

Supporting Information

Synthesis and characterization of zinc carboxy-porphyrin complexes for dye sensitized solar cells

Claude P. Gros, Clément Michelin, Léo Bucher, Nicolas Desbois, Charles Devillers, Athanassios G. Coutsolelos, Subhayan Biswas and Ganesh D. Sharma

Figure S1.	MS (MALDI) mass spectrum of 2	p. 2
Figure S2.	HRMS (ESI) mass spectrum of 2	p. 3
Figure S3.	¹ H NMR spectrum (300 MHz, 300 K) of 2	p. 4
Figure S4.	MS (MALDI) mass spectrum of 4	p. 5
Figure S5.	¹ H NMR spectrum (300 MHz, 300 K) of 4	p. 6
Figure S6.	MS (MALDI) mass spectrum of 5	p. 7
Figure S7.	¹ H NMR spectrum (300 MHz, 300 K) of 5	p. 8
Figure S8.	MS (MALDI) mass spectrum of 6	p. 9
Figure S9.	¹ H NMR spectrum (600 MHz, 400 K) of 6	p. 10
Figure S10.	MS (MALDI) mass spectrum of 7	p. 11
Figure S11.	¹ H NMR spectrum (600 MHz, 400 K) of 7	p. 12
Figure S12.	MS (MALDI) mass spectrum of 8	p. 13
Figure S13.	HRMS (ESI) mass spectrum of 8	p. 14
Figure S14.	¹ H NMR spectrum (600 MHz, 340 K) of 8	p. 15
Figure S15	Absorption, emission and excitation spectra of (a) 2 in THF and (b) 8 in MeOH at 298 K	p. 16

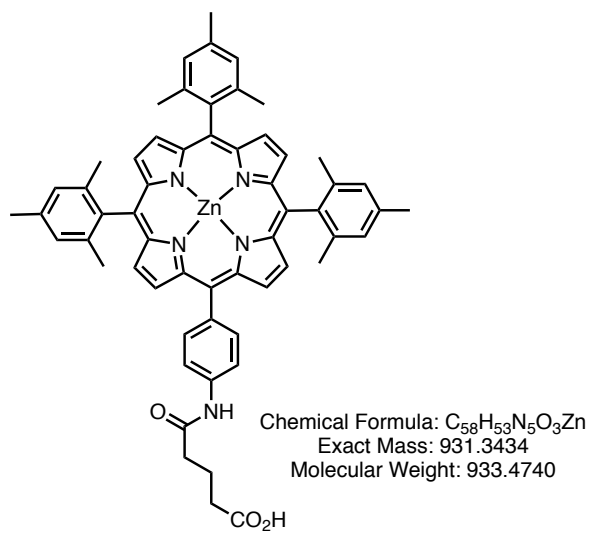
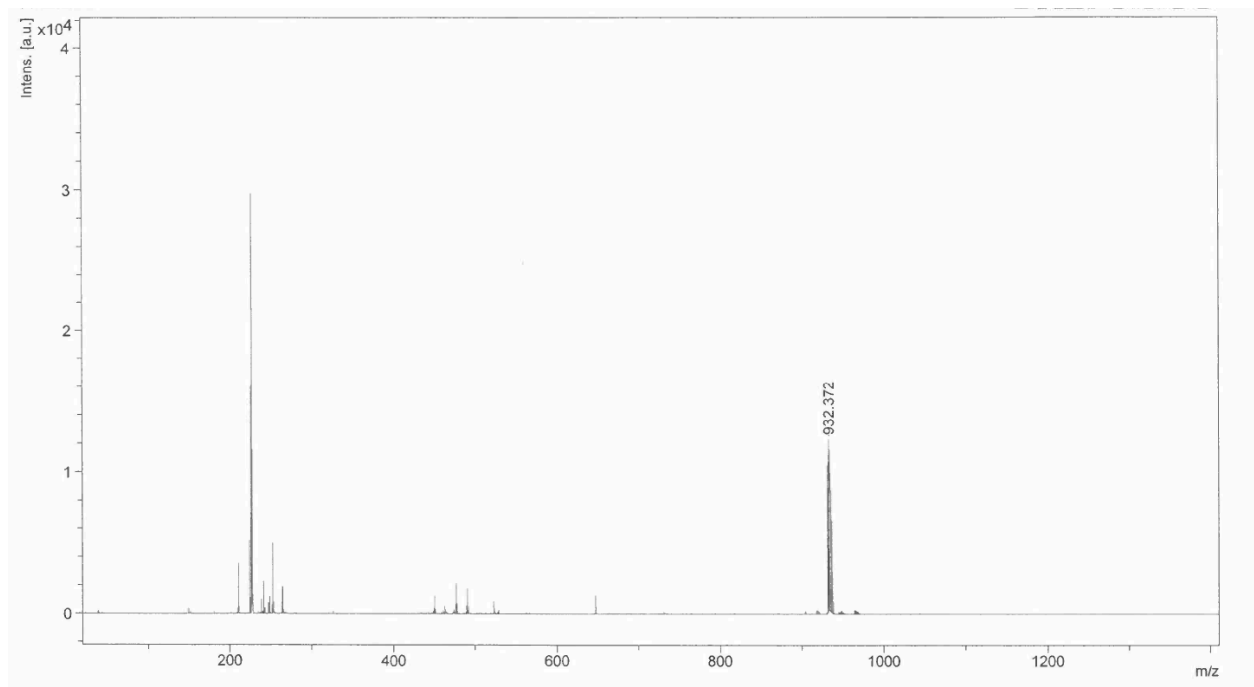


