

Electronic Supplementary Information for
**Effect of Single Atom Substitution (O, S, Se) on the Photocatalytic Hydrogen
Evolution for Triazine Based Conjugated Porous Polymers**

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Supplementary Figures

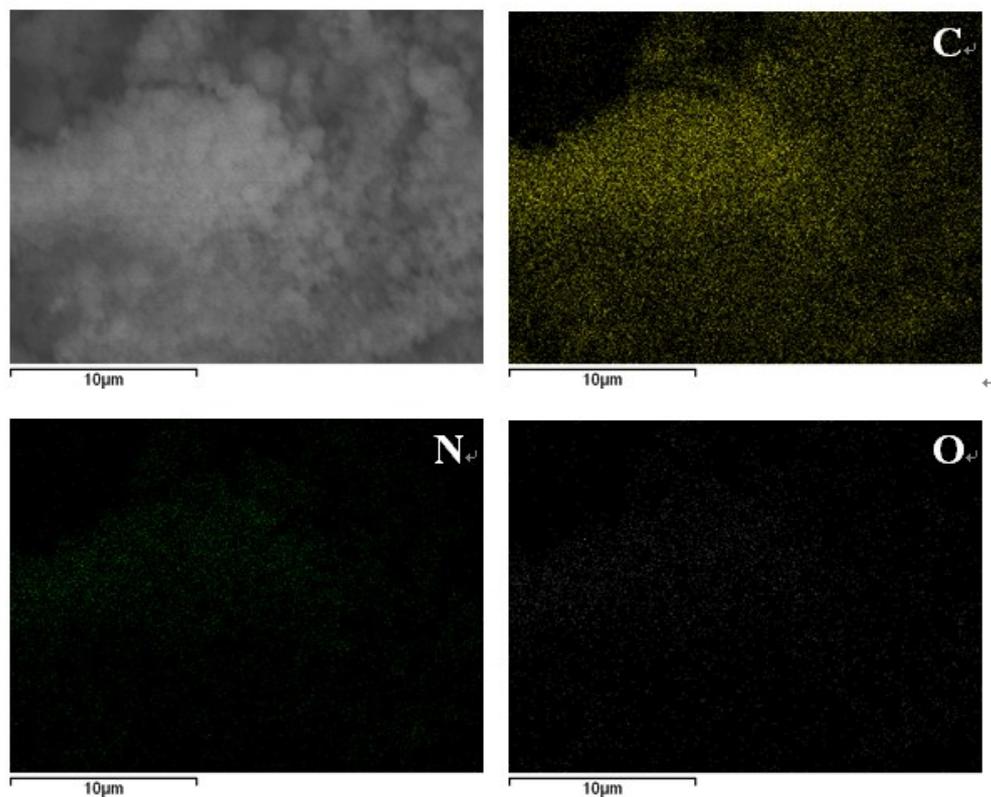


Fig. S1. Energy-dispersive X-ray (EDX) spectra of P3.

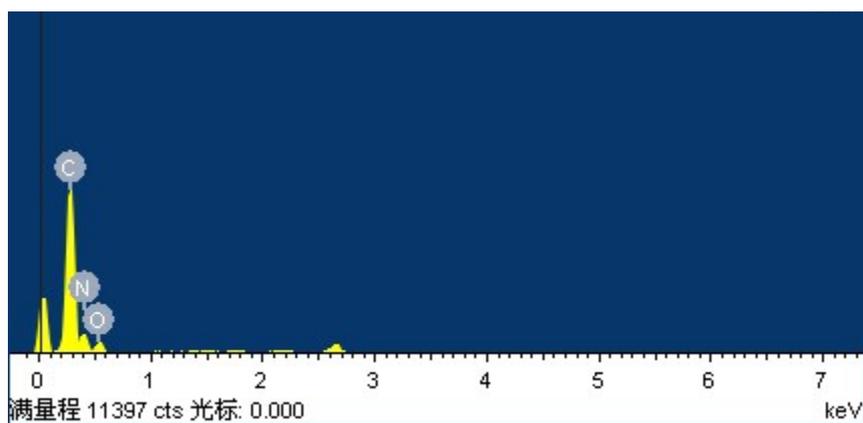


Fig. S2. Energy-dispersive X-ray (EDX) spectra of P3.

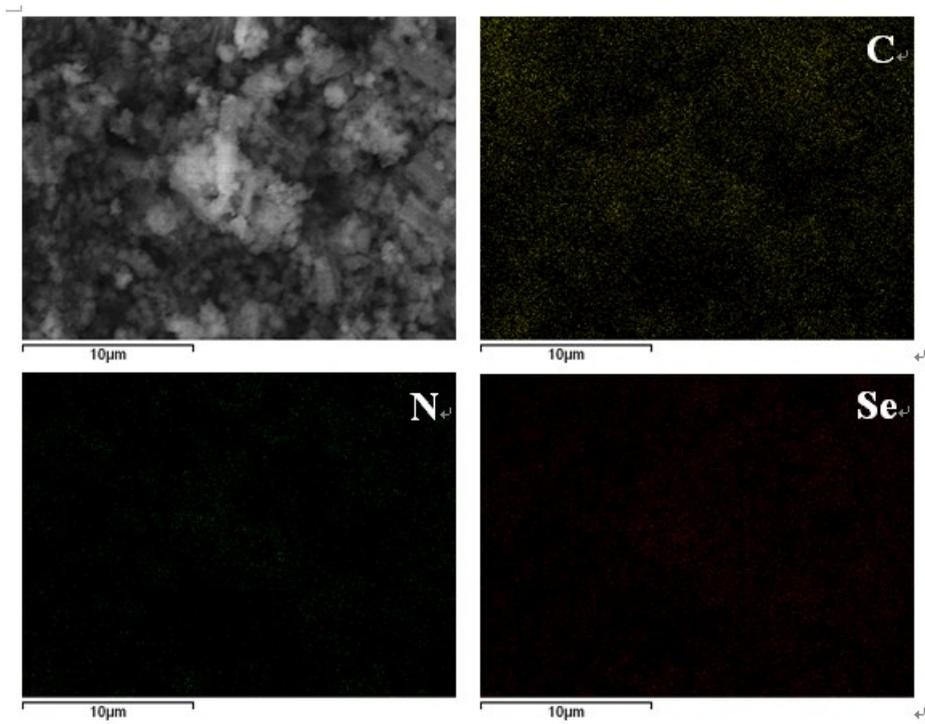


Fig. S3. Energy-dispersive X-ray (EDX) spectra of P4.

