

Supplementary Information for
“Spectral and Redox Properties of Zinc Porphyrin Core Dendrimers with Triarylamines as Dendron”

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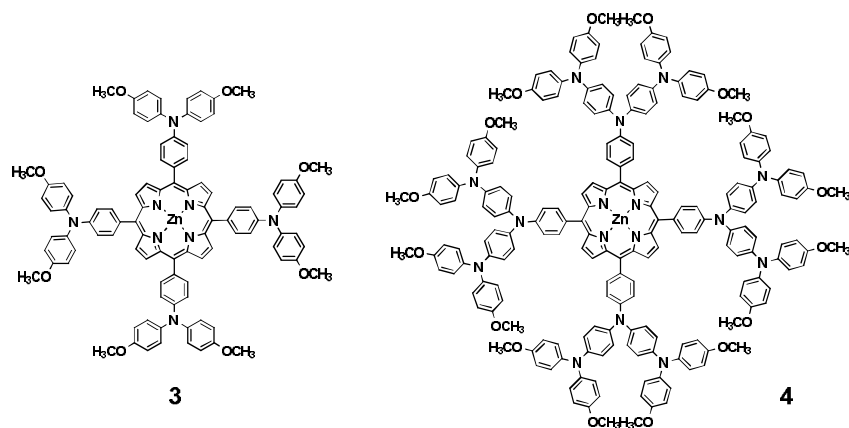
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A : ¹H NMR spectra

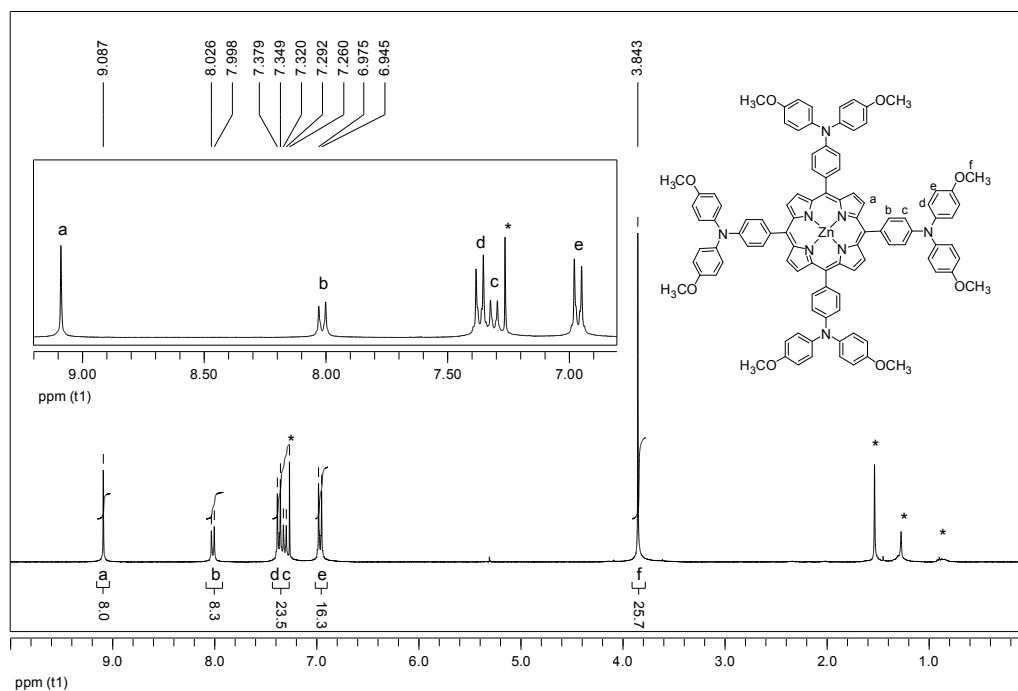


Fig. 1 ¹H NMR of **3** in CDCl₃.

