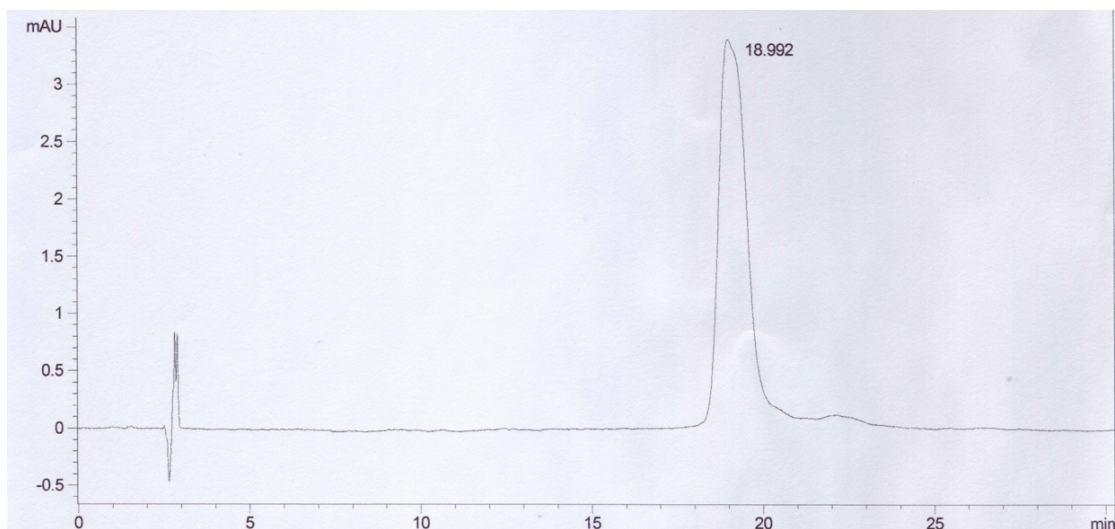


Electronic Supplementary Information

**Effects of the number and position of the substituents on the *in vitro*
photodynamic activities of glucosylated zinc(II) phthalocyanines**

Jian-Yong Liu, Pui-Chi Lo, Wing-Ping Fong and Dennis K. P. Ng*

(a)



(b)