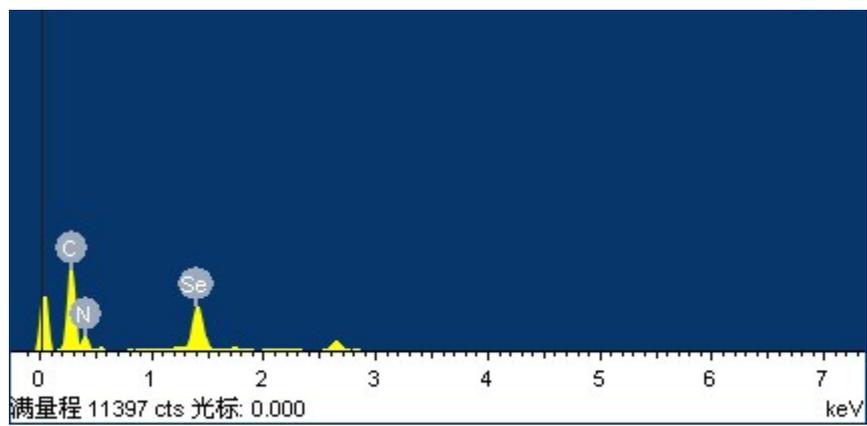


Fig. S4. Energy-dispersive X-ray (EDX) spectra of P4.

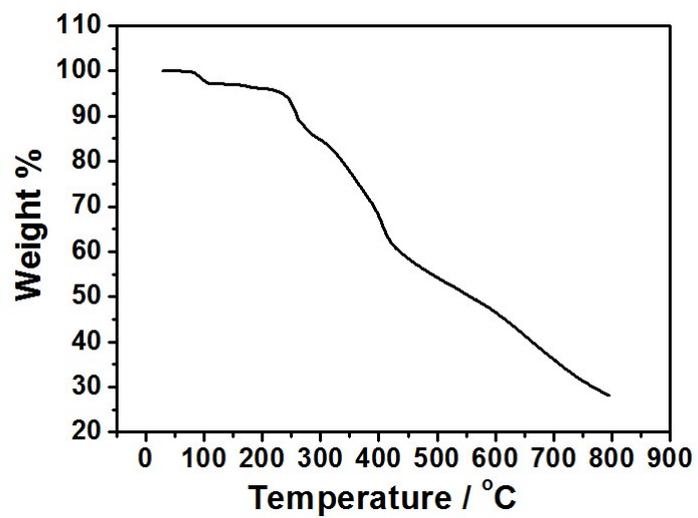


Fig. S5. Thermogravimetric analysis (TGA) for polymer P3.

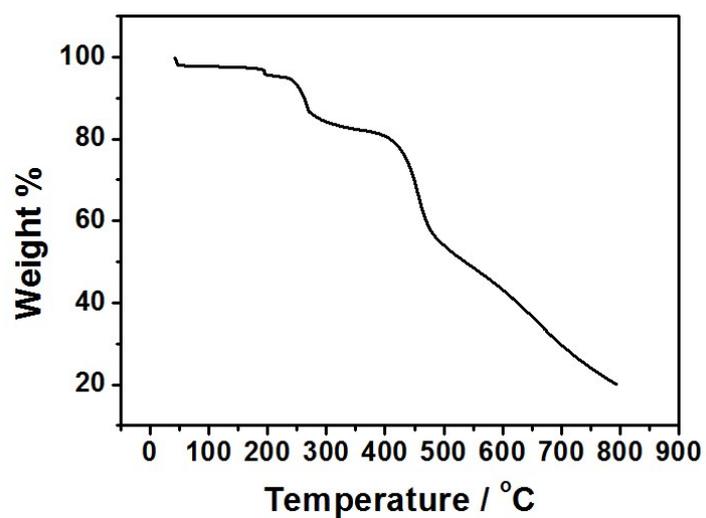


Fig. S6. Thermogravimetric analysis (TGA) for polymer P4.

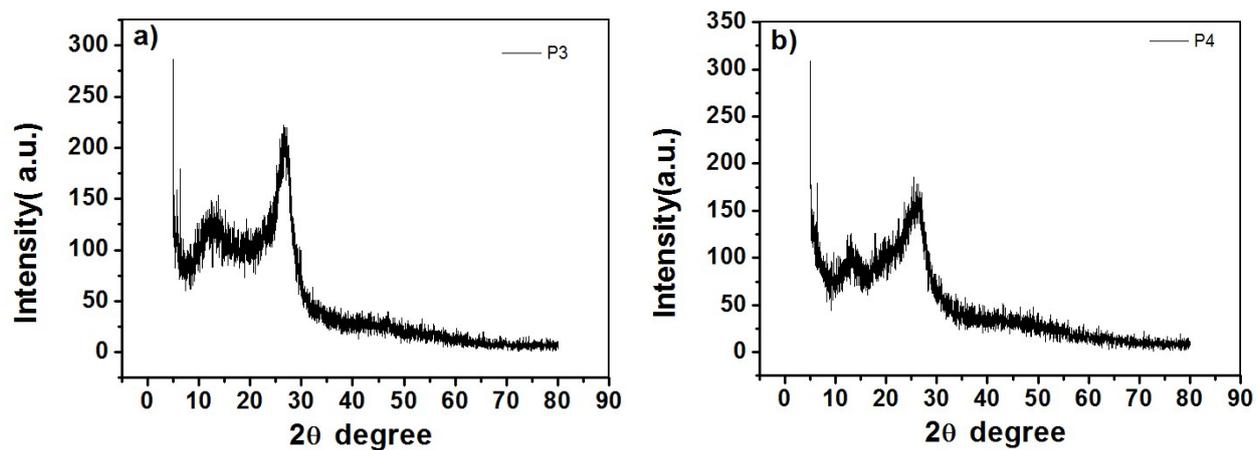


Fig. S7. a) Powder X-ray diffraction (PXRD) of P3. b) Powder X-ray diffraction (PXRD) of P4.