Figure S1. MS (MALDI) mass spectrum of **2**

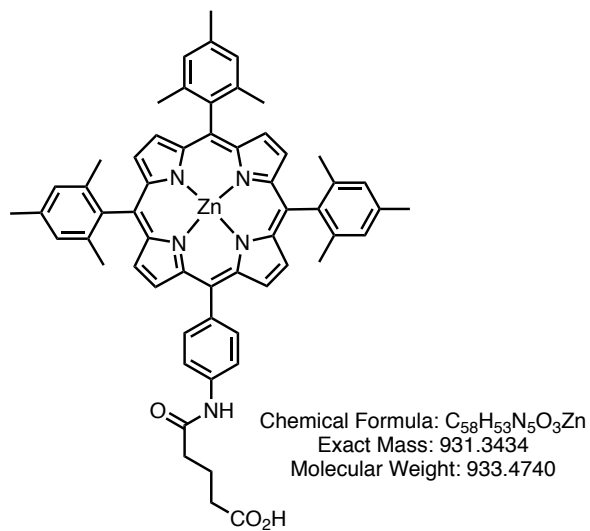
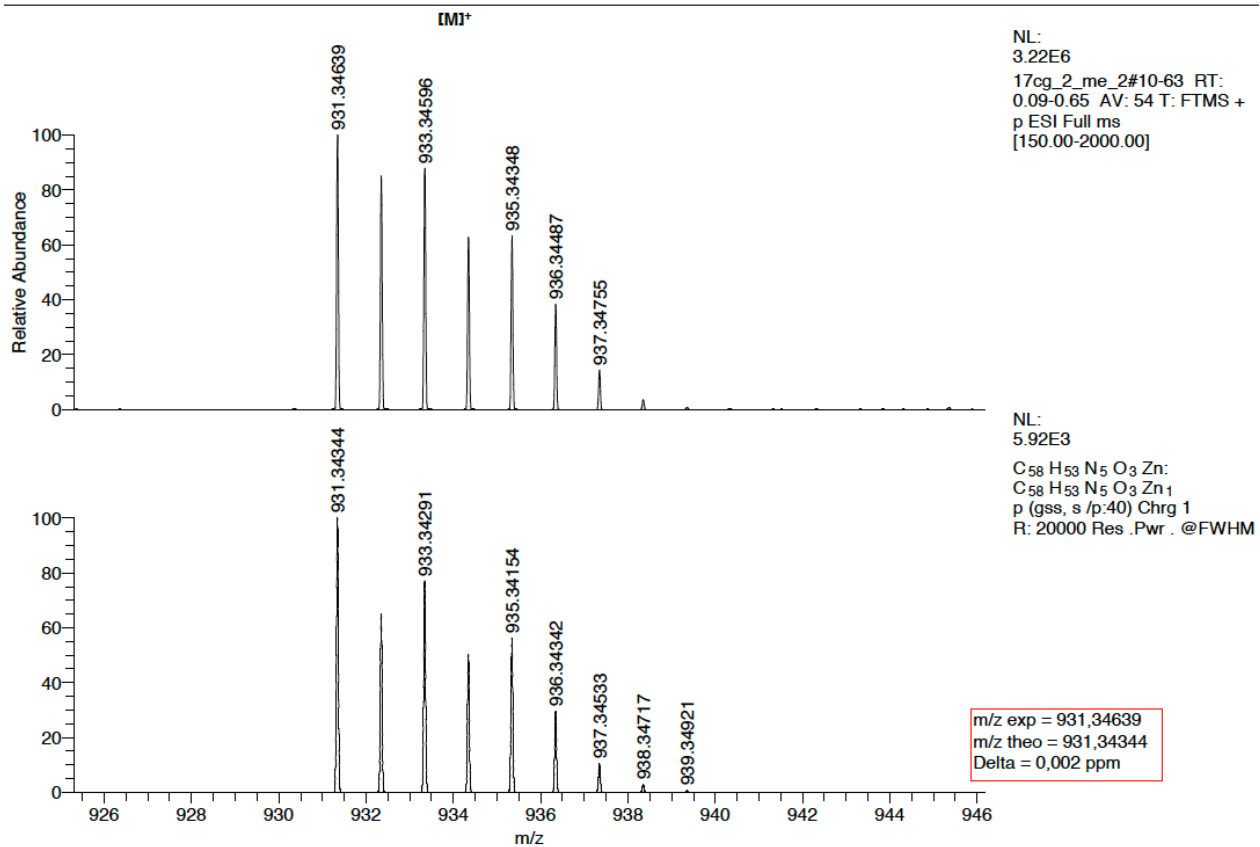
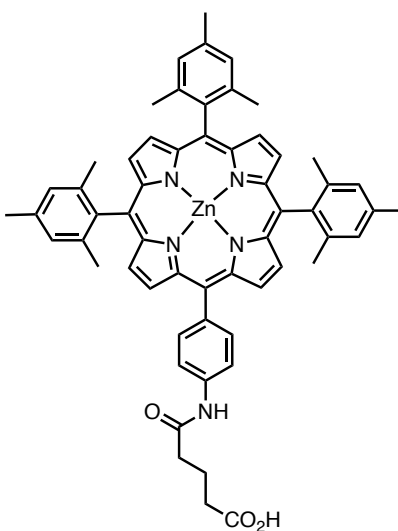
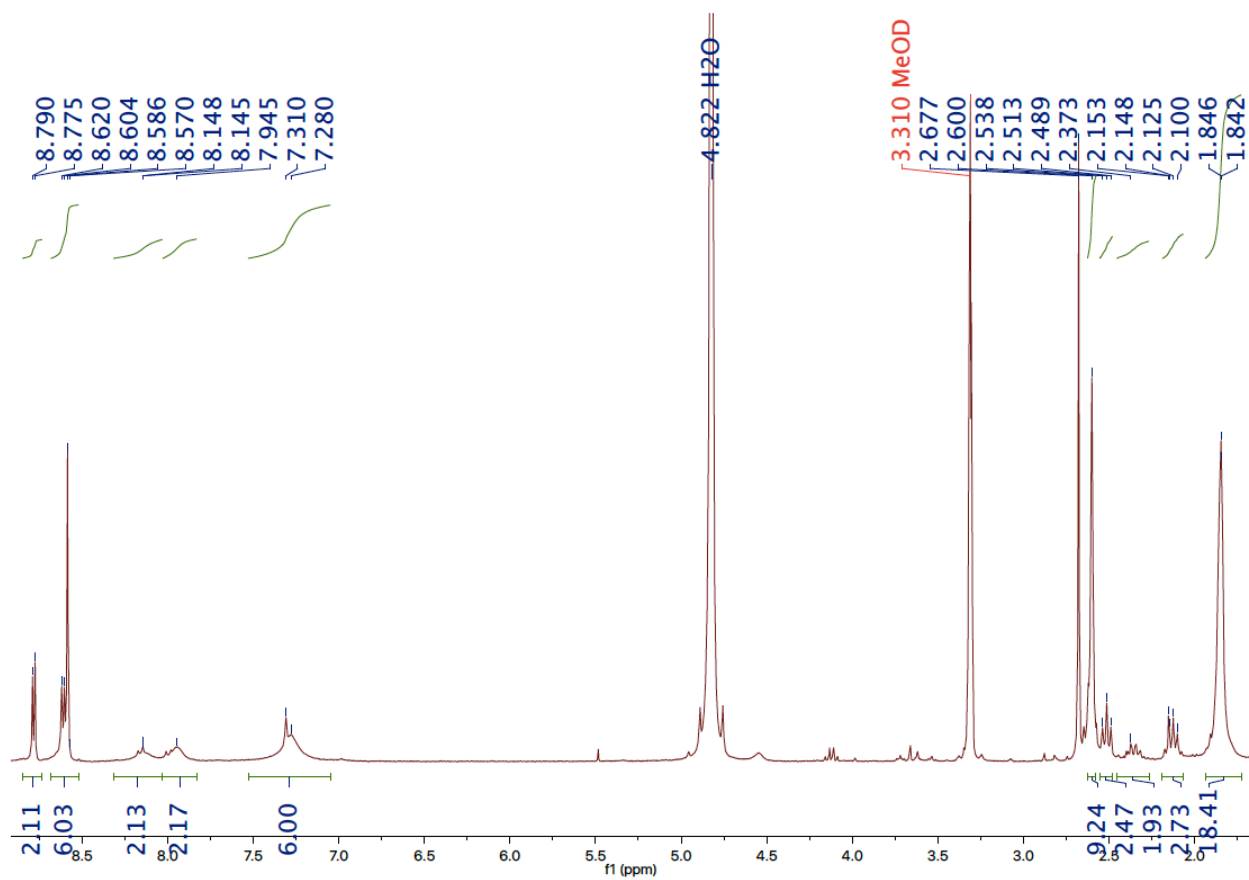


Figure S2. HRMS (ESI) mass spectrum of **2**



Chemical Formula: $C_{58}H_{53}N_5O_3Zn$
 Exact Mass: 931.3440
 Molecular Weight: 933.4740

