Supplementary Material

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

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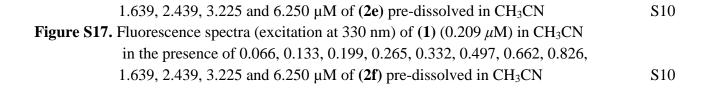
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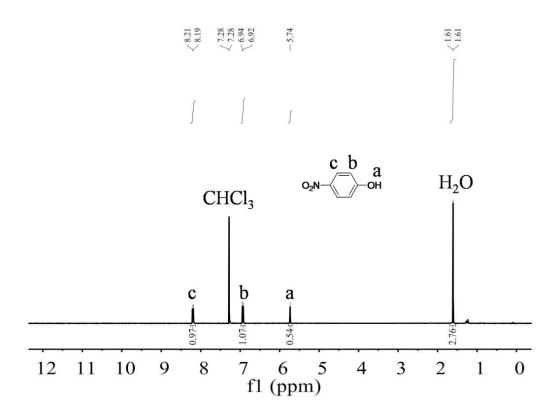


Figure S1. ¹H NMR spectrum of 2d (in CDCl₃).

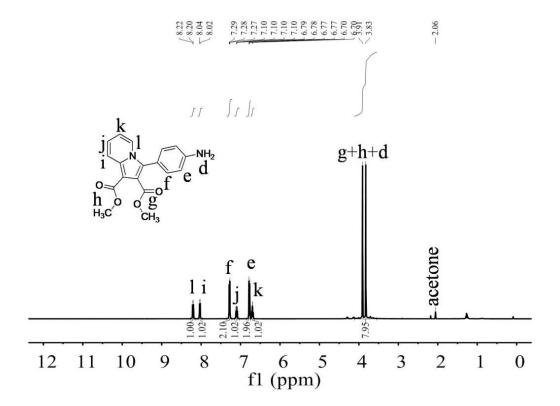


Figure S2. ¹H NMR spectrum of 1 (in CDCl₃).

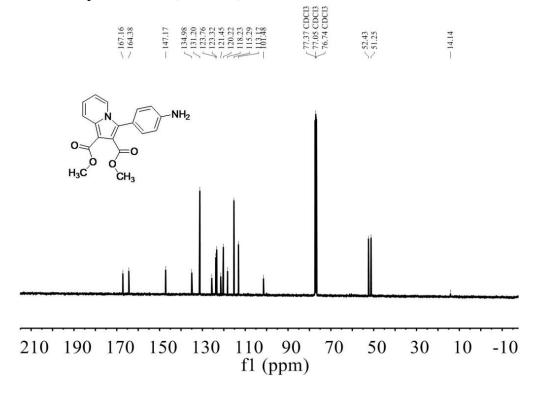


Figure S3. ¹³C NMR spectrum of **1** (in CDCl₃).

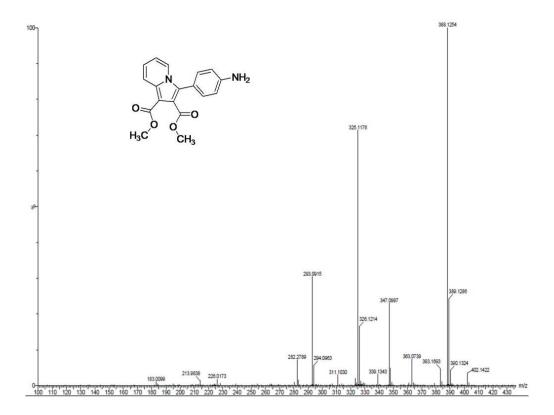


Figure S4. Mass spectrum of 1.

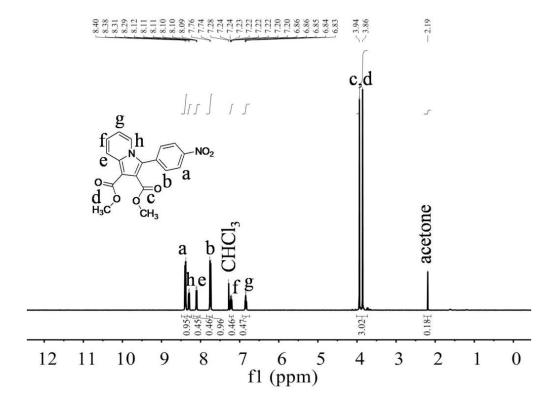


Figure S5. ¹H NMR spectrum of 5 (in CDCl₃).