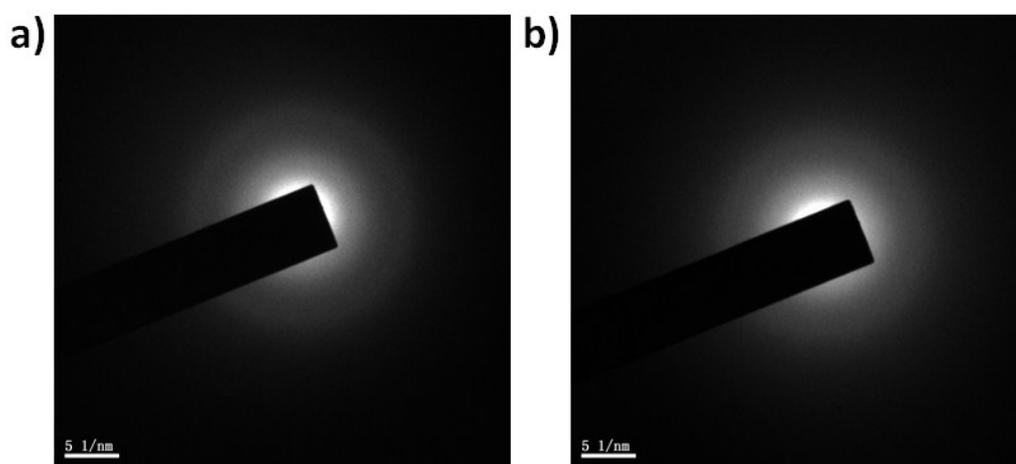


Fig. S8. (a) Selected area electron diffraction (SAED) of P3. (b) Selected area electron diffraction (SAED) of P4.

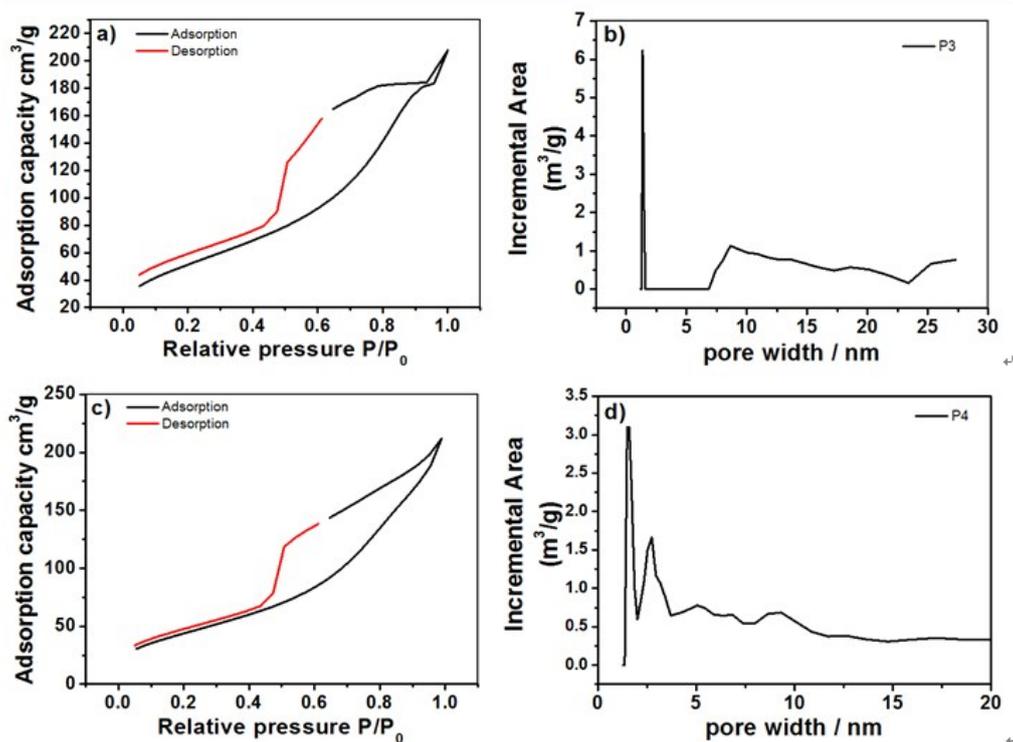


Fig. S9. (a) Nitrogen adsorption isotherm (red line) and desorption isotherm (black line) for P3 recorded at 77 K, (b) profile of the calculated pore size distribution for P3. P/P_0 , vapor pressure over saturation pressure, (c) Nitrogen adsorption isotherm (red line) and desorption isotherm (black line) for P4 recorded at 77 K, (d) profile of the calculated pore size distribution for P4. P/P_0 , vapor pressure over saturation pressure.

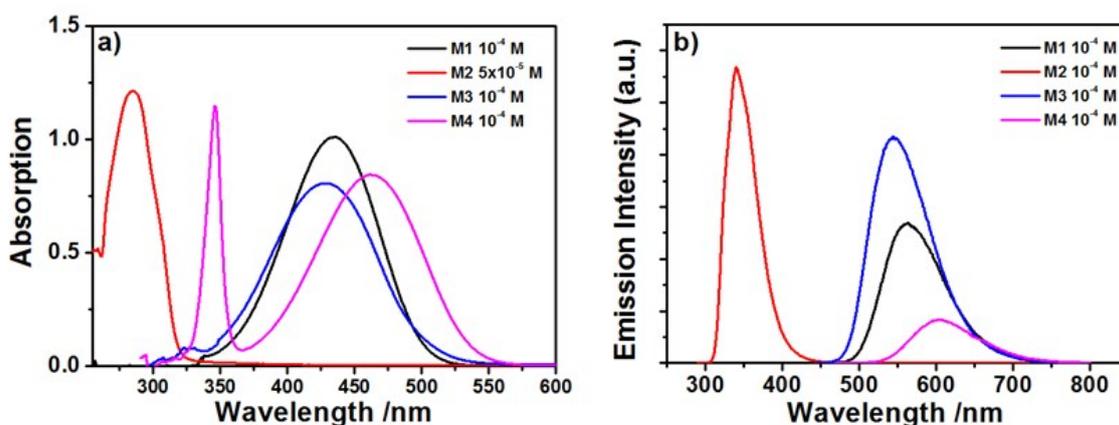


Fig. S10. a) UV-vis absorption spectra and b) emission spectra of monomer M1, M2, M3 and M4 in DMF solution at 298 K.