Figure S3. 1H NMR spectrum (300 MHz, 300 K) of **2**

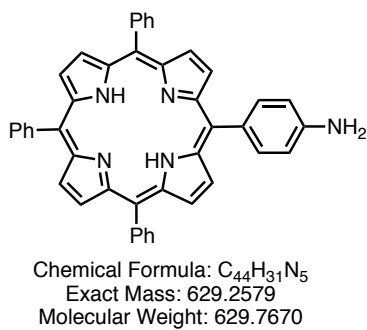
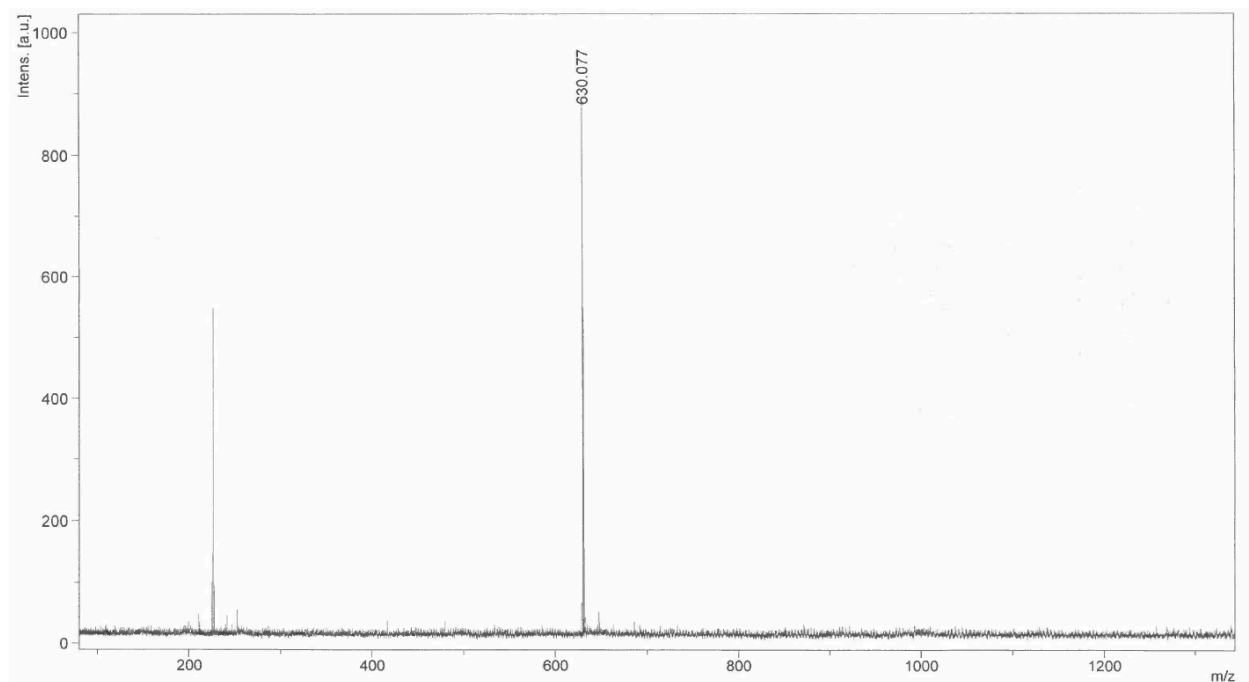
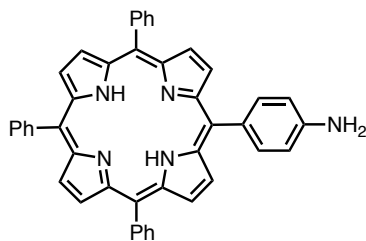
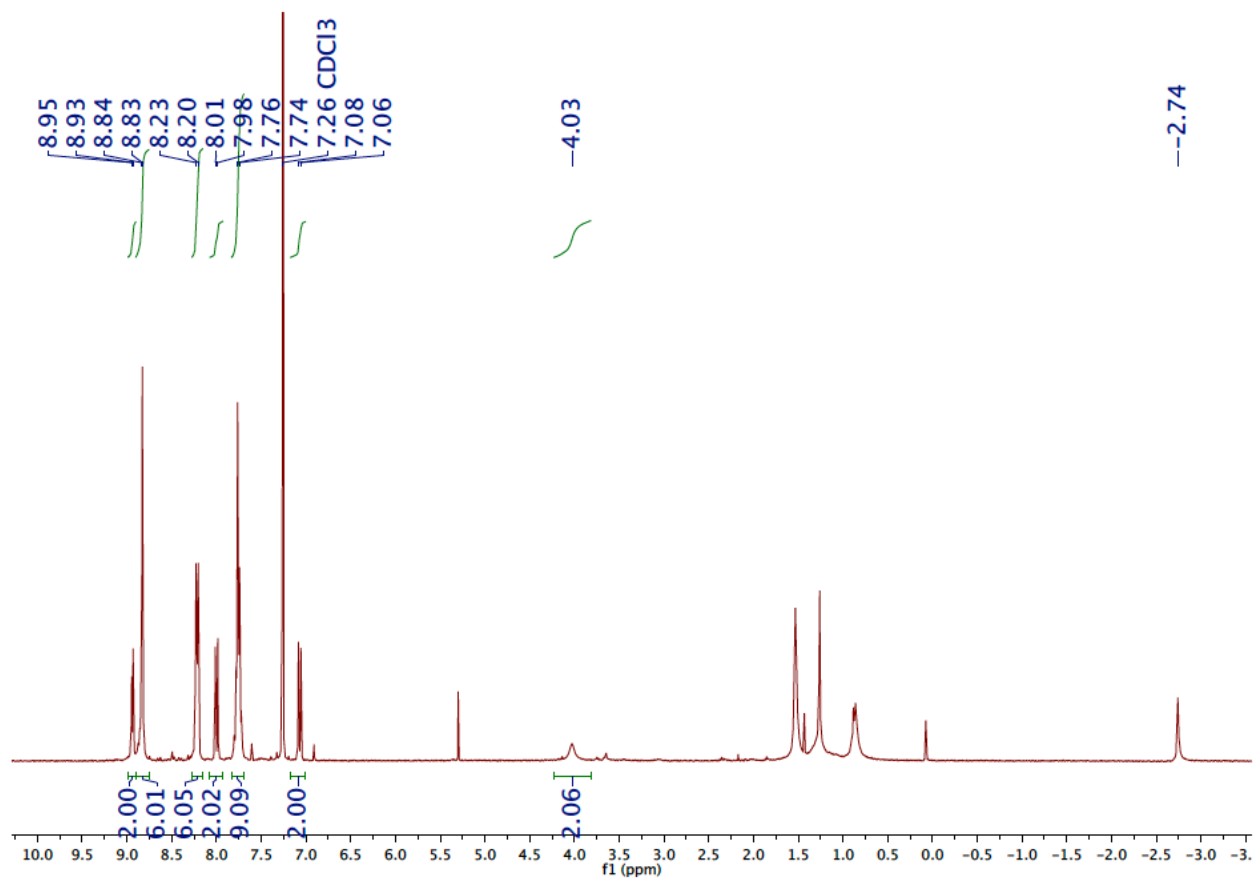
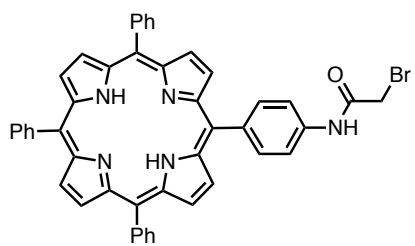
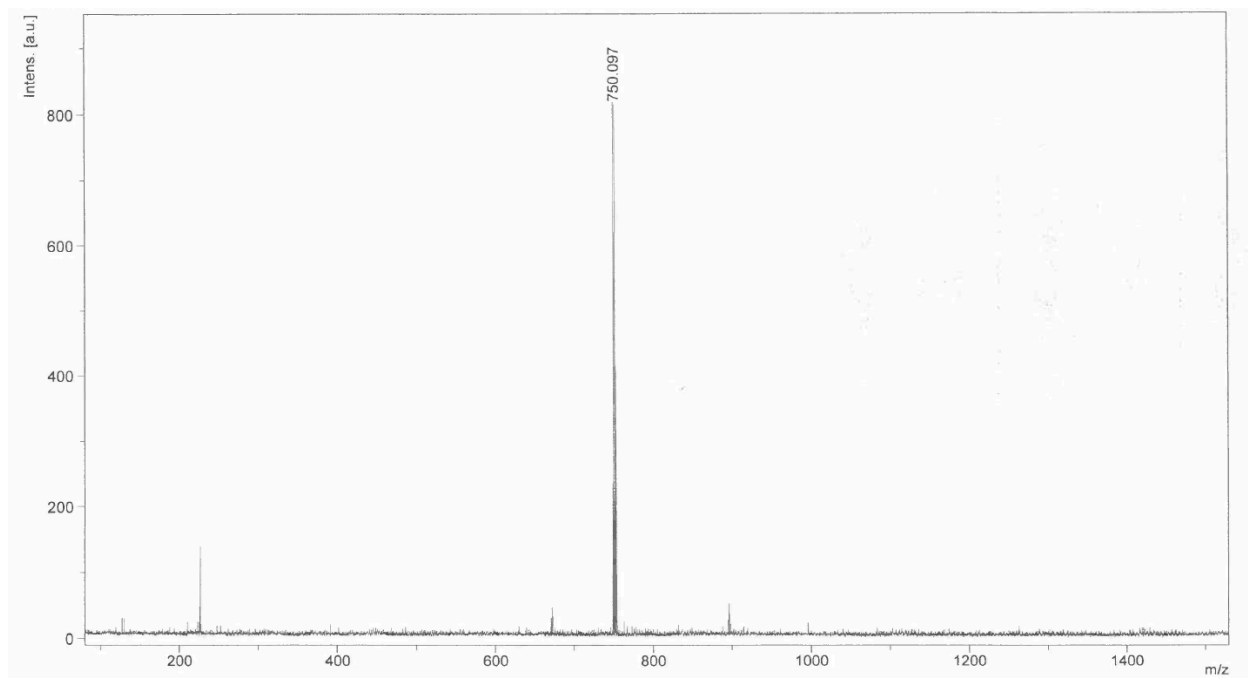


