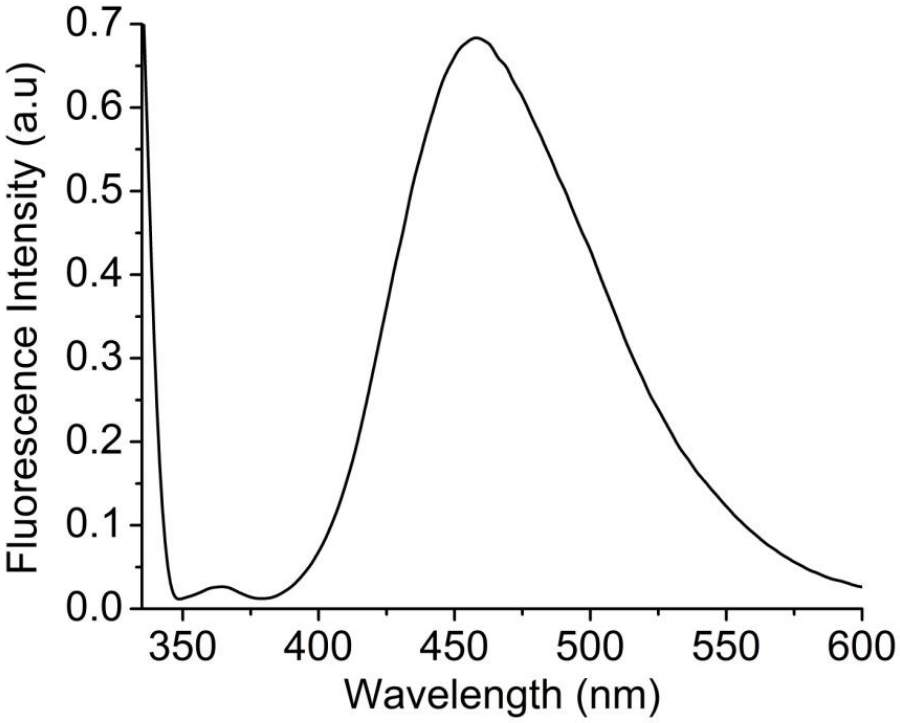

Figure S11. Emission spectrum of dimethyl 3-(4-aminophenyl)indolizine-1,2- dicarboxylate (**1**) (λ_{exc}= 330 nm) in CH_3CN.

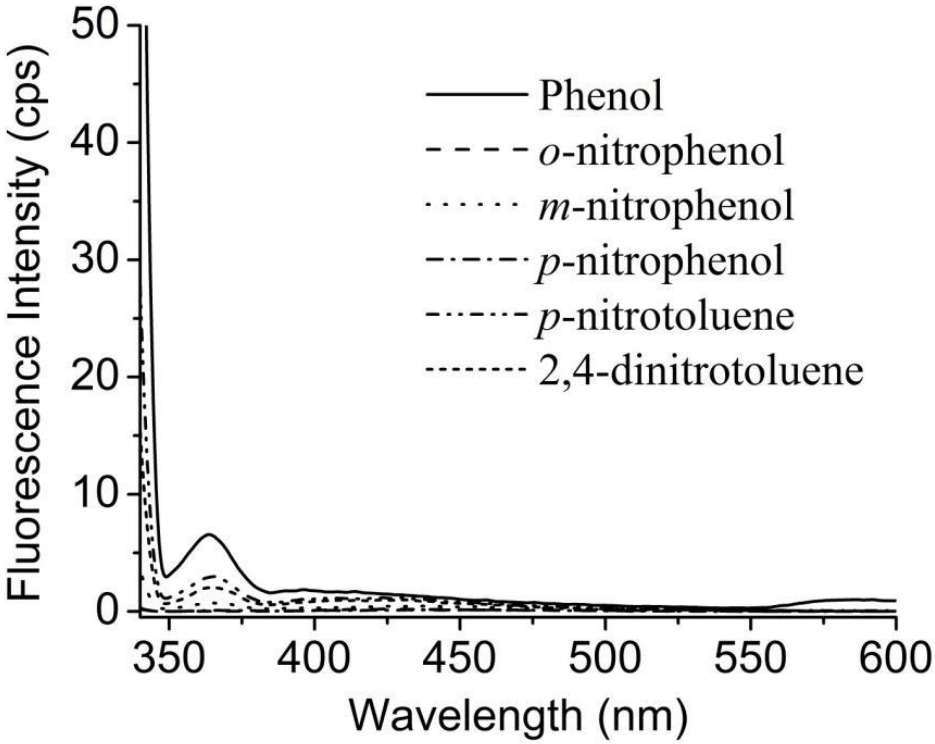

Figure S12. Emission spectra of guest compounds (**2a-f**) (λ_{exc}= 330 nm) in CH_3CN.