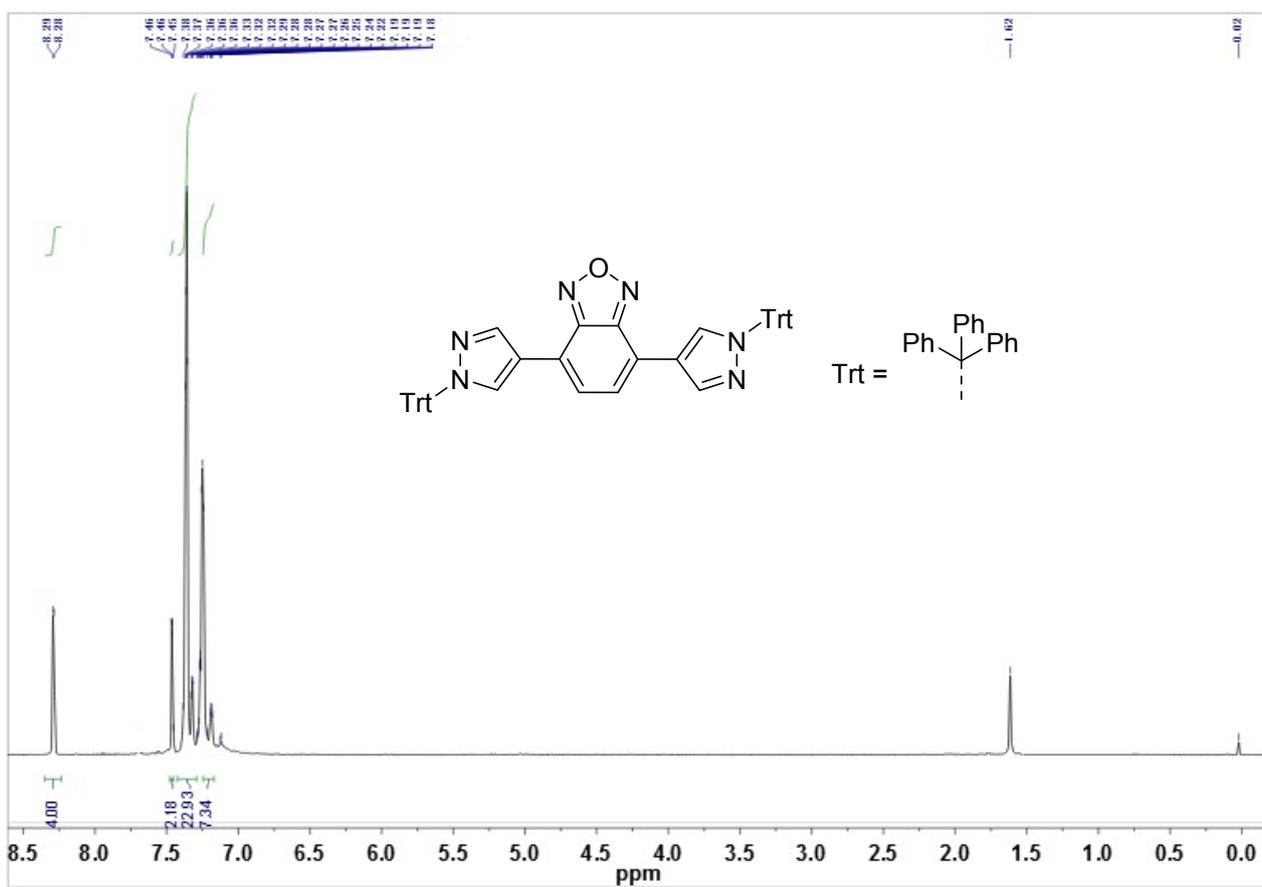


Fig. S11. ^1H NMR of 4 in CDCl_3 .

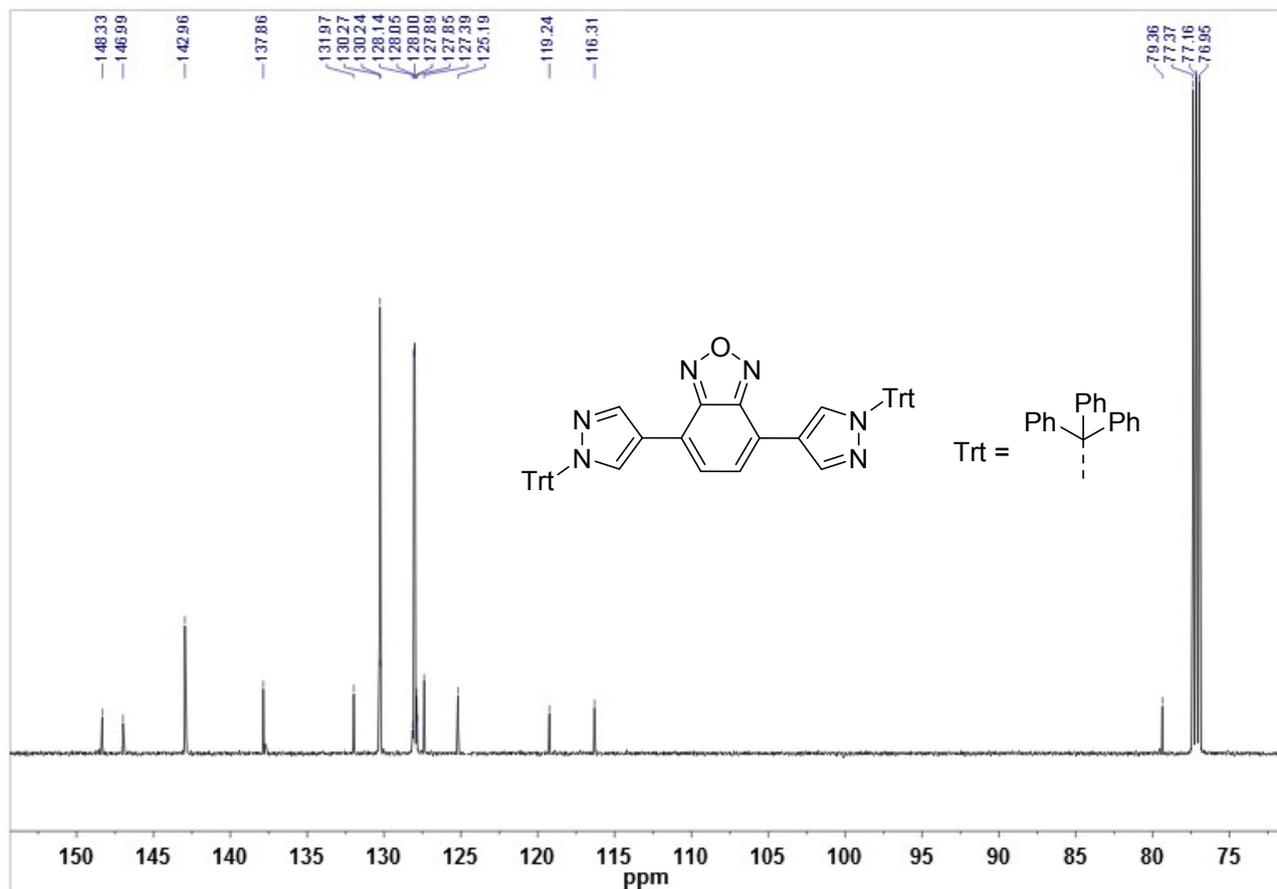


Fig. S12. ^{13}C NMR of 4 in CDCl_3 .

