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## Flexible synthesis of cationic peptide-porphyrin derivatives for light-triggered drug delivery and photodynamic therapy

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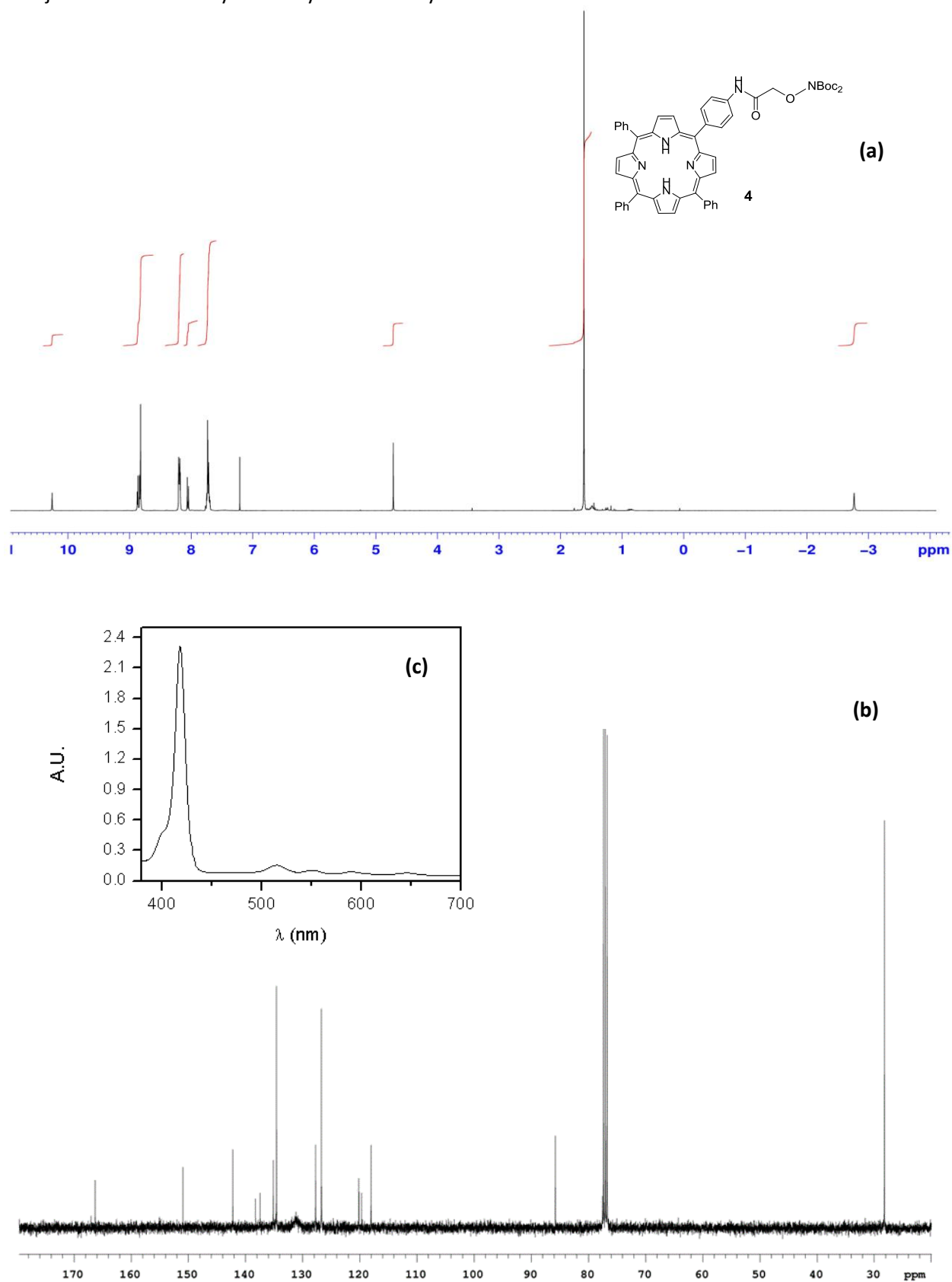
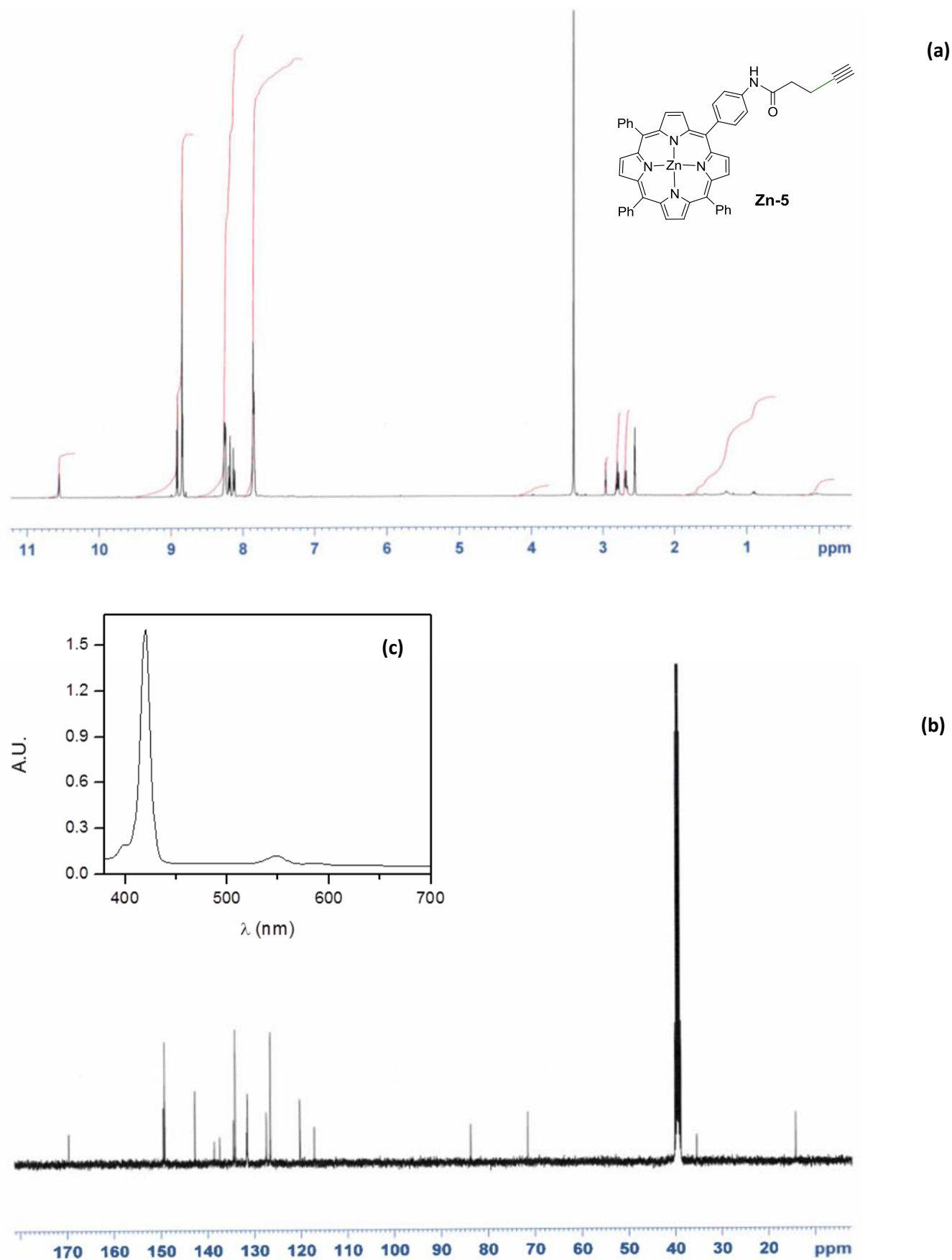