Figure S4. MS (MALDI) mass spectrum of **4**



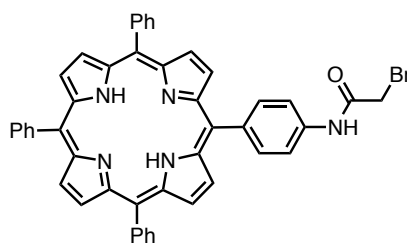
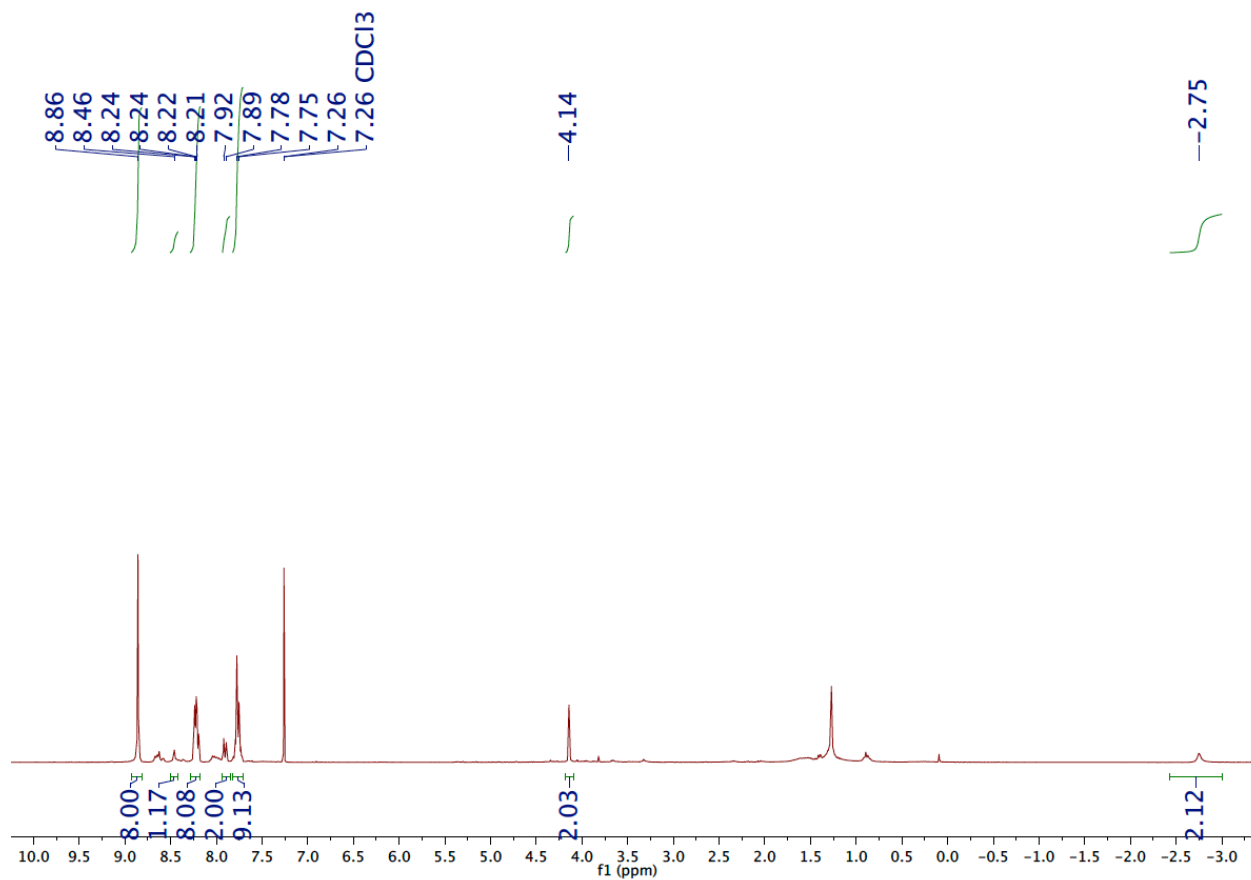
Chemical Formula: $C_{44}H_{31}N_5$
 Exact Mass: 629.2579
 Molecular Weight: 629.7670