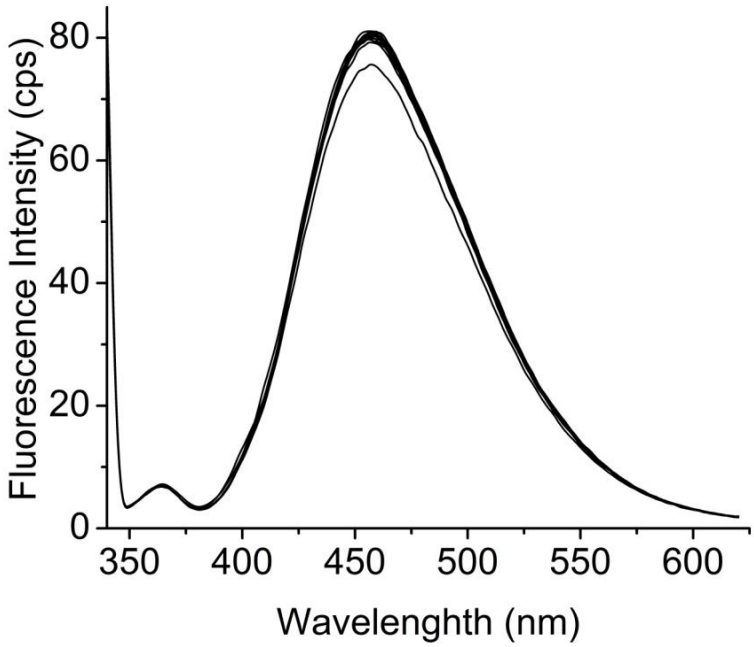

Figure S13. Fluorescence spectra (excitation at 330 nm) of **(1)** (0.209 μM) in CH_3CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 µM of **(2a)** pre-dissolved in CH_3CN.

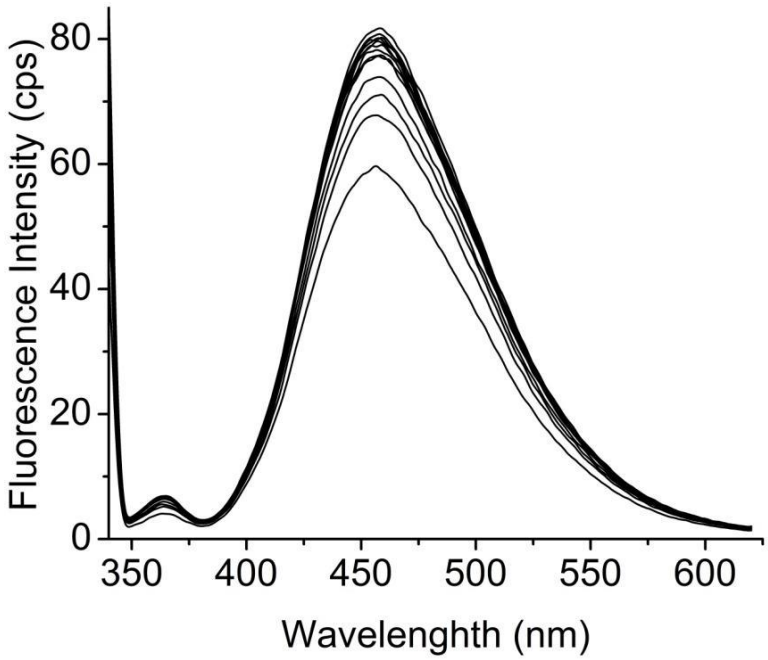

Figure S14. Fluorescence spectra (excitation at 330 nm) of **(1)** (0.209 μM) in CH_3CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 µM of **(2b)** pre-dissolved in CH_3CN.

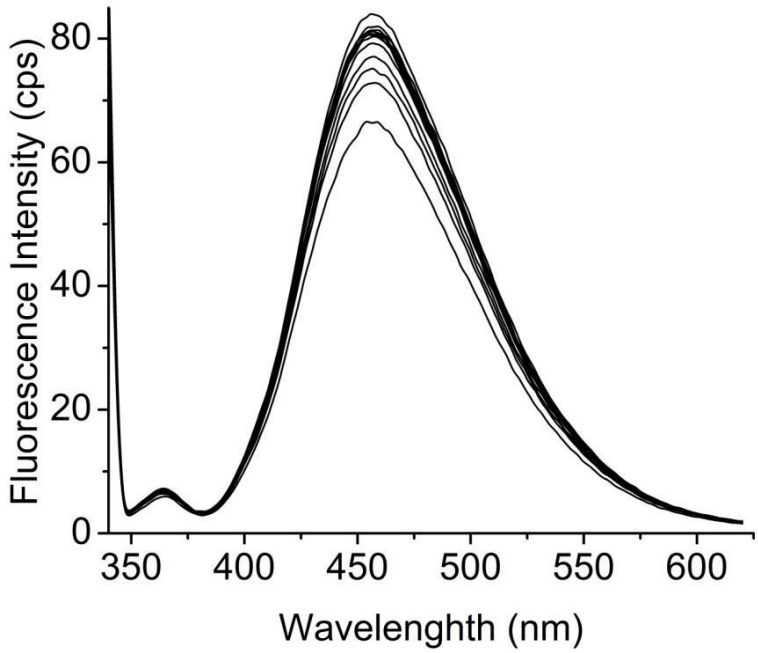

Figure S15. Fluorescence spectra (excitation at 330 nm) of **(1)** (0.209 μM) in CH_3CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 µM of **(2c)** pre-dissolved in CH_3CN.