Figure 1 (a)-(b). <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra in CDCl<sub>3</sub> of **4**; (c) UV-visible spectrum in CHCl<sub>3</sub> of **4**.



**Figure 2 (a)-(b).** <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra in (CD<sub>3</sub>)<sub>2</sub>SO of Zn-5; **(c)** UV-visible spectrum in CHCl<sub>3</sub> of Zn-5.

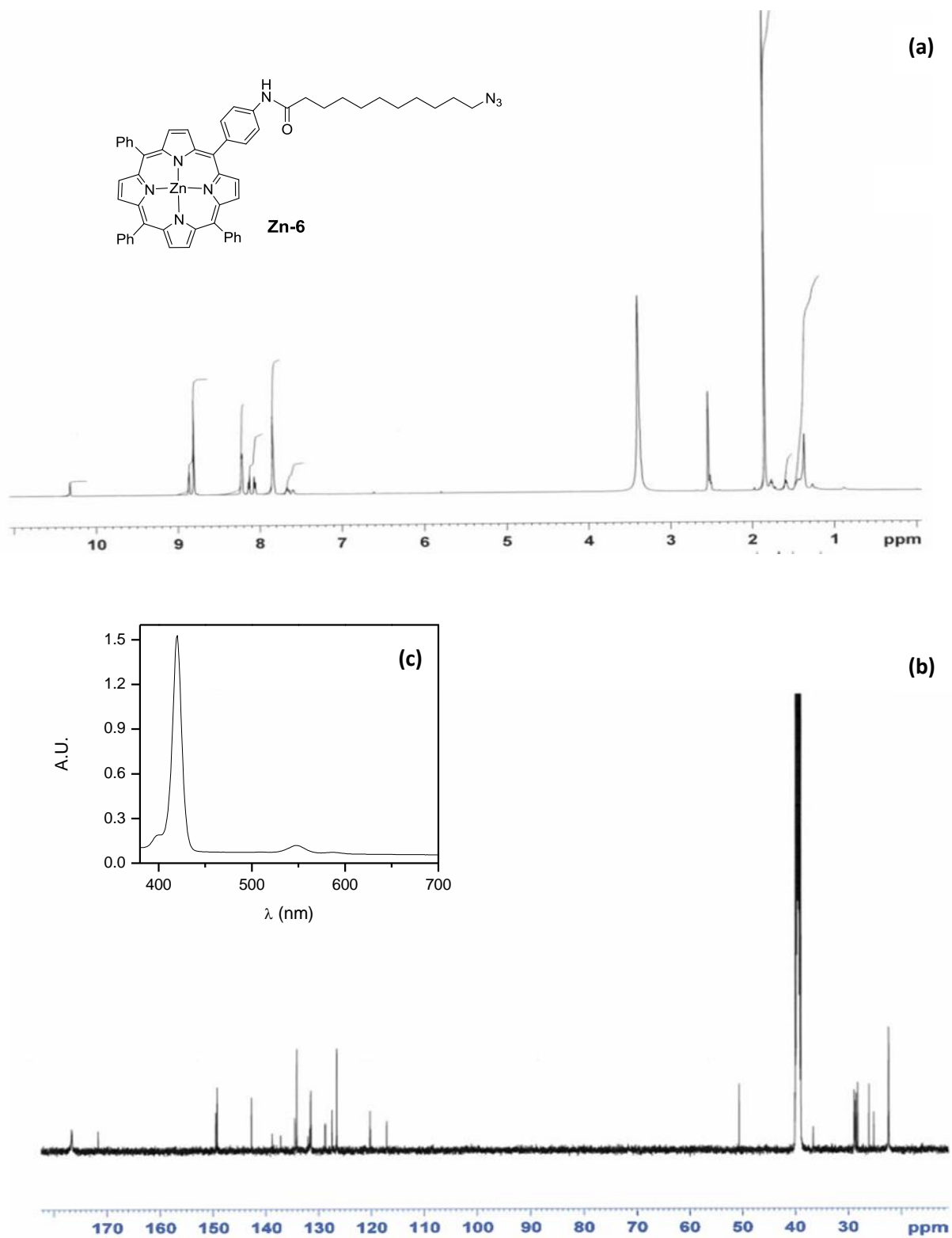
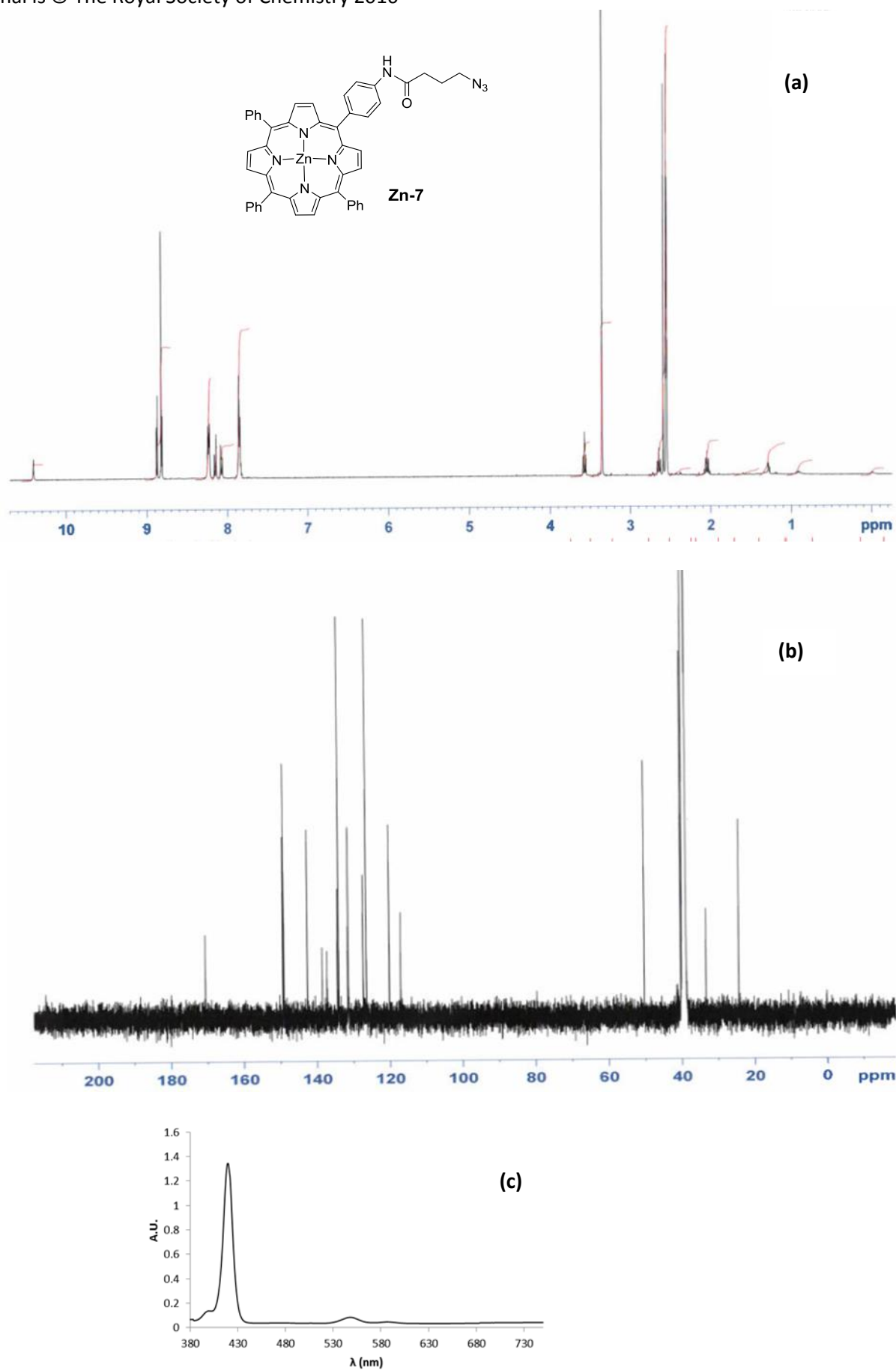