Figure S5. 1H NMR spectrum (300 MHz, 300 K) of **4**



Chemical Formula: C₄₆H₃₂BrN₅O
Exact Mass: 749.1790
Molecular Weight: 750.7000

Figure S6. MS (MALDI) mass spectrum of **5**



Chemical Formula: C₄₆H₃₂BrN₅O
 Exact Mass: 749.1790
 Molecular Weight: 750.7000

Figure S7. ¹H NMR spectrum (300 MHz, 300 K) of **5**

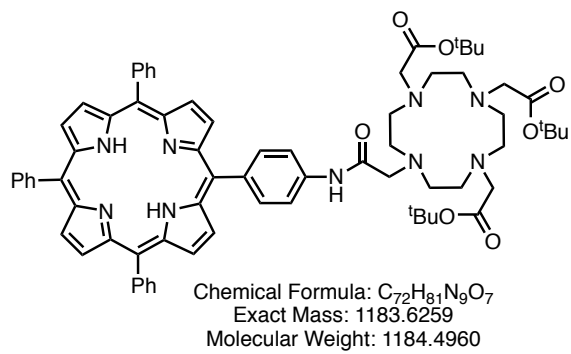
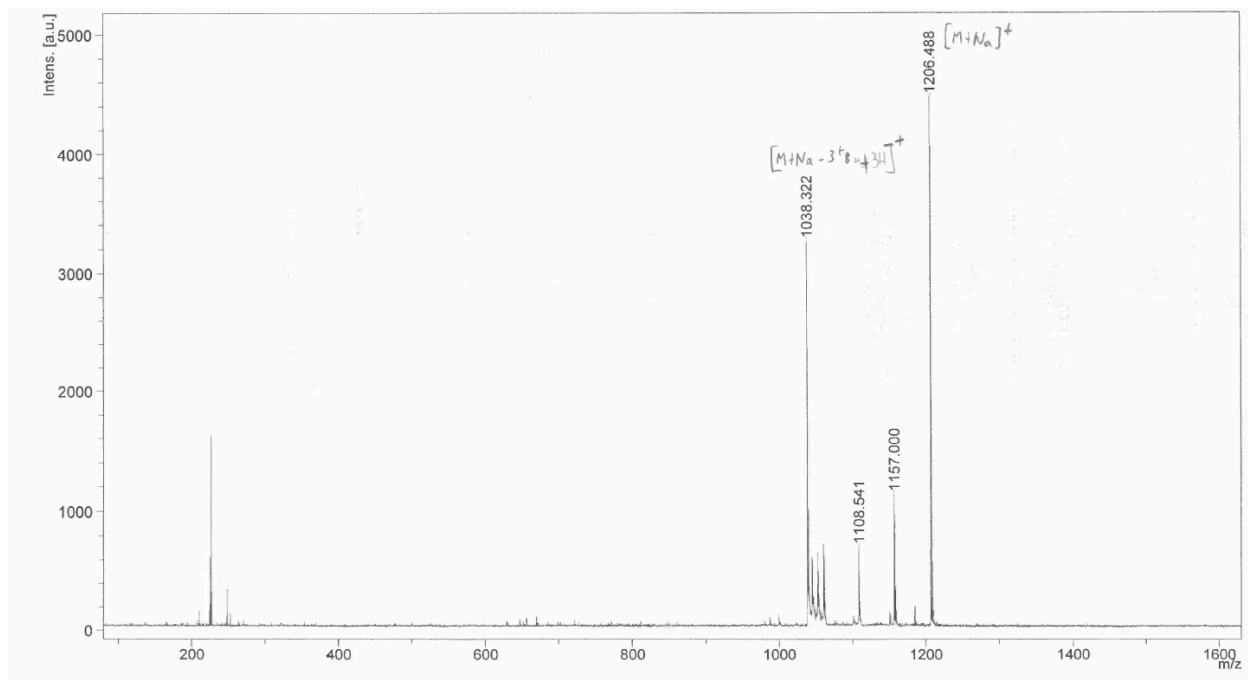


Figure S8. MS (MALDI) mass spectrum of **6**

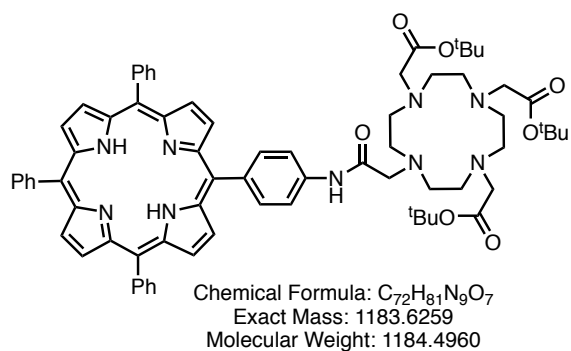
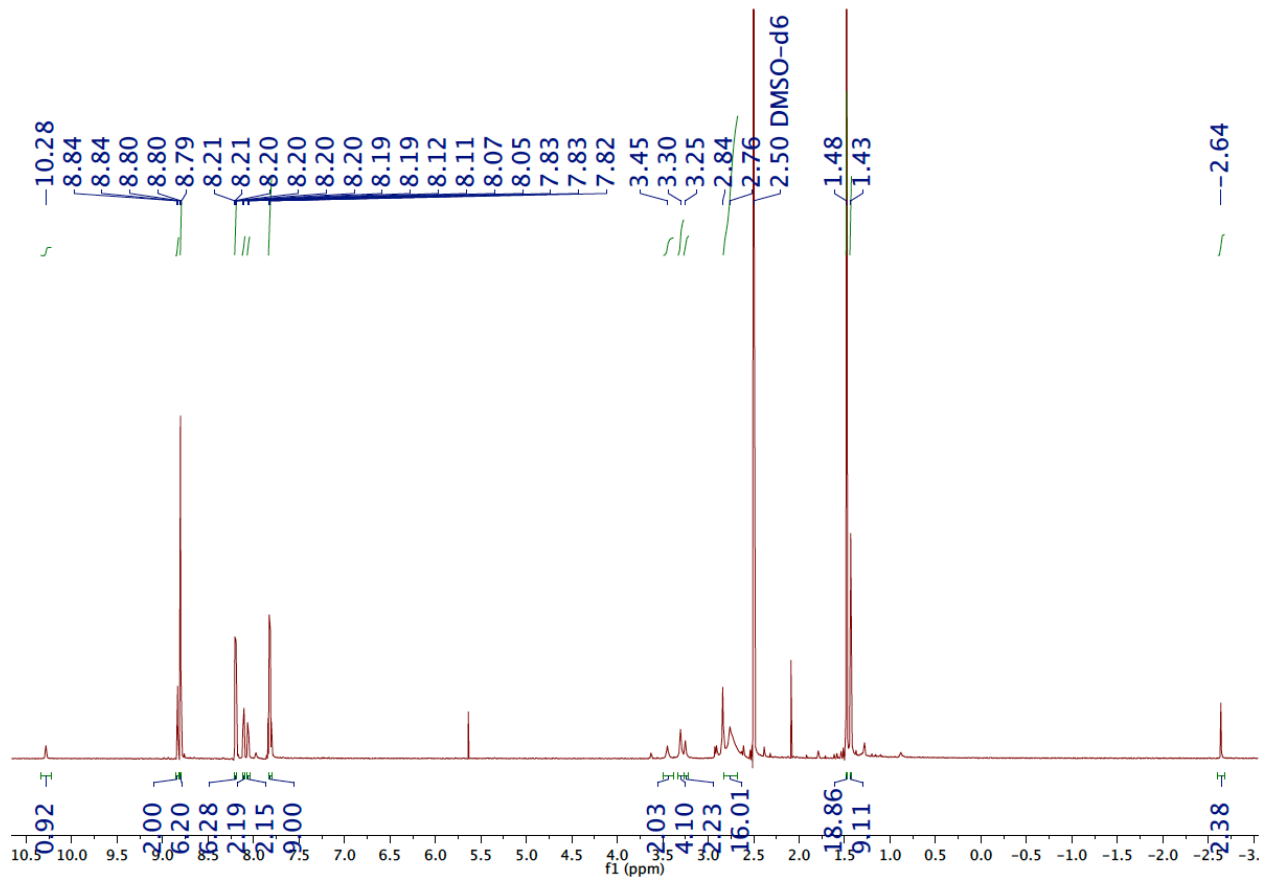