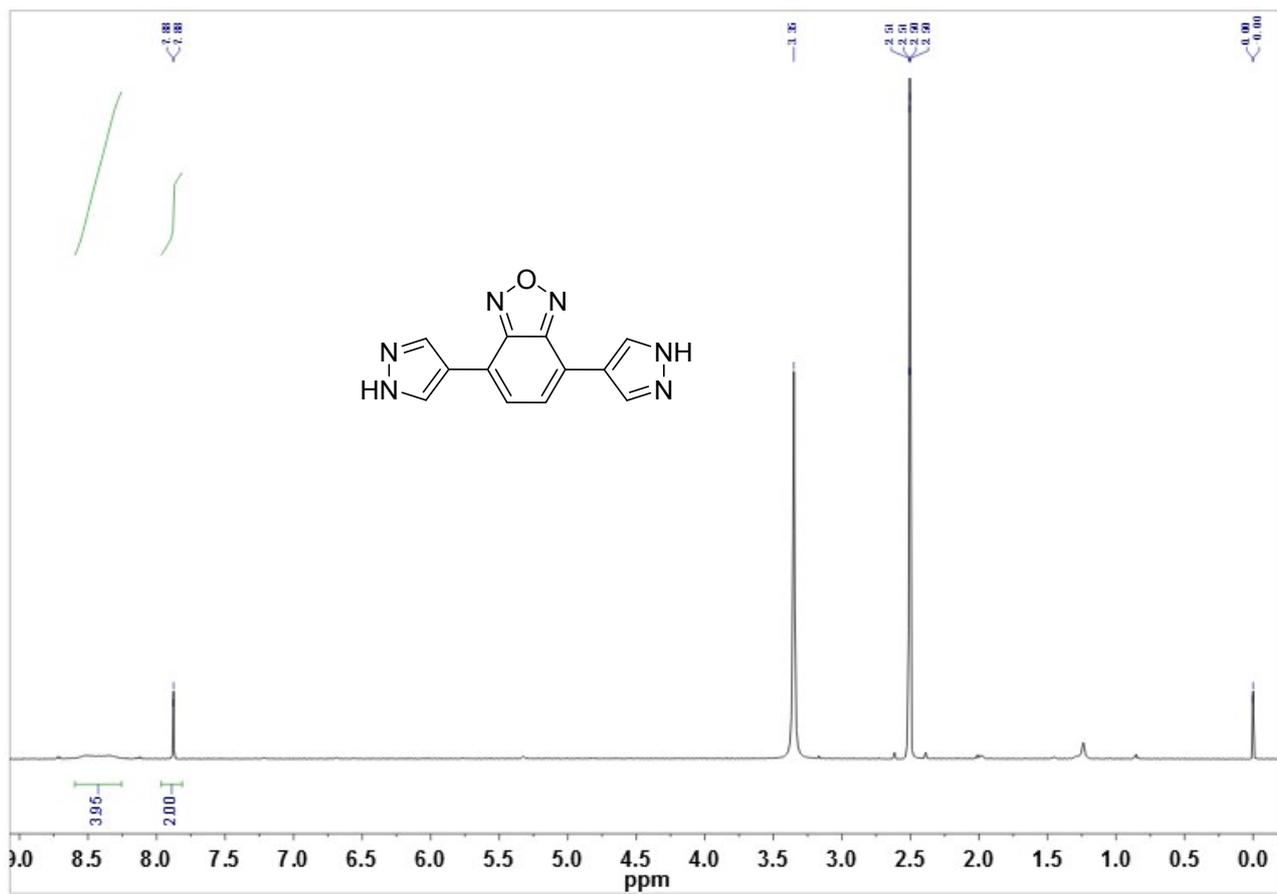


Fig. S13. ¹H NMR of M3 in d₆-DMSO.

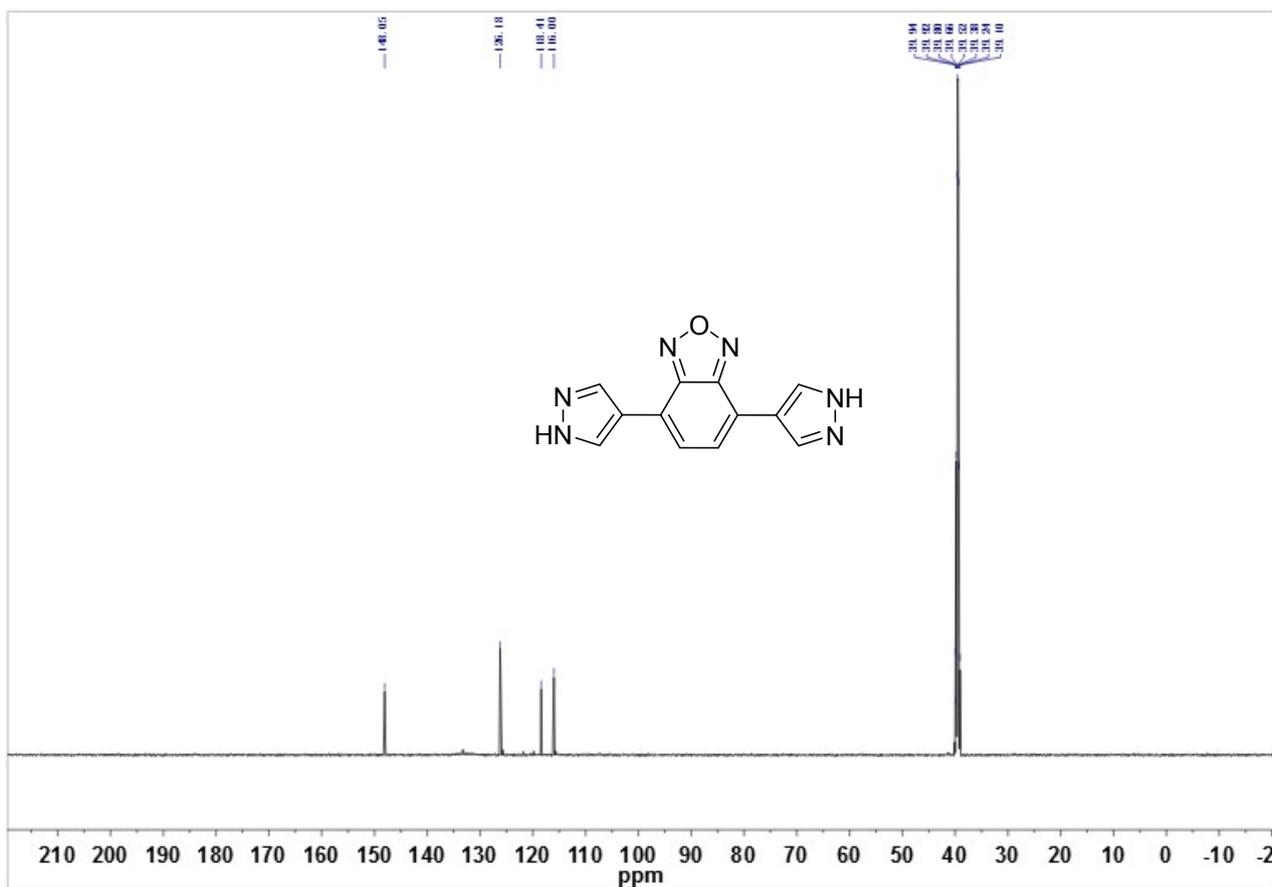
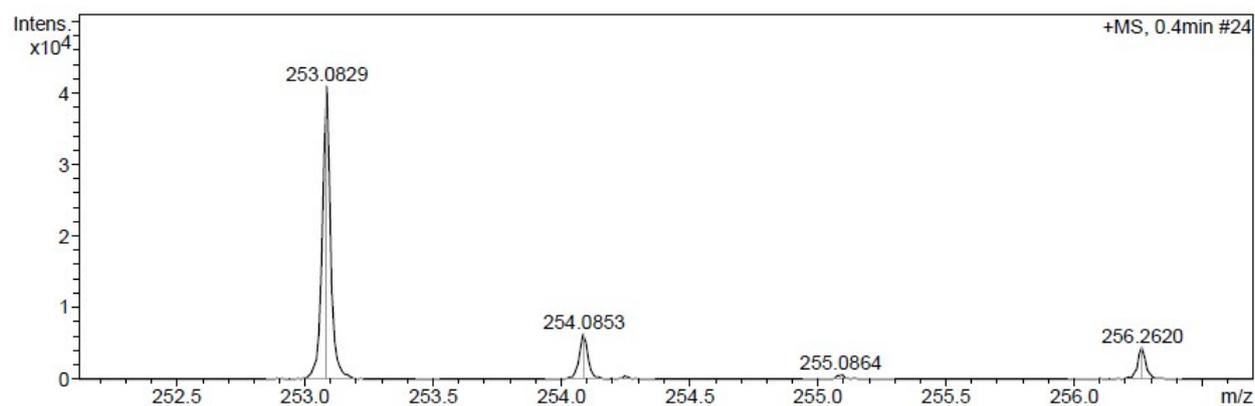