Figure 3 (a)-(b).  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra in  $(\text{CD}_3)_2\text{SO}$  of Zn-6; (c) UV-visible spectrum in  $\text{CHCl}_3$  of Zn-6.



**Figure 4 (a)-(b).** <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra in (CD<sub>3</sub>)<sub>2</sub>SO of Zn-7 (c) UV-visible spectrum in CHCl<sub>3</sub> of Zn-7.

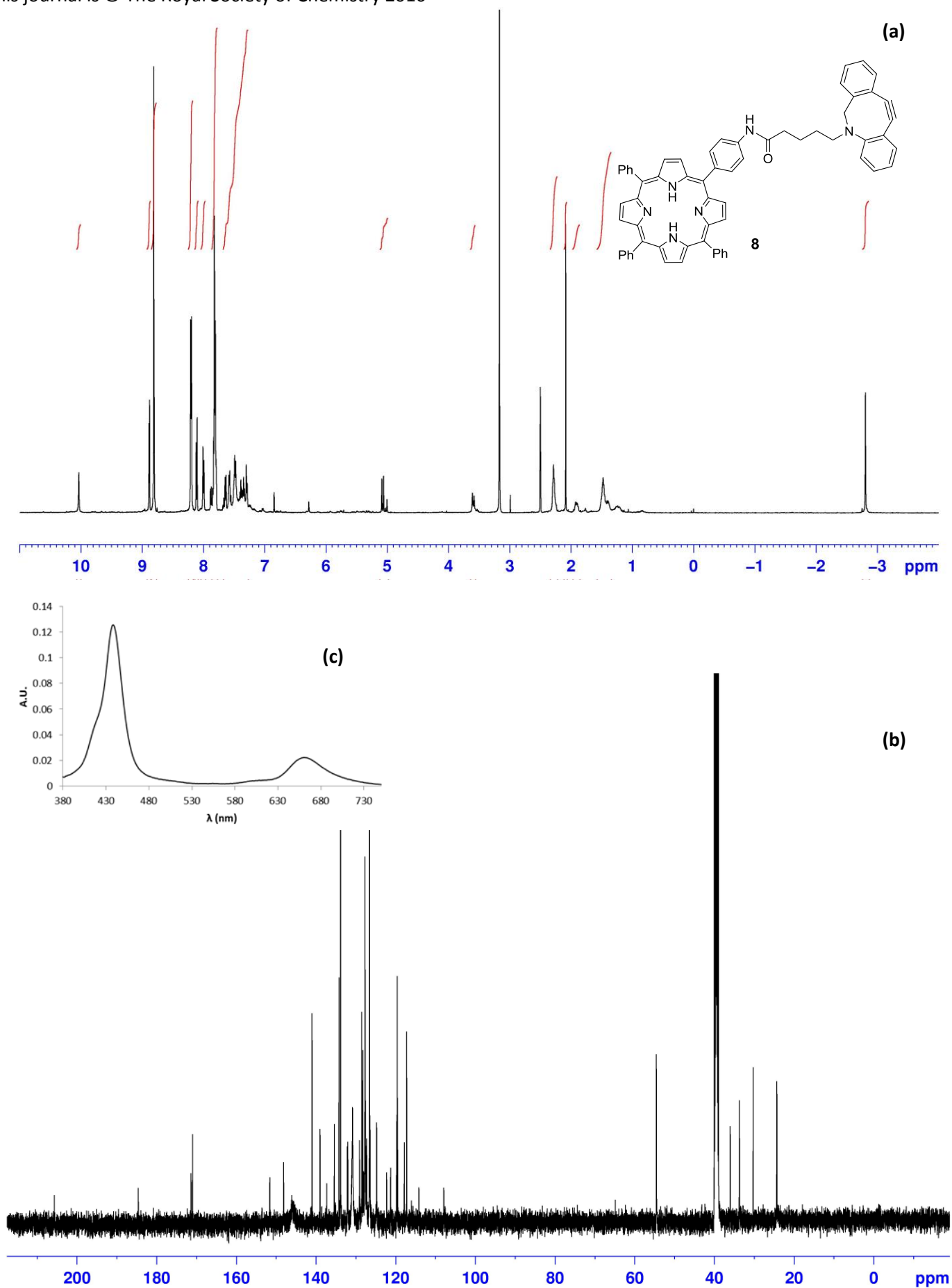


Figure 5 (a)-(b).  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra in  $(\text{CD}_3)_2\text{SO}$  of **8** (c) UV-visible spectrum in  $\text{CHCl}_3$  of **8**.