Figure S9. 1H NMR spectrum (600 MHz, 400 K) of **6**

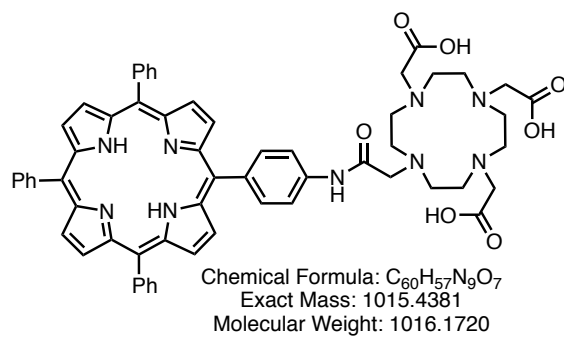
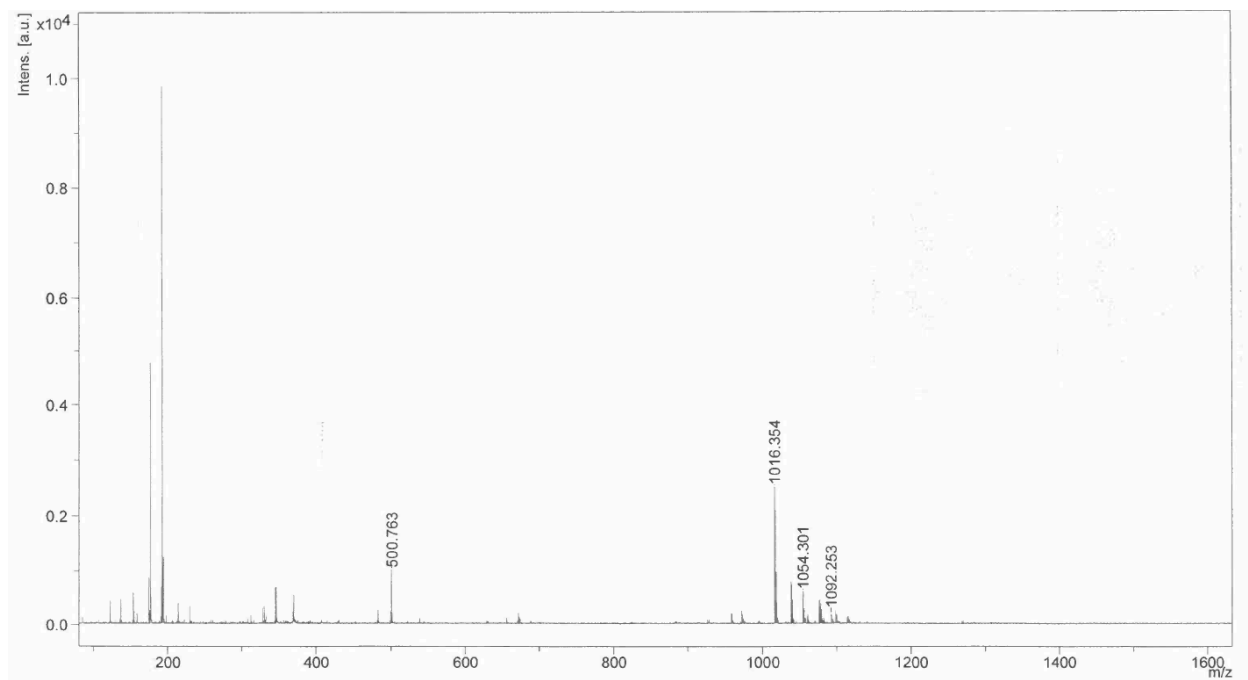


Figure S10. MS (MALDI) mass spectrum of **7**

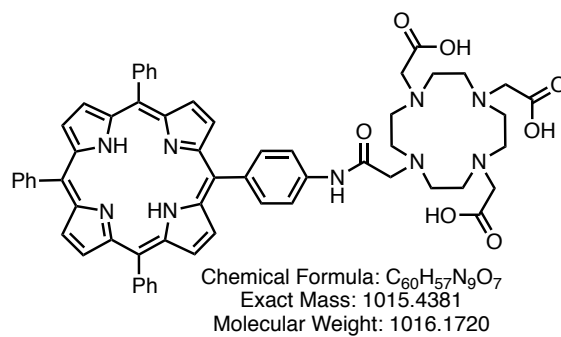
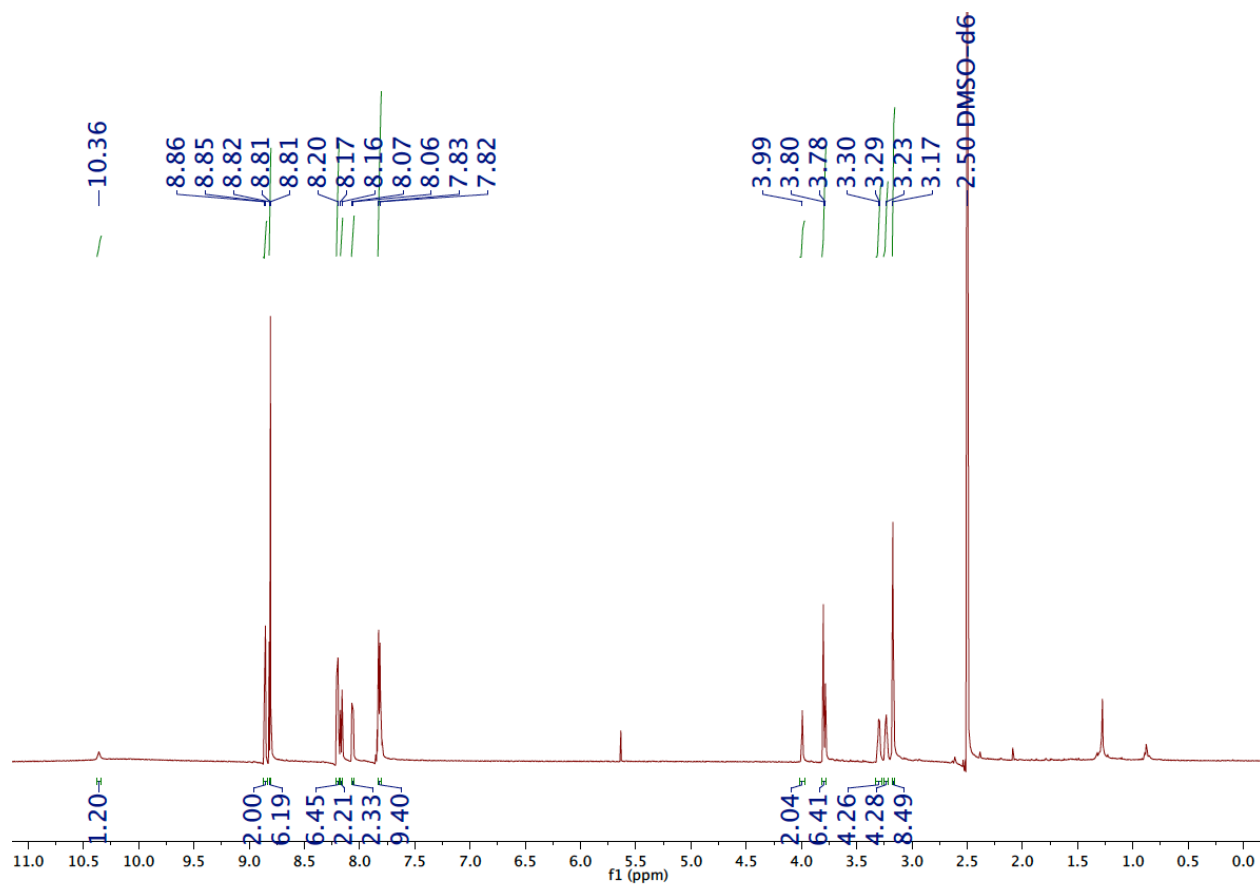