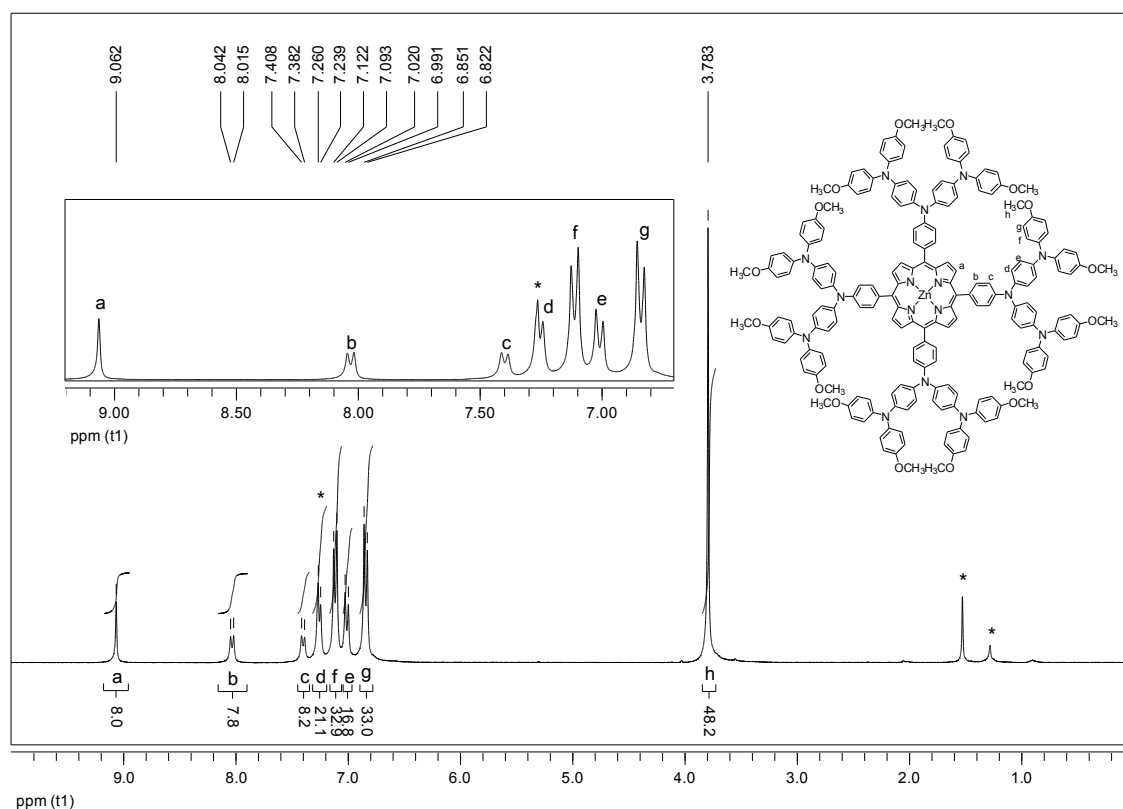


Fig. 2 ^1H NMR of **4** in CDCl_3 .

B. Excitation spectra

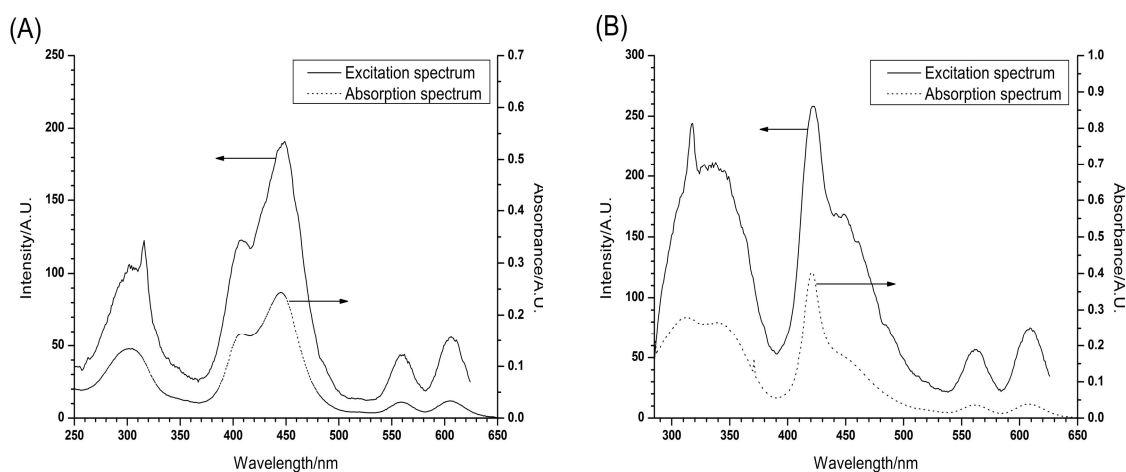


Fig. 3 The absorption and excitation spectra of (A) 2.5×10^{-5} M **3** in CH_2Cl_2 ; (B) 2.0×10^{-6} M **4** in toluene. Excitation experiments were monitored at emission wavelength (A) 635; (B) 632 nm.

C. Tables of calculated numbers of electron transferred from spectroelectrochemistry

Table 1 The numbers of electron transferred (n) in Ox 1 of **4** was obtained from the plot of $\log[(A_O - A)/(A - A_R)]^a$ vs. applied potential (E). Data is obtained from Fig. 6(D) in article.

Absorption peak (nm)	$E = -\frac{0.059}{n} \log \frac{A_O - A}{A - A_R} + E^0$	n	R square
312	$y = -0.061x + 0.423$	0.97	$R^2 = 0.993$
426	$y = -0.047x + 0.411$	1.26	$R^2 = 0.961$
552	$y = -0.051x + 0.444$	1.16	$R^2 = 0.971$
610	$y = -0.056x + 0.407$	1.05	$R^2 = 0.914$
774	$y = -0.057x + 0.435$	1.04	$R^2 = 0.990$
1354	$y = -0.060x + 0.430$	0.98	$R^2 = 0.998$

^a A_O , A_R and A represent the absorbance of a peak at oxidative state, reductive state and an applied potential respectively.

Table 2 The numbers of electron transferred (n) in Ox 2 of **4** was obtained from the plot of $\log[(A_O - A)/(A - A_R)]^a$ vs. applied potential (E). Data is obtained from Fig. 6(E) in article.

Absorption peak (nm)	$E = -\frac{0.059}{n} \log \frac{A_O - A}{A - A_R} + E^0$	n	R square
298	$y = -0.062x + 0.703$	0.95	$R^2 = 0.900$
426	$y = -0.099x + 0.735$	0.60	$R^2 = 0.965$
556	$y = -0.060x + 0.721$	0.98	$R^2 = 0.981$
592	$y = -0.053x + 0.721$	1.11	$R^2 = 0.939$
1172	$y = -0.068x + 0.716$	0.87	$R^2 = 0.986$
1500	$y = -0.064x + 0.710$	0.92	$R^2 = 0.961$

^a A_O , A_R and A represent the absorbance of a peak at oxidative state, reductive state and an applied potential respectively.