Fig. S14. ^{13}C NMR of M3 in d_6 -DMSO.



Meas. m/z	#	Formula	m/z	err [ppm]	Mean err [ppm]	rdb	N-Rule	e ⁻	Con	mSigma
253.0829	1	C ₁₂ H ₉ N ₆ O	253.0832	1.4	2.0	11.5	ok	even		4.03

Fig. S15. High resolution mass spectrum of M3 in methanol.

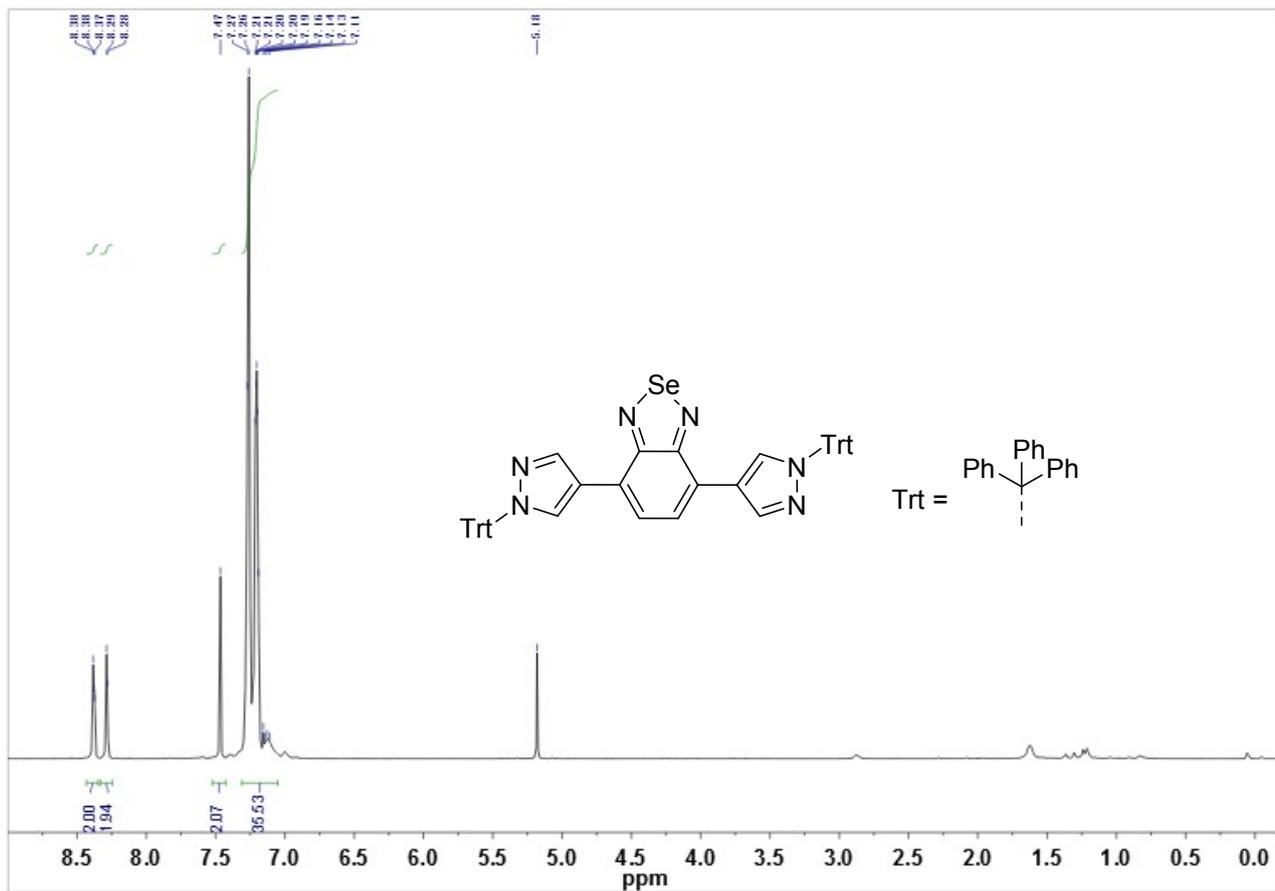


Fig. S16. $^1\text{H NMR}$ of 5 in CDCl_3 .