Figure S11. 1H NMR spectrum (600 MHz, 400 K) of 7

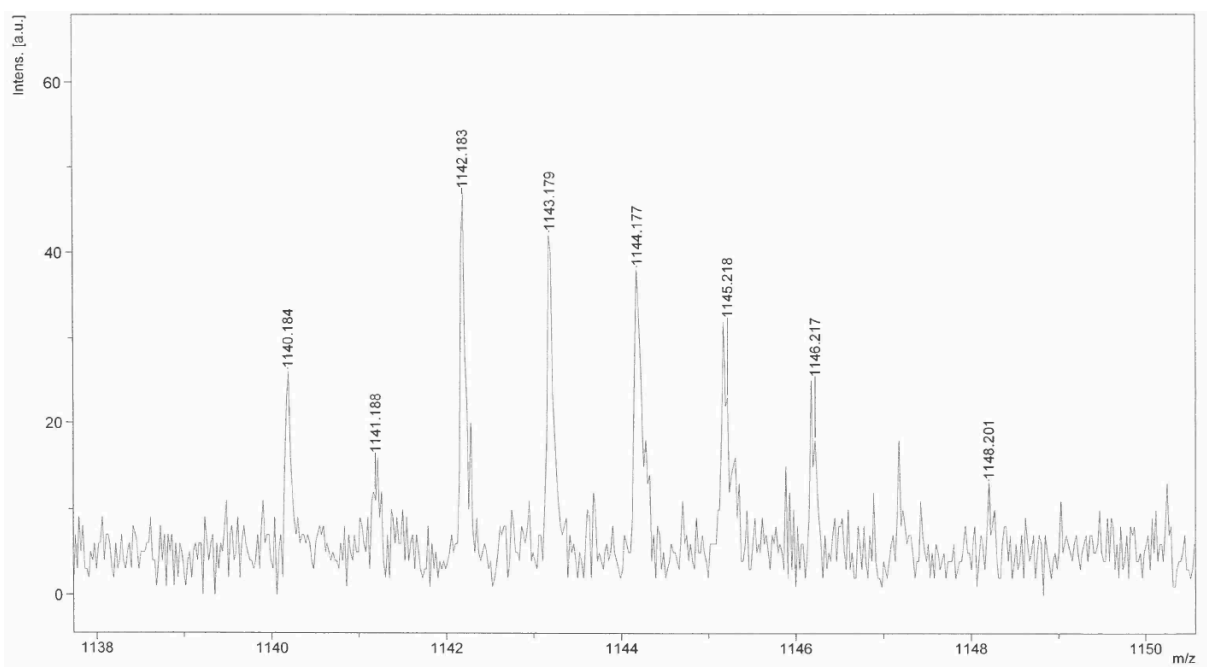
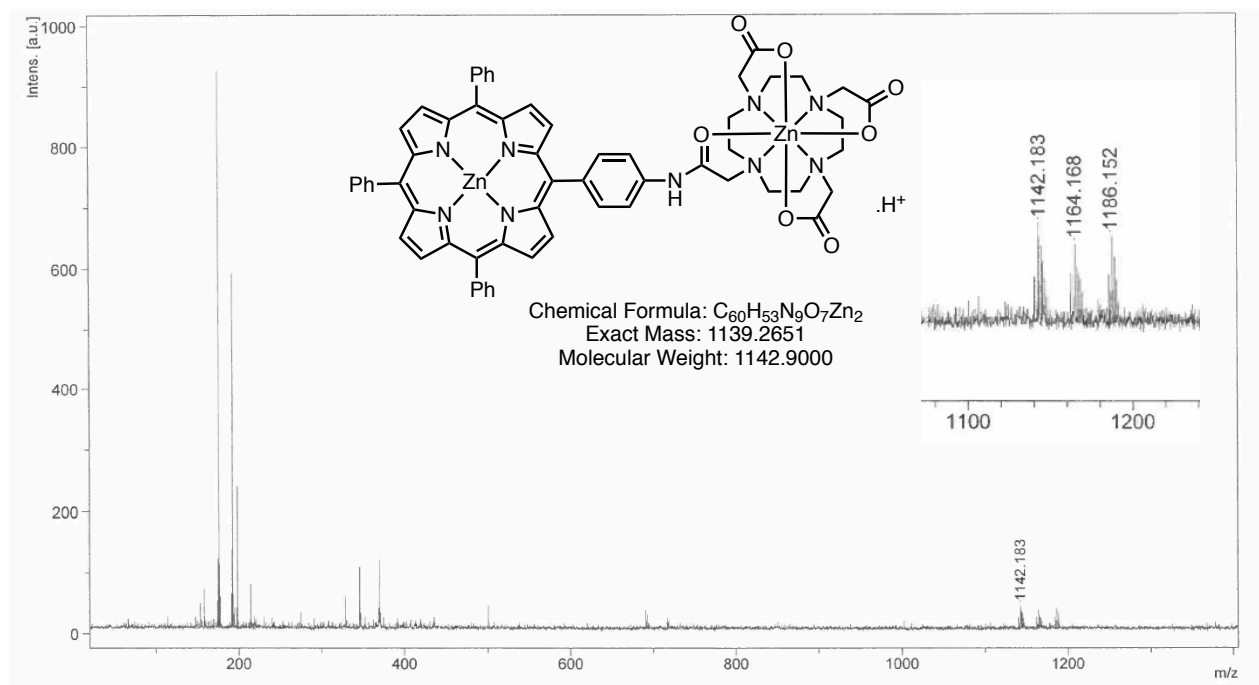