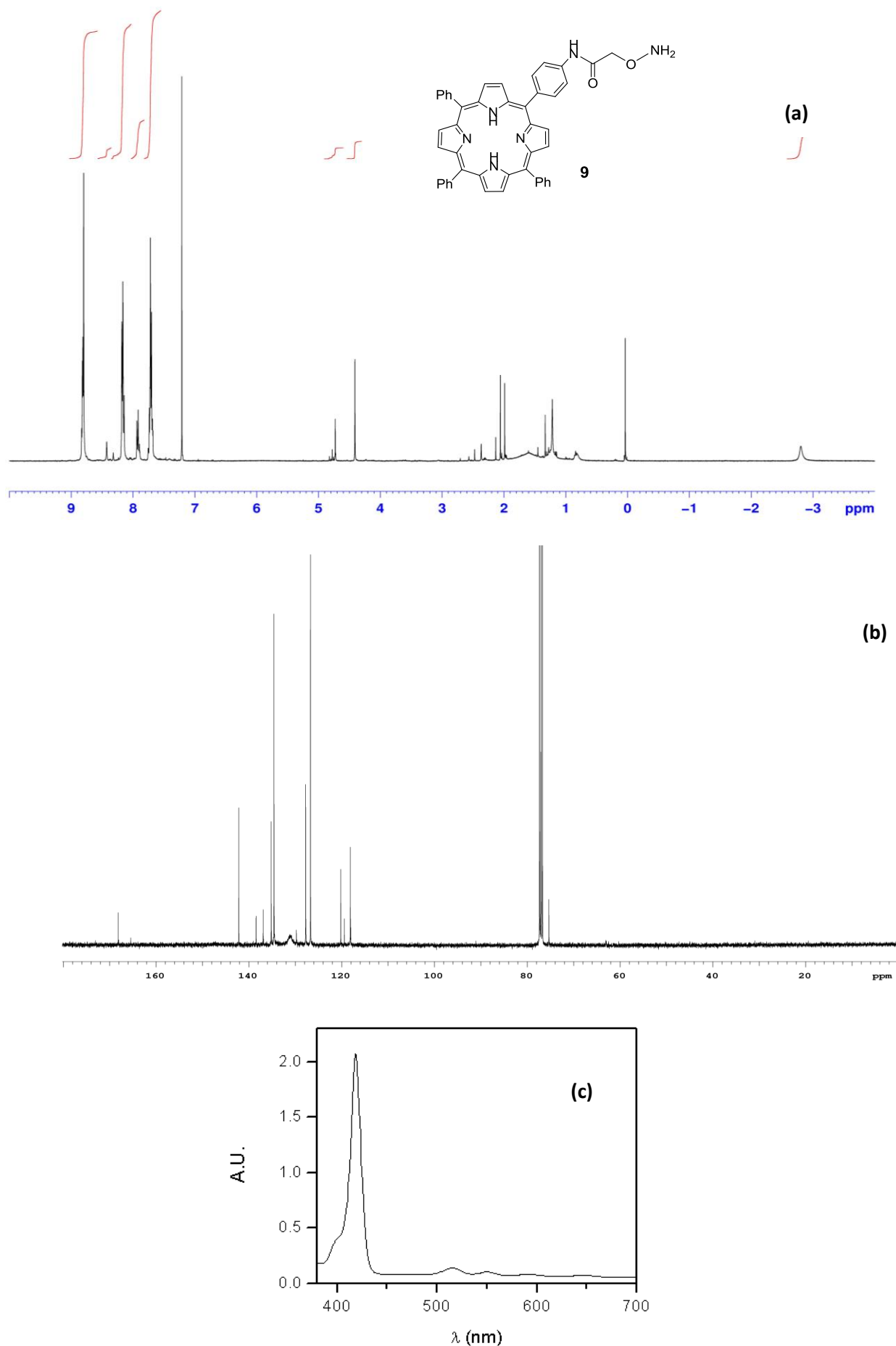
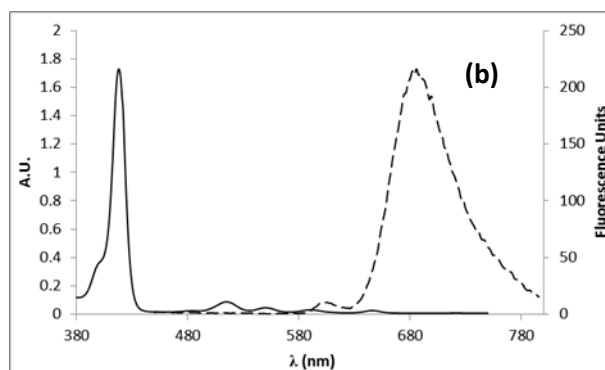
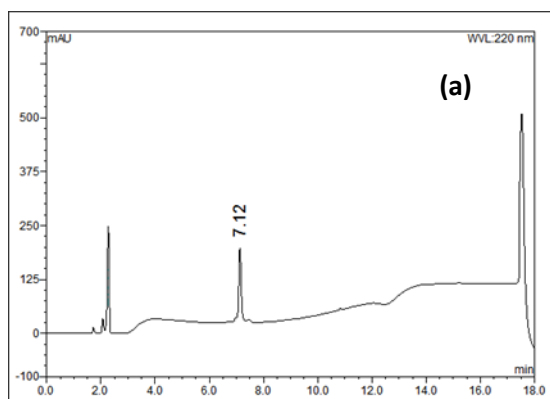
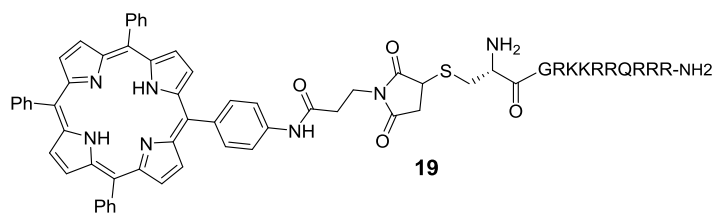
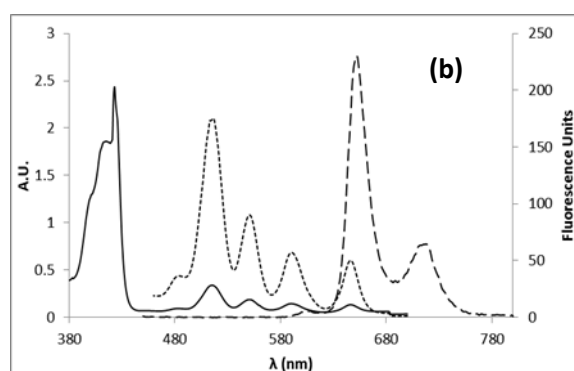
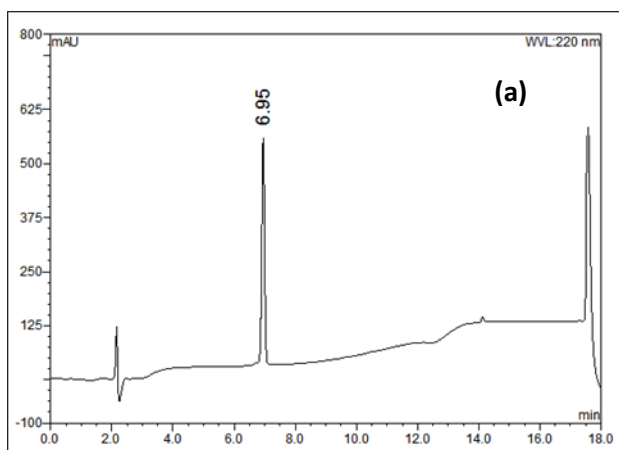
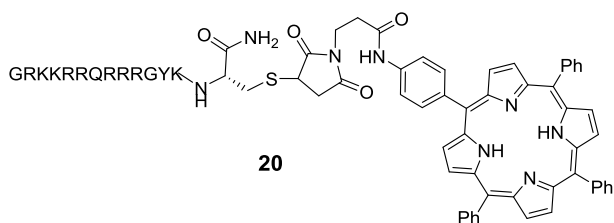