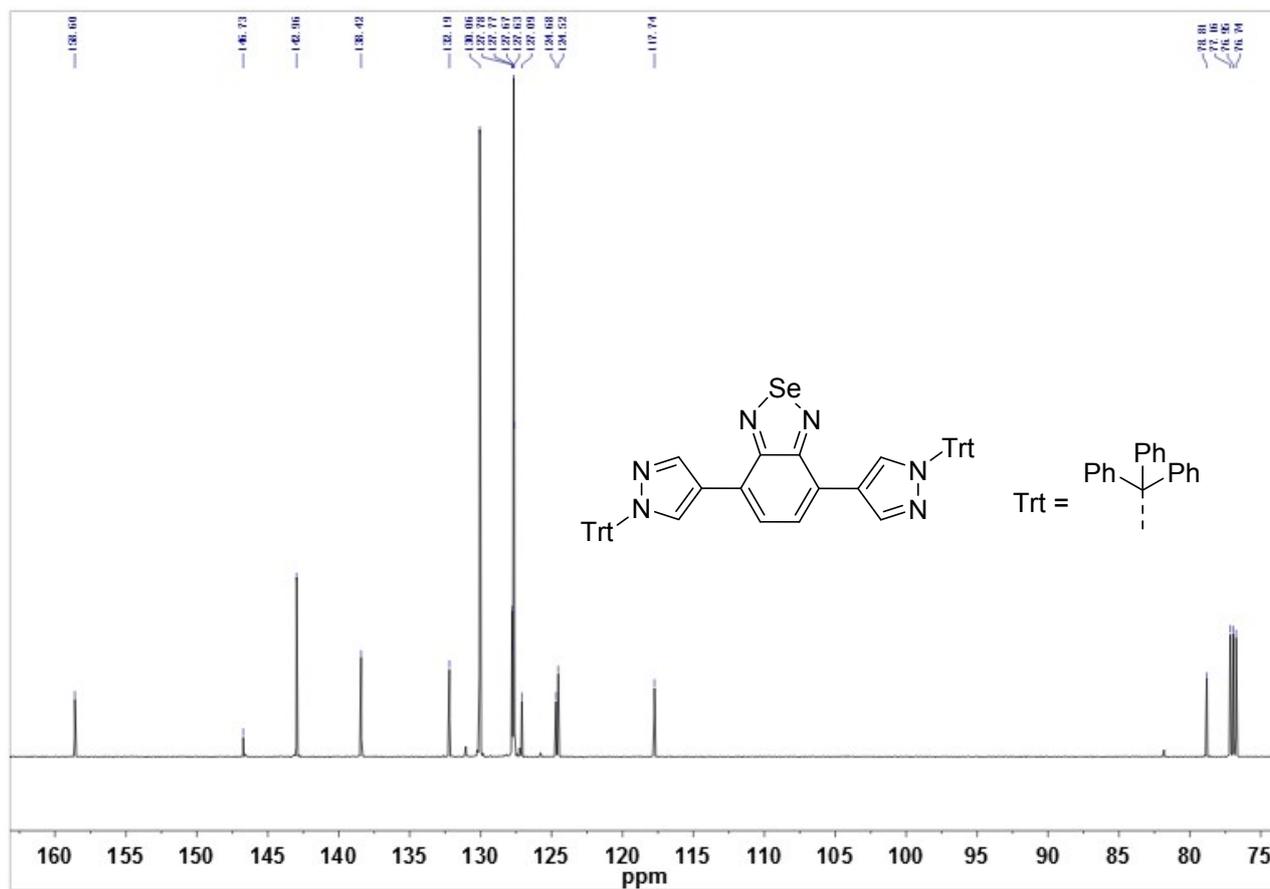


Fig. S17. ¹³C NMR of 5 in CDCl₃.

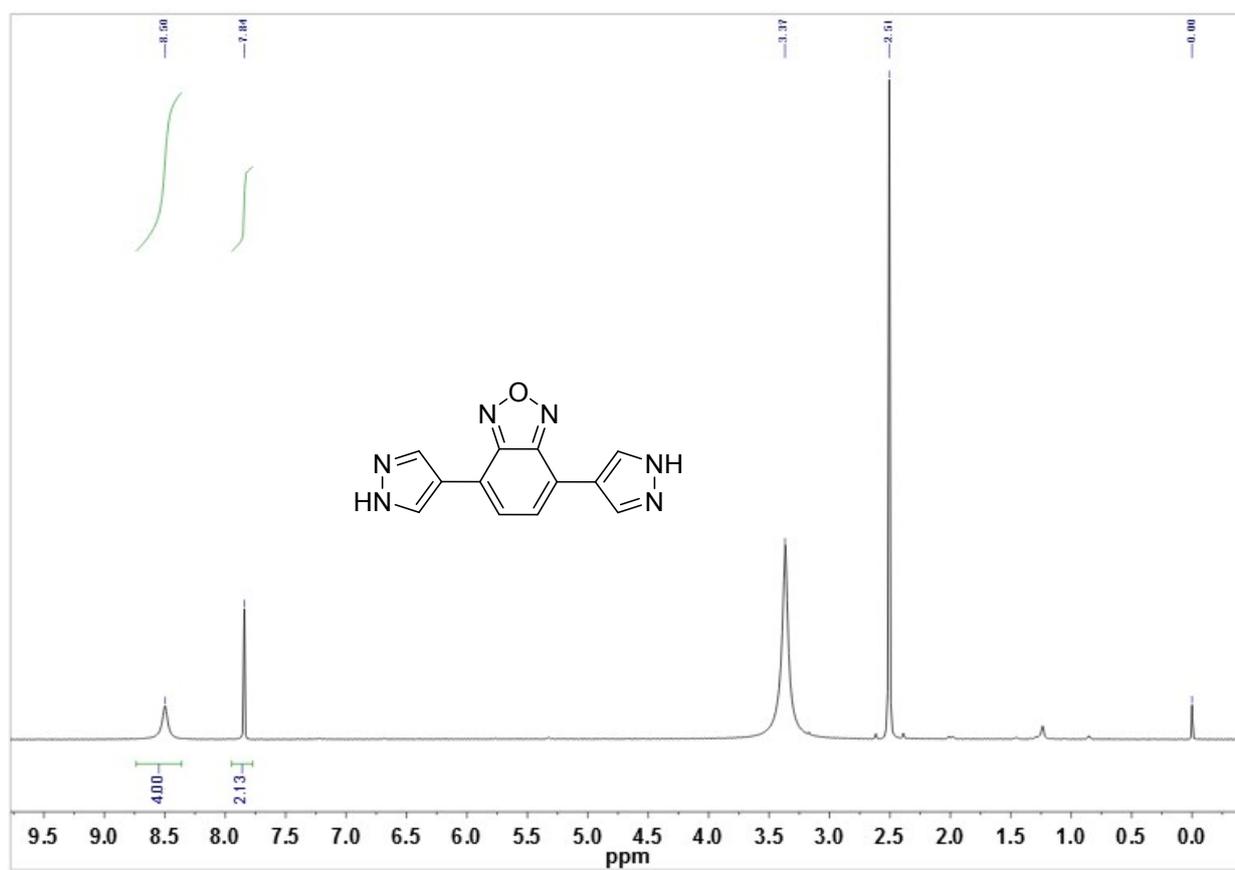


Fig. S18. ¹H NMR of M4 in d₆-DMSO.