Figure S12. MS (MALDI) mass spectrum of **8**

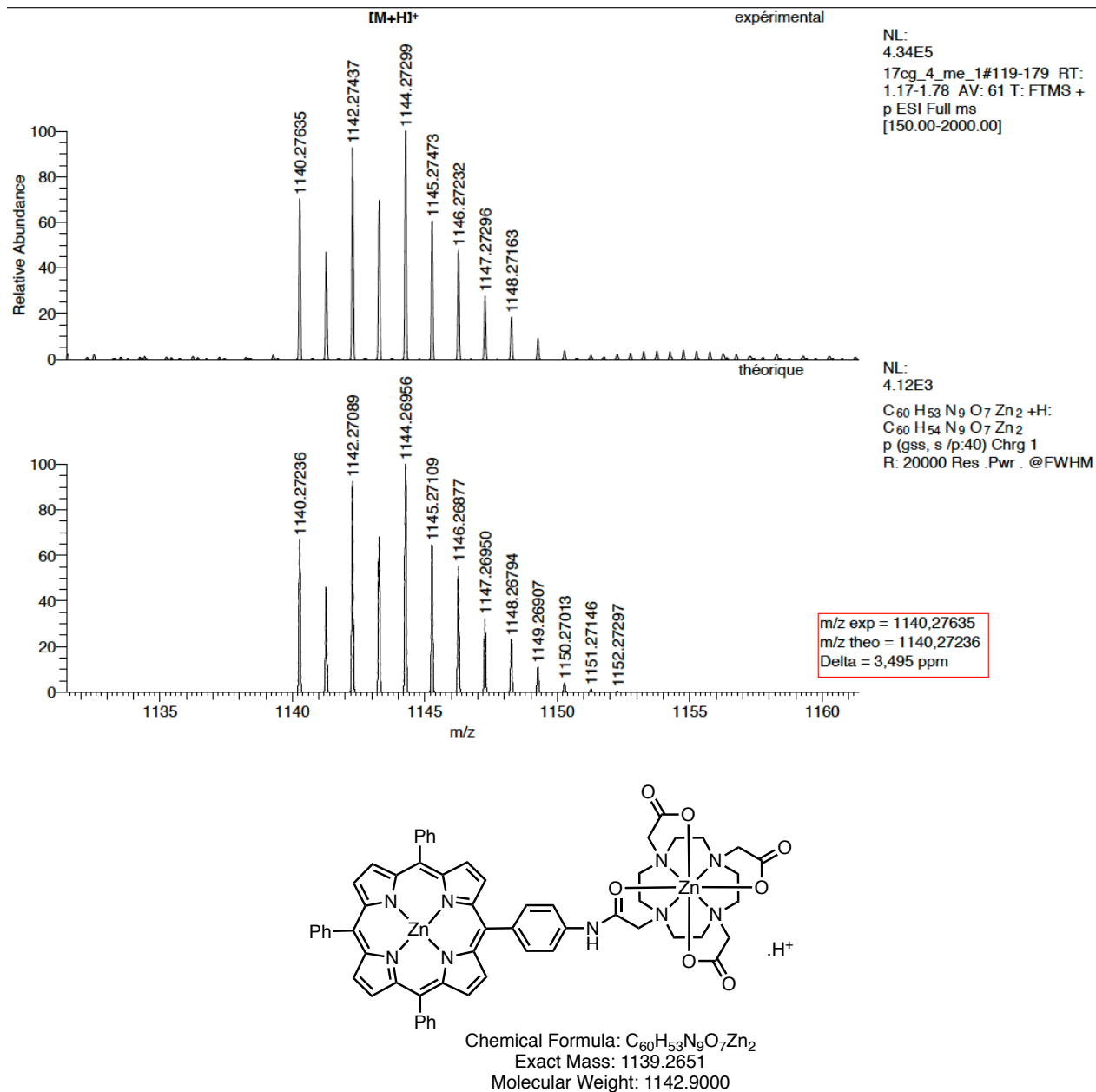
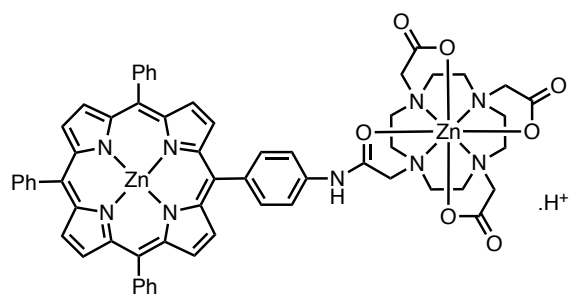
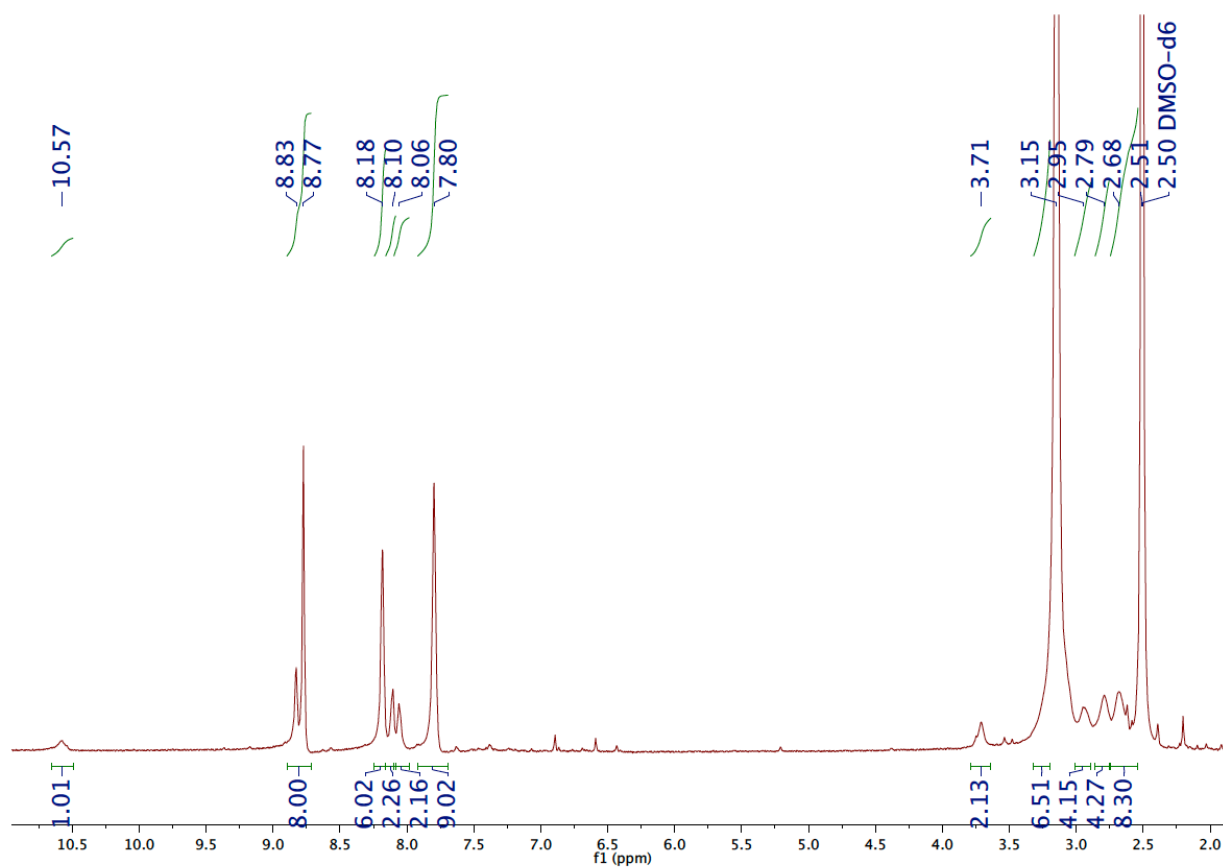


Figure S13. HRMS (ESI) mass spectrum of **8**



Chemical Formula: $C_{60}H_{53}N_9O_7Zn_2$
 Exact Mass: 1139.2651
 Molecular Weight: 1142.9000

Figure S14. 1H NMR spectrum (600 MHz, 340 K) of **8**

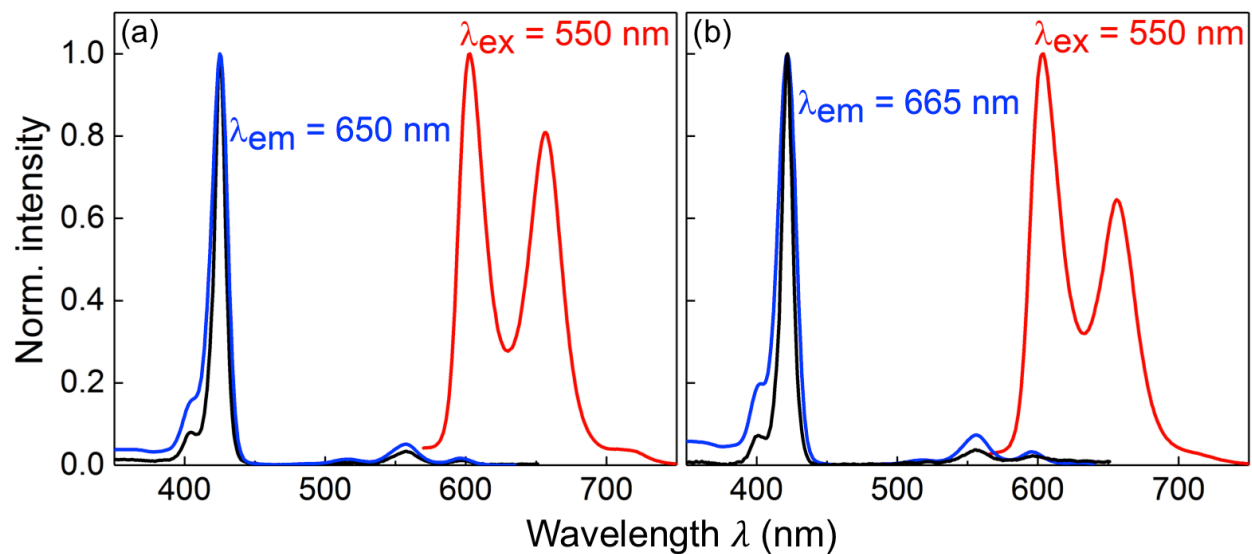


Figure S15. Absorption (black trace), emission (red trace) and excitation (blue trace) spectra of (a) **2** in THF and (b) **8** in MeOH at 298 K