Figure 6 (a)-(b). <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra in CDCl<sub>3</sub> of **9** (c) UV-visible spectrum in CHCl<sub>3</sub> of **9**.

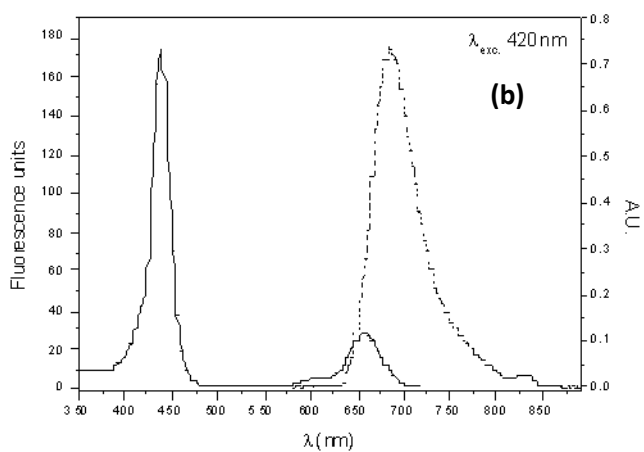
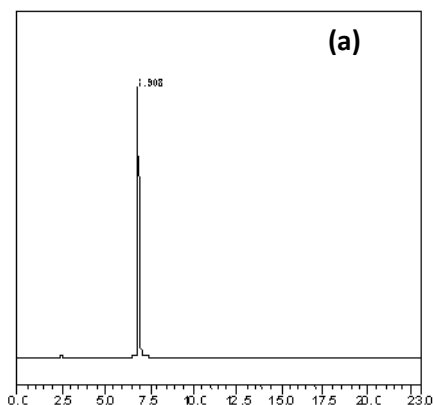
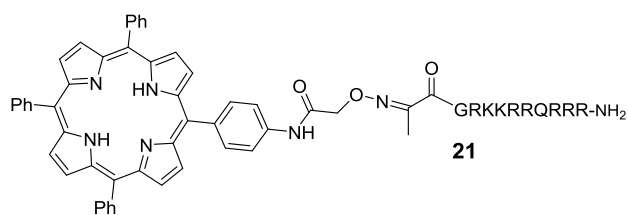


**Figure 7 (a)** HPLC profile of conjugate **19** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **19**.

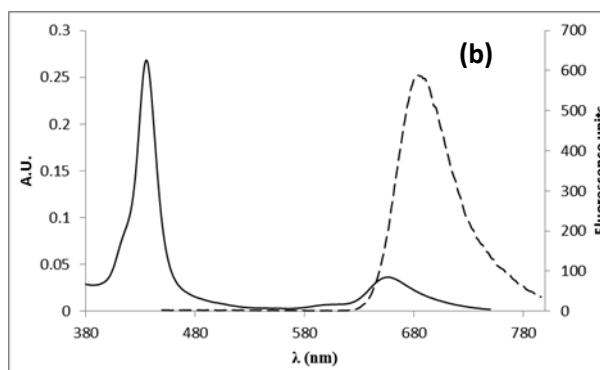
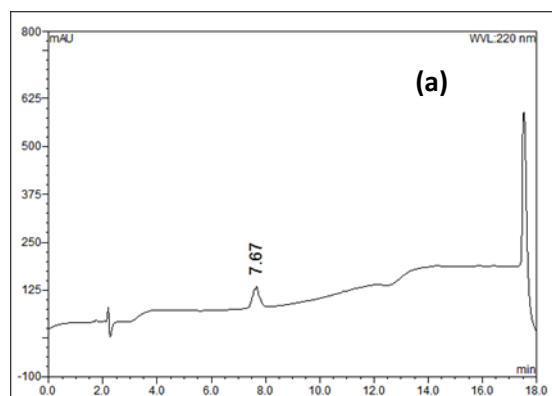
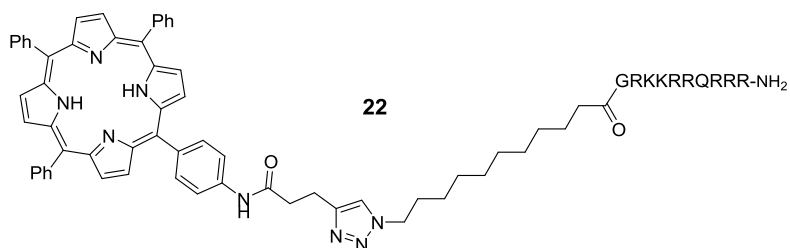