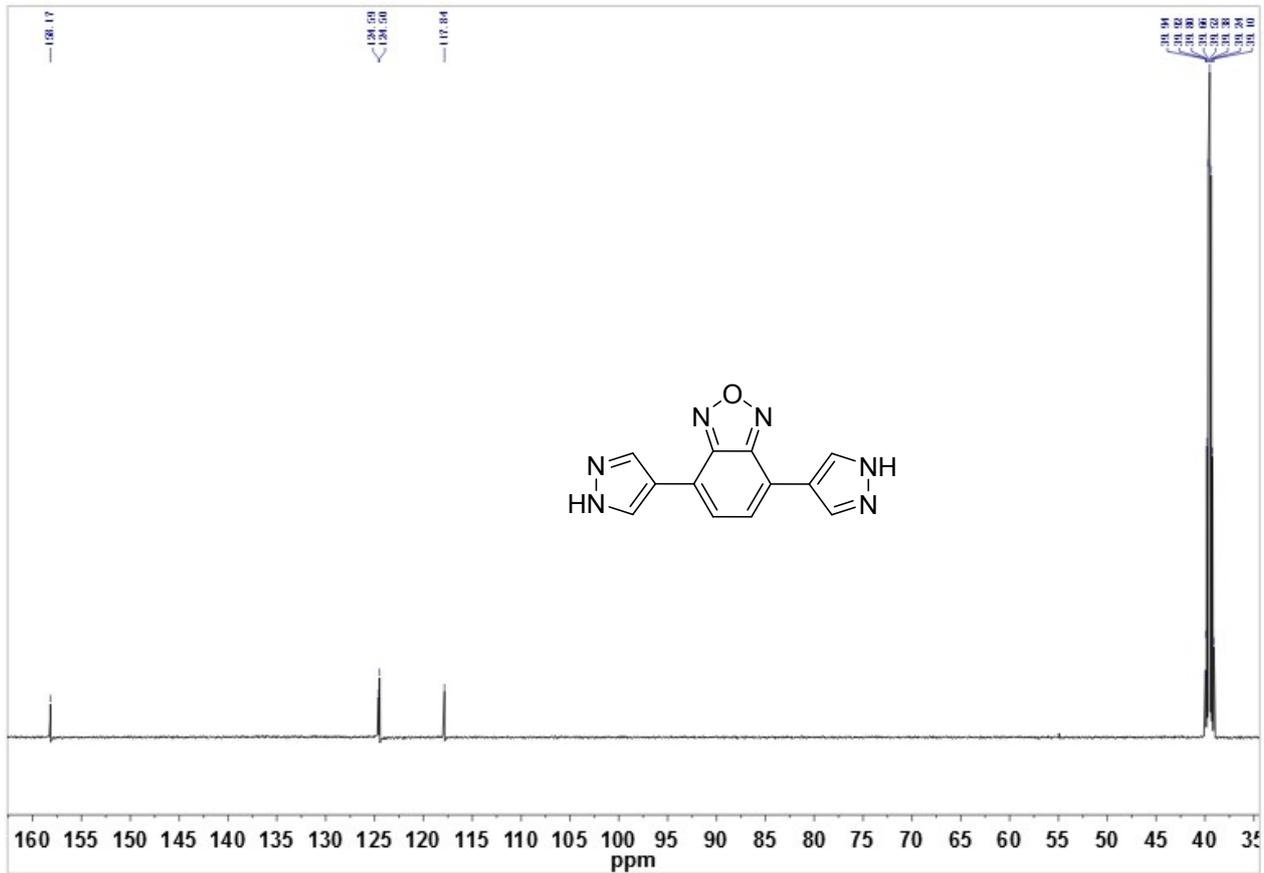
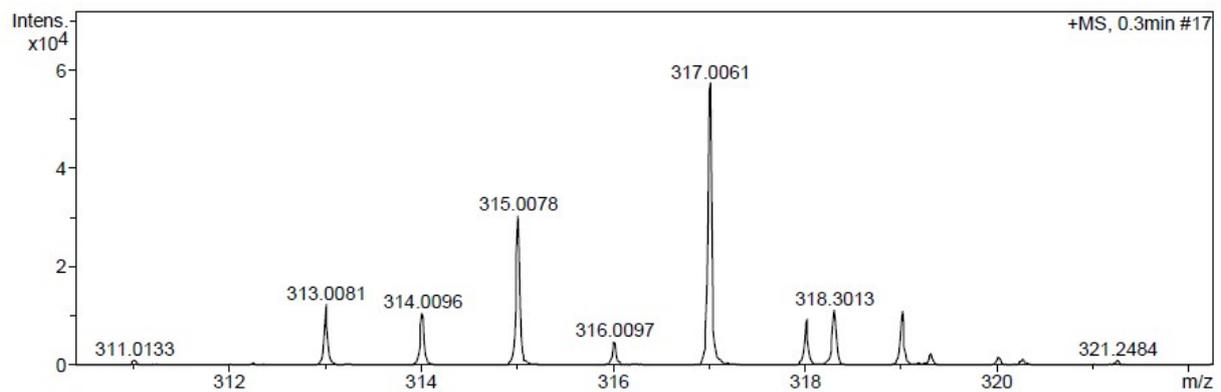


Fig. S19. ^{13}C NMR of M4 in d_6 -DMSO.



Meas. m/z	#	Formula	m/z	err [ppm]	Mean err [ppm]	rdb	N-Rule	e ⁻	Con	mSigma
317.0061	1	C ₁₂ H ₉ N ₆ Se	317.0048	-3.9	-4.5	11.5	ok	even		14.32

Fig. S20. High resolution mass spectrum of M4 in methanol.