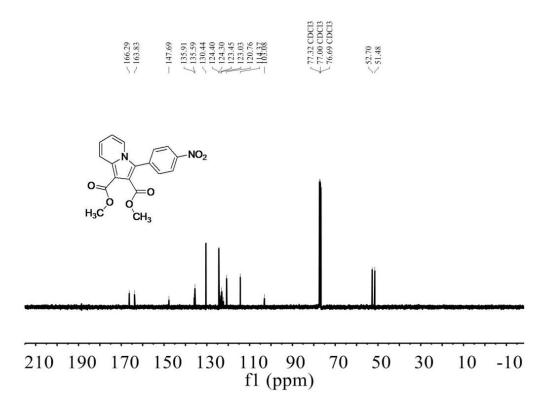


Figure S6. ¹³C NMR spectrum of **5** (in CDCl₃).

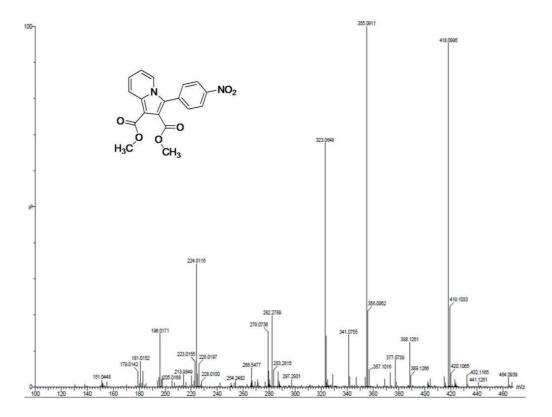


Figure S7. Mass spectrum of 5.

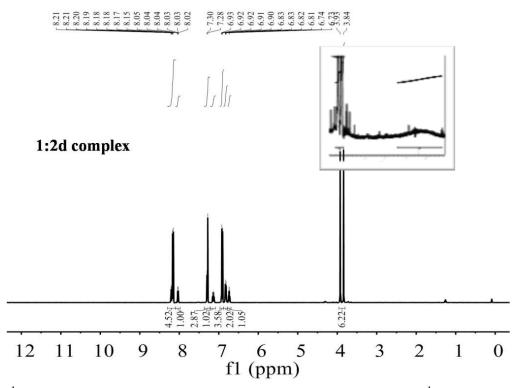


Figure S8. ¹H NMR spectrum of **1:2d** complex (in CDCl₃) Inset: Expanded ¹H NMR region showing the broad NH protons.

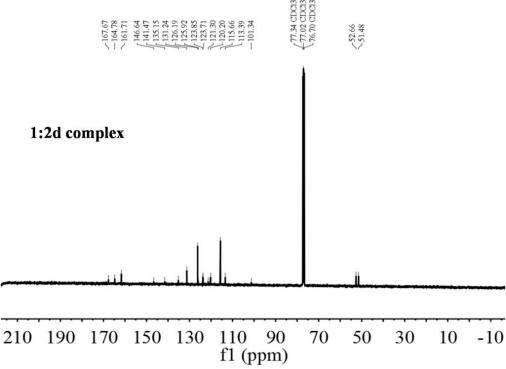


Figure S9. ¹³C NMR spectrum of 1:2d complex (in CDCl₃).

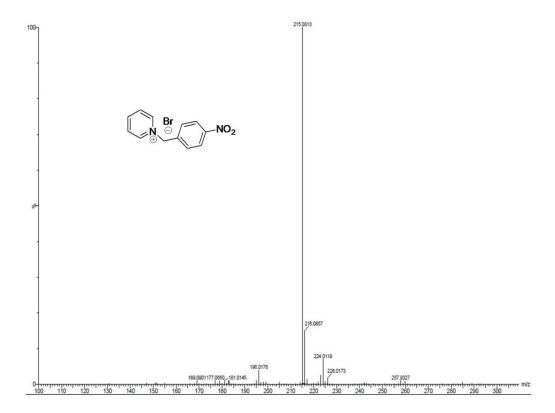


Figure S10. Mass spectrum of 4.

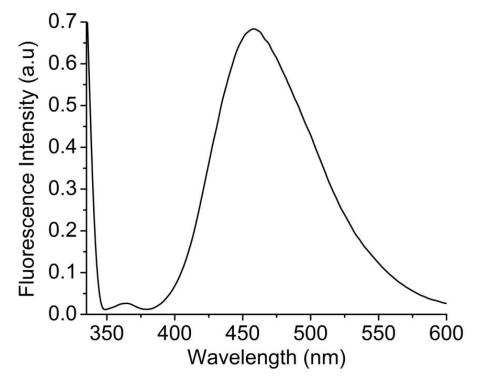


Figure S11. Emission spectrum of dimethyl 3-(4-aminophenyl)indolizine-1,2- dicarboxylate (1) $(\lambda_{exc} = 330 \text{ nm})$ in CH₃CN.