**Figure 8 (a)** HPLC profile of conjugate **20** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **20**.

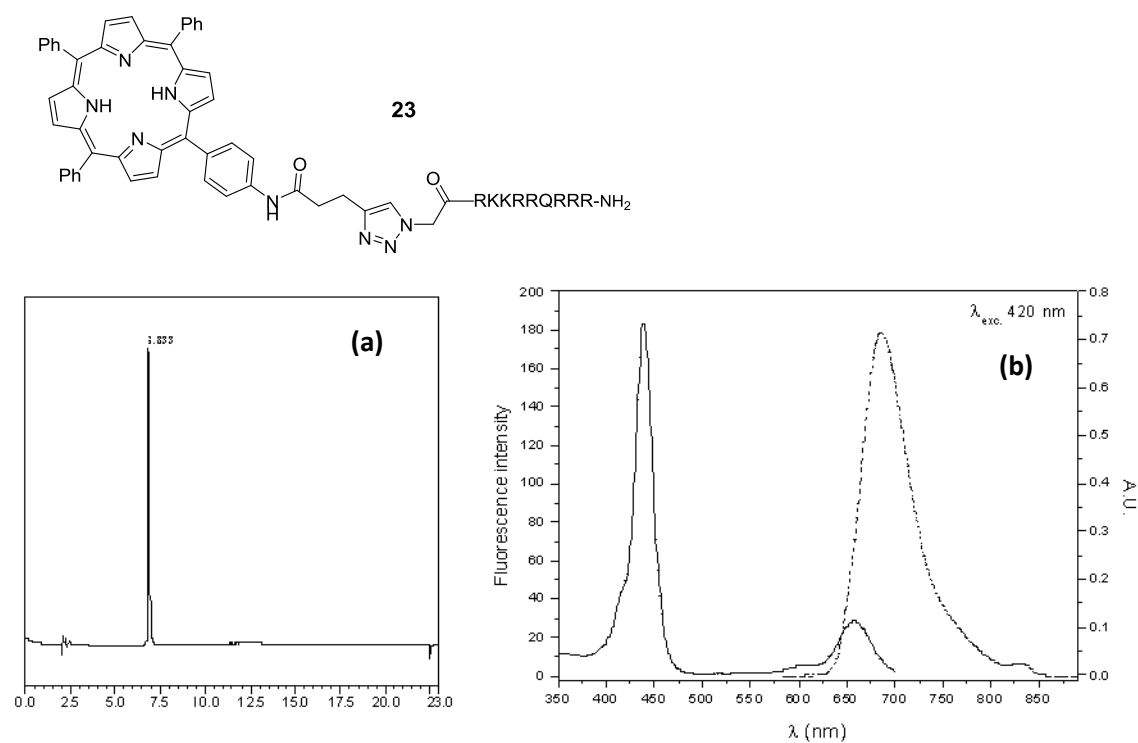




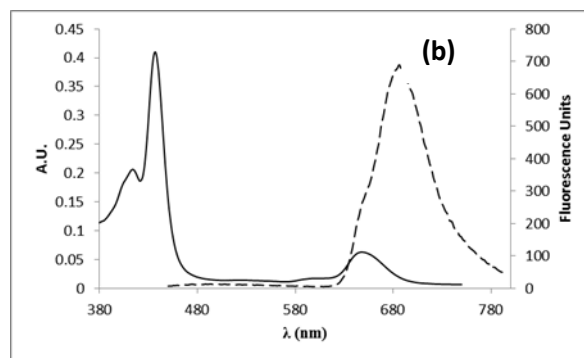
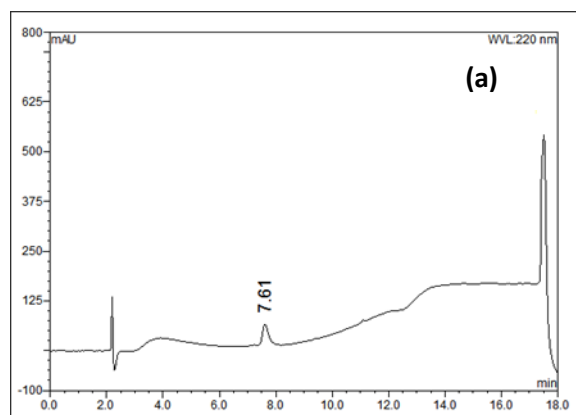
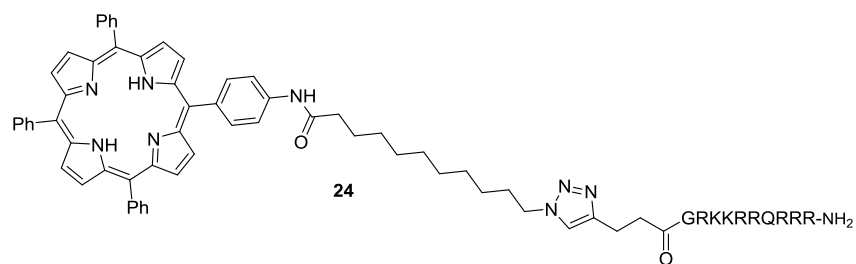
**Figure 9** (a) HPLC profile of conjugate **21** (elution Method 2, see General Information); (b) UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **21**.



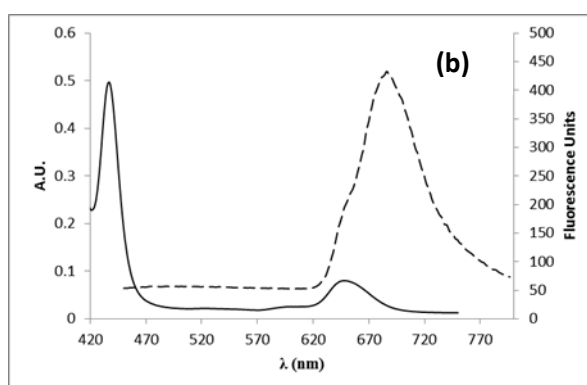
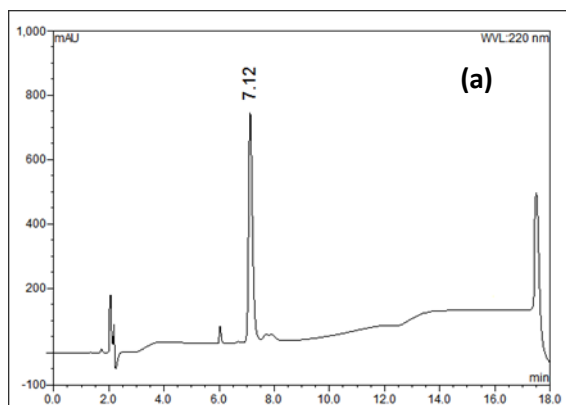
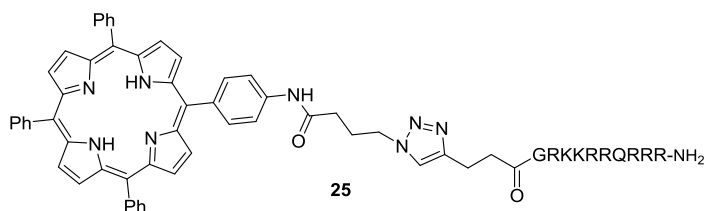
**Figure 10** (a) HPLC profile of conjugate **22** (elution Method 2, see General Information); (b) UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **22**.