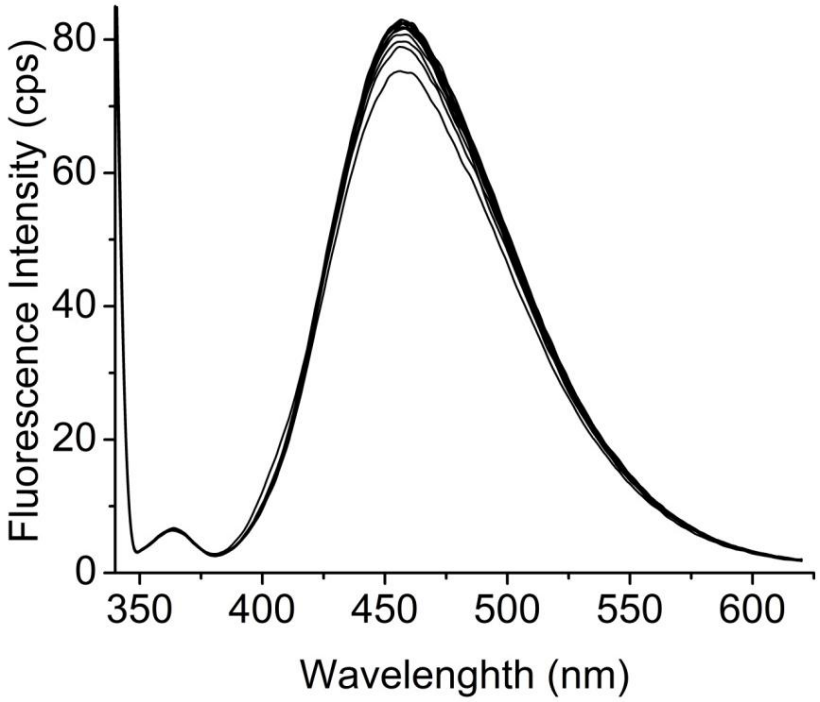

Figure S16. Fluorescence spectra (excitation at 330 nm) of **(1)** (0.209 μM) in CH_3CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 µM of **(2e)** pre-dissolved in CH_3CN.

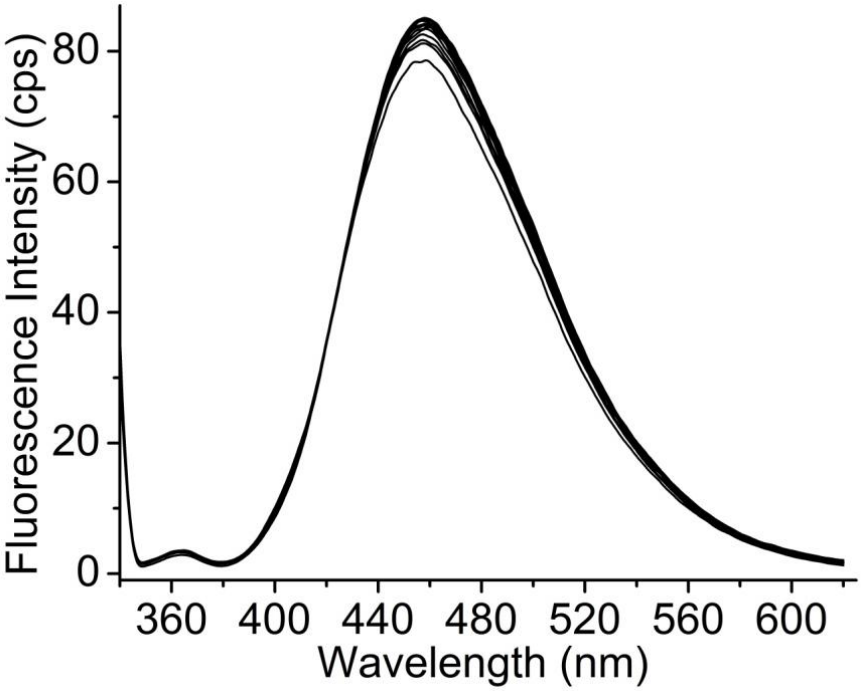

Figure S17. Fluorescence spectra (excitation at 330 nm) of **(1)** (0.209 μM) in CH_3CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 µM of **(2f)** pre-dissolved in CH_3CN.