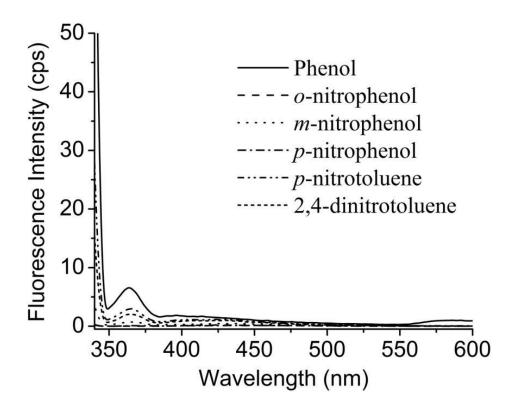


Figure S12. Emission spectra of guest compounds (2a-f) (λ_{exc} = 330 nm) in CH₃CN.

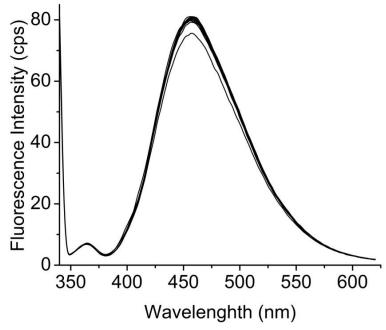


Figure S13. Fluorescence spectra (excitation at 330 nm) of (1) $(0.209 \ \mu\text{M})$ in CH₃CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 μ M of (2a) pre-dissolved in CH₃CN.

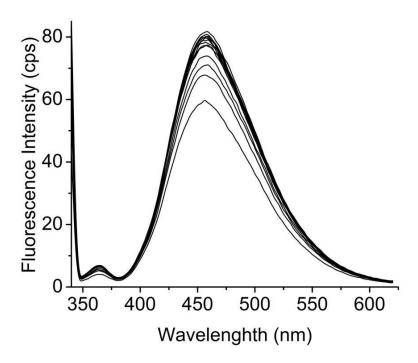


Figure S14. Fluorescence spectra (excitation at 330 nm) of (1) $(0.209 \ \mu\text{M})$ in CH₃CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 μ M of (2b) pre-dissolved in CH₃CN.

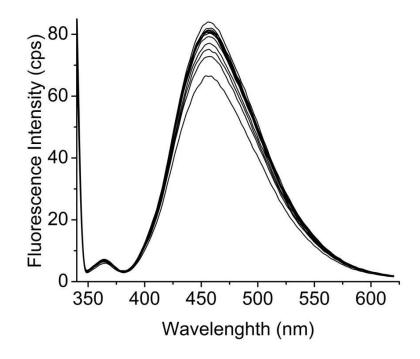


Figure S15. Fluorescence spectra (excitation at 330 nm) of (1) $(0.209 \ \mu\text{M})$ in CH₃CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 μ M of (2c) pre-dissolved in CH₃CN.

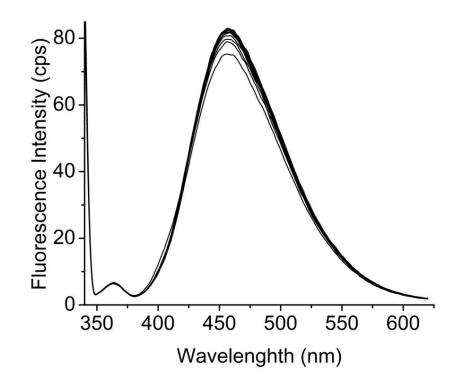


Figure S16. Fluorescence spectra (excitation at 330 nm) of (1) $(0.209 \ \mu\text{M})$ in CH₃CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 μ M of (2e) pre-dissolved in CH₃CN.

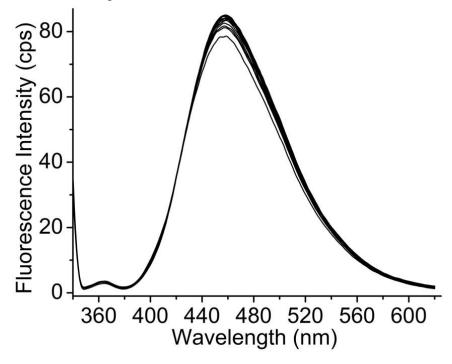


Figure S17. Fluorescence spectra (excitation at 330 nm) of (1) $(0.209 \ \mu\text{M})$ in CH₃CN in the presence of 0.066, 0.133, 0.199, 0.265, 0.332, 0.497, 0.662, 0.826, 1.639, 2.439, 3.225 and 6.250 μM of (2f) pre-dissolved in CH₃CN.