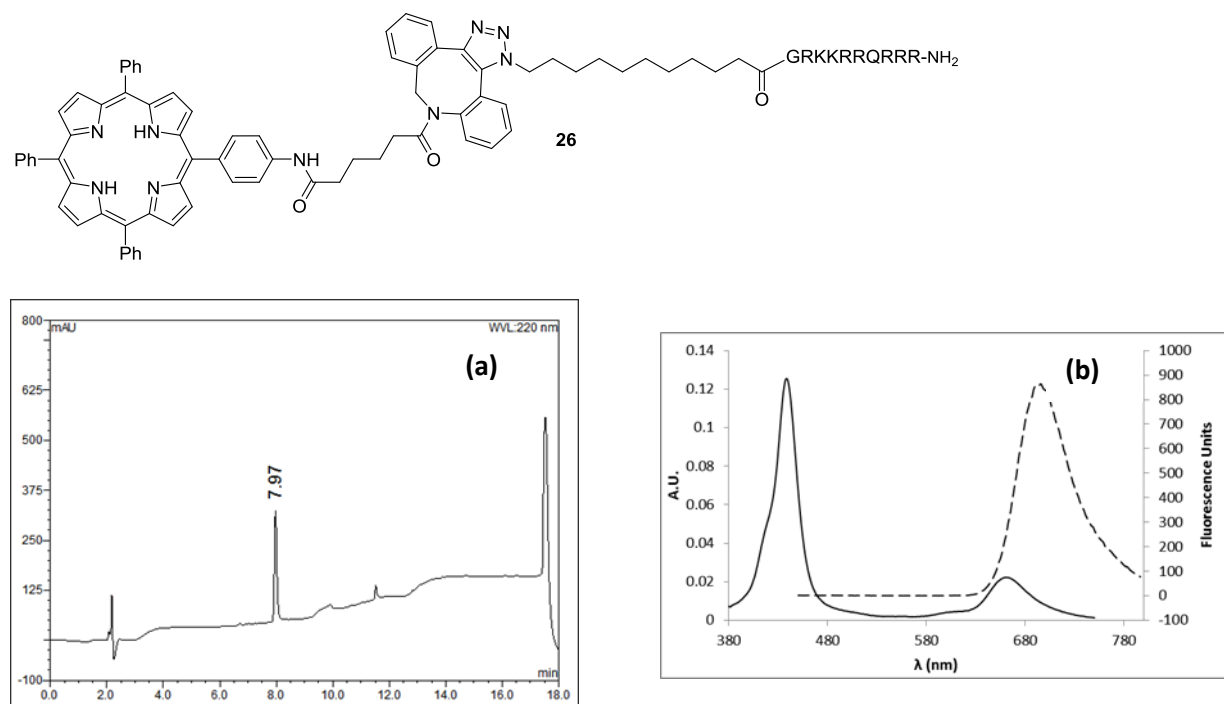
**Figure 11** (a) HPLC profile of conjugate **23** (elution Method 2, see General Information); (b) UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **23**.



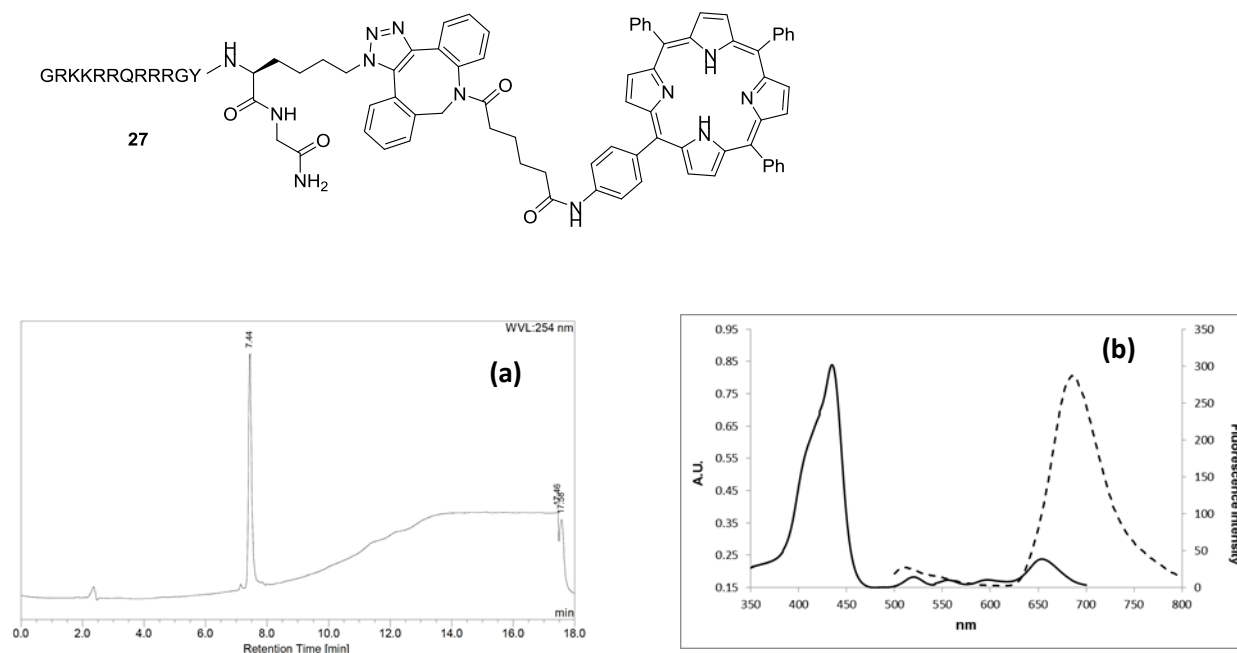
**Figure 12 (a)** HPLC profile of conjugate **24** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **24**.