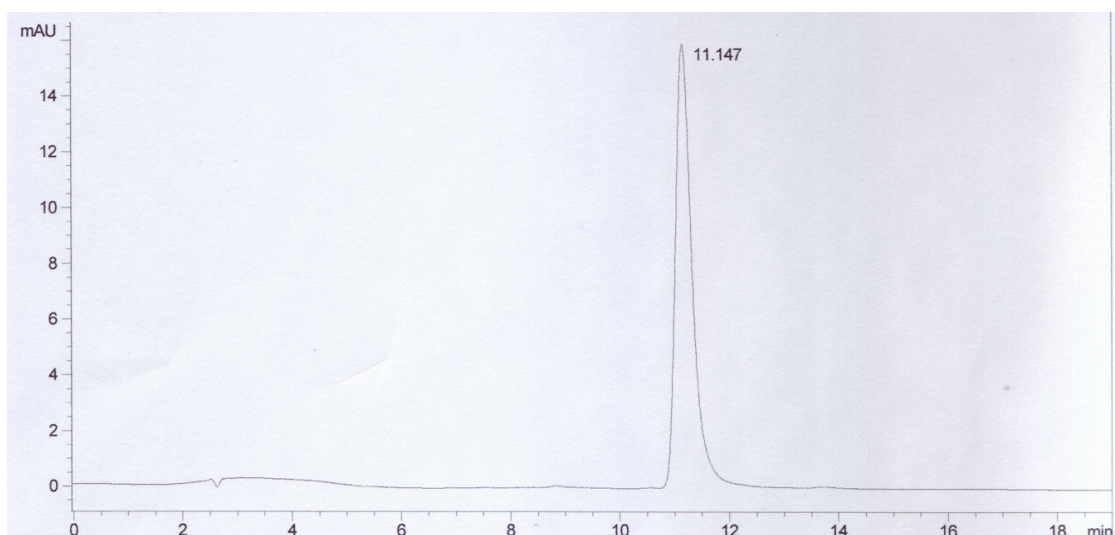
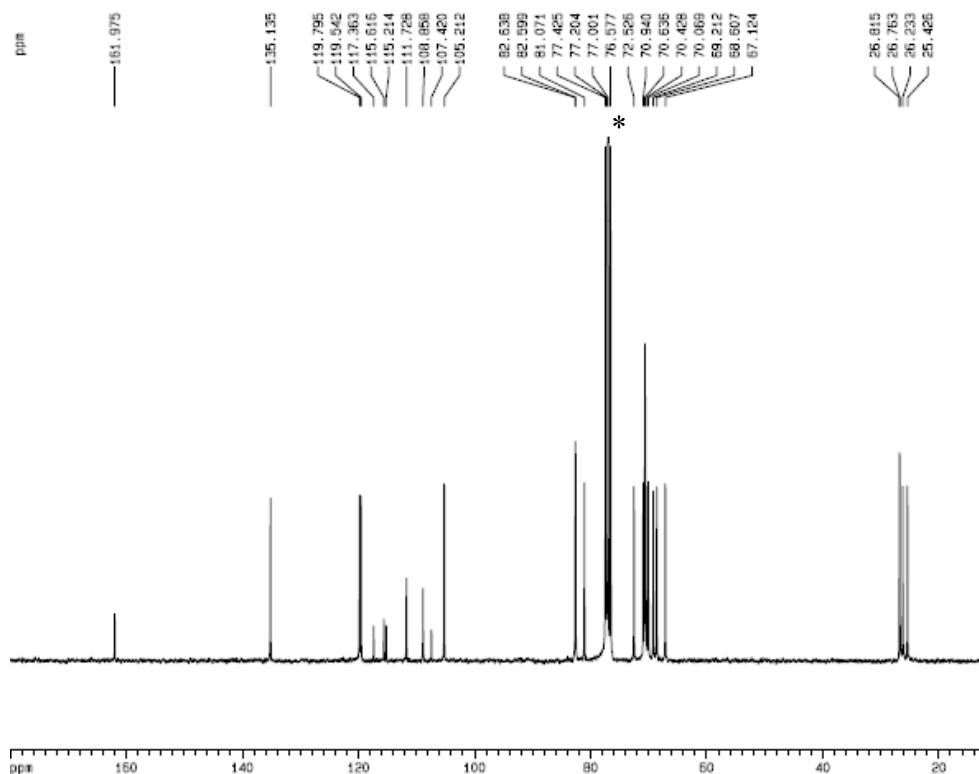
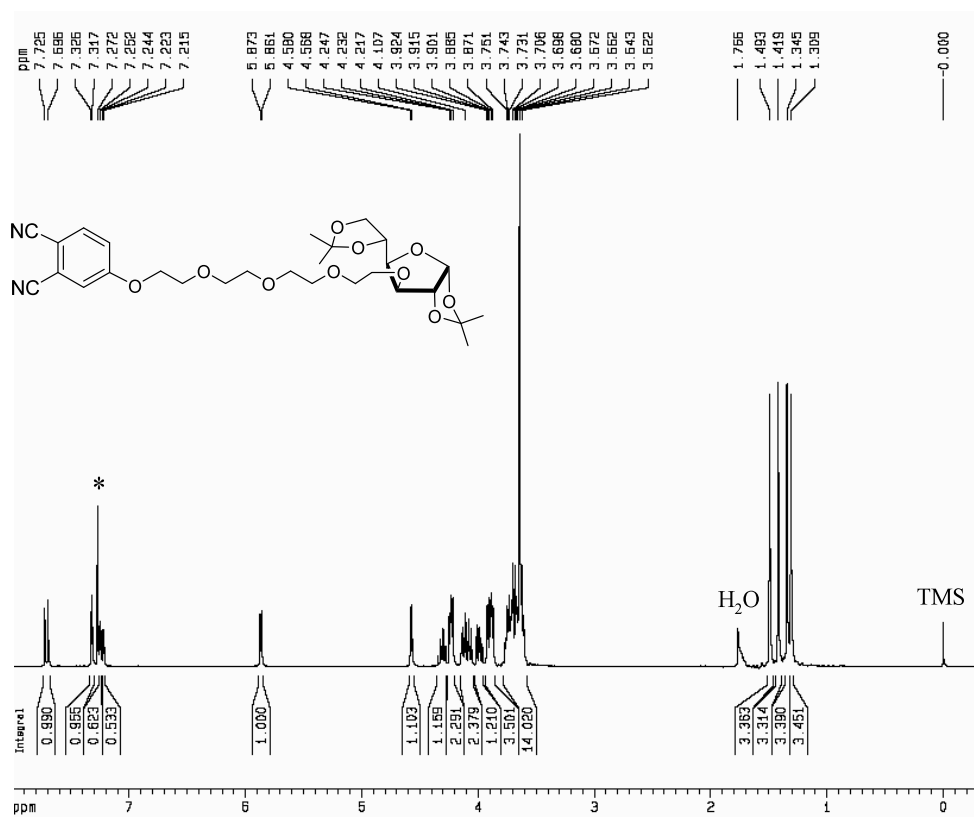