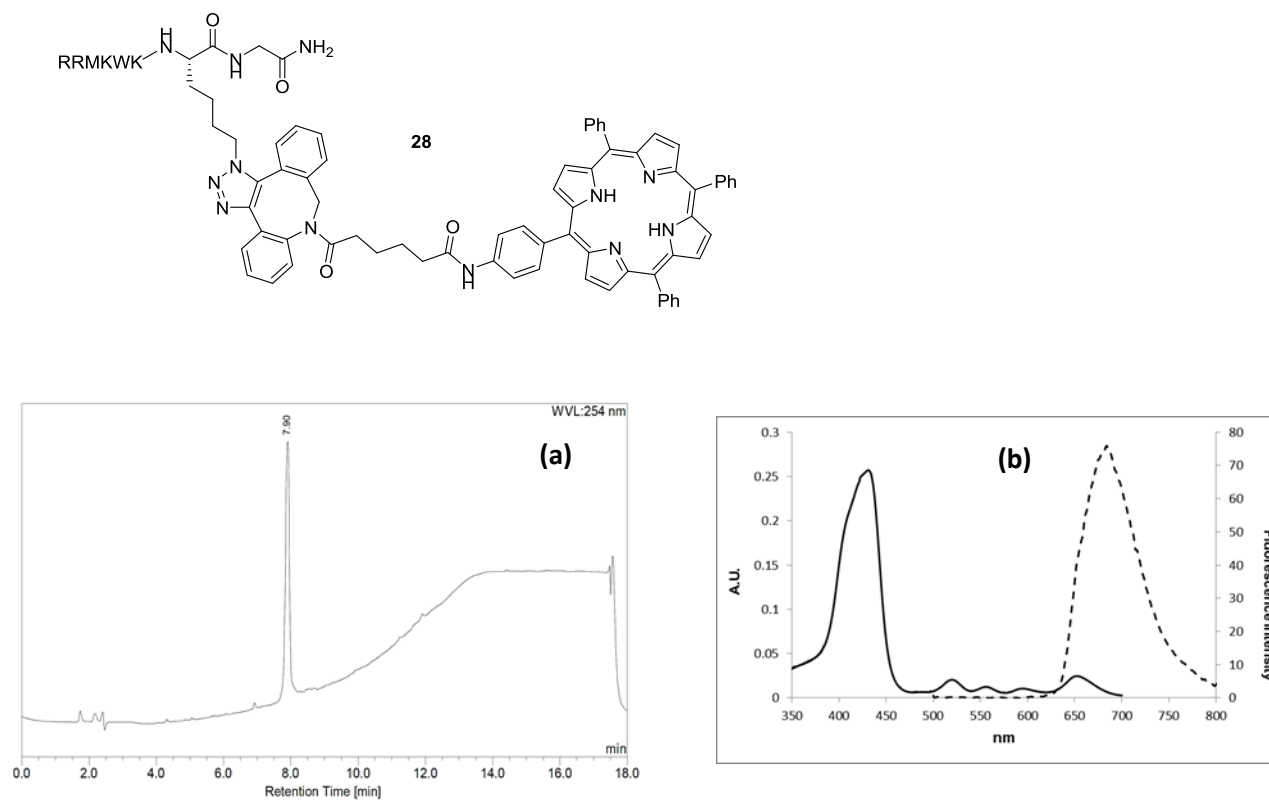
**Figure 13 (a)** HPLC profile of conjugate **25** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **25**.



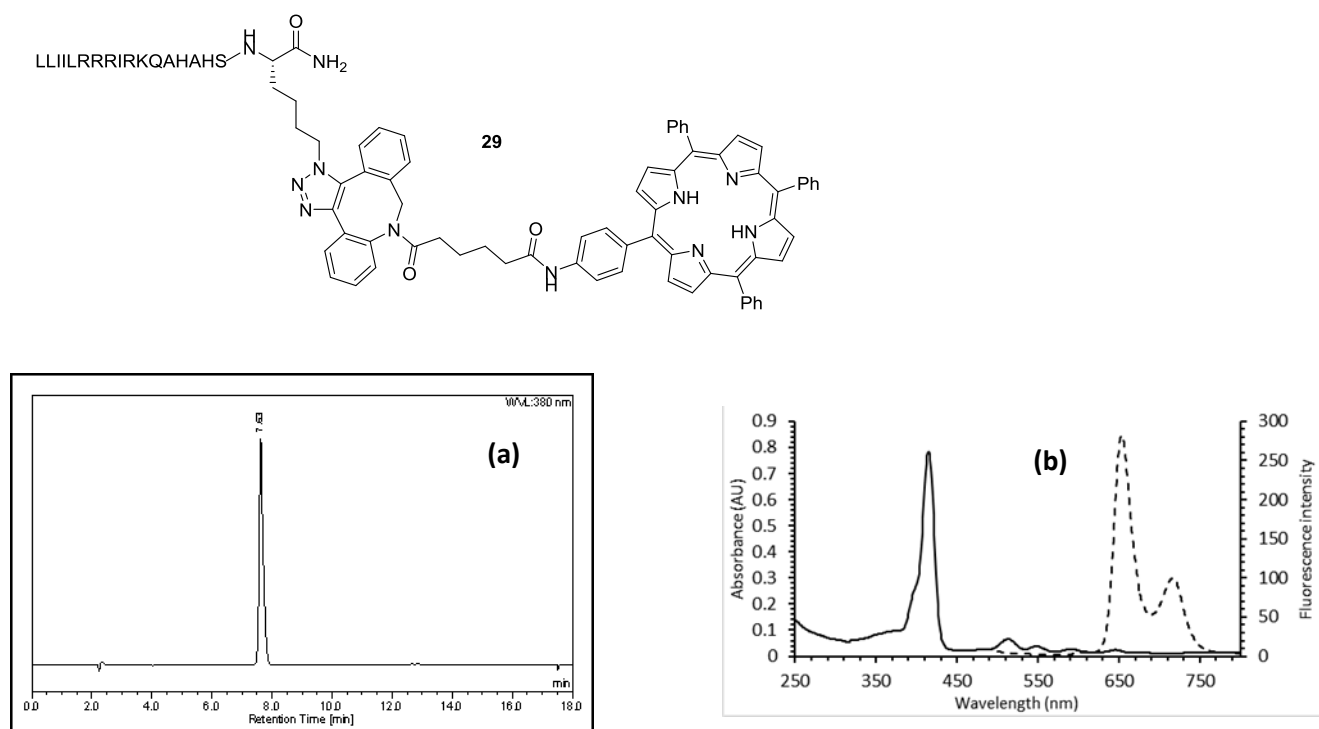
**Figure 14 (a)** HPLC profile of conjugate **26** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **26**.



**Figure 15 (a)** HPLC profile of conjugate **27** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **27**.



**Figure 16 (a)** HPLC profile of conjugate **28** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **28**.



**Figure 17 (a)** HPLC profile of conjugate **29** (elution Method 2, see General Information); **(b)** UV-visible (solid line) and fluorescence (dotted line) spectra in 0.1% aq TFA of conjugate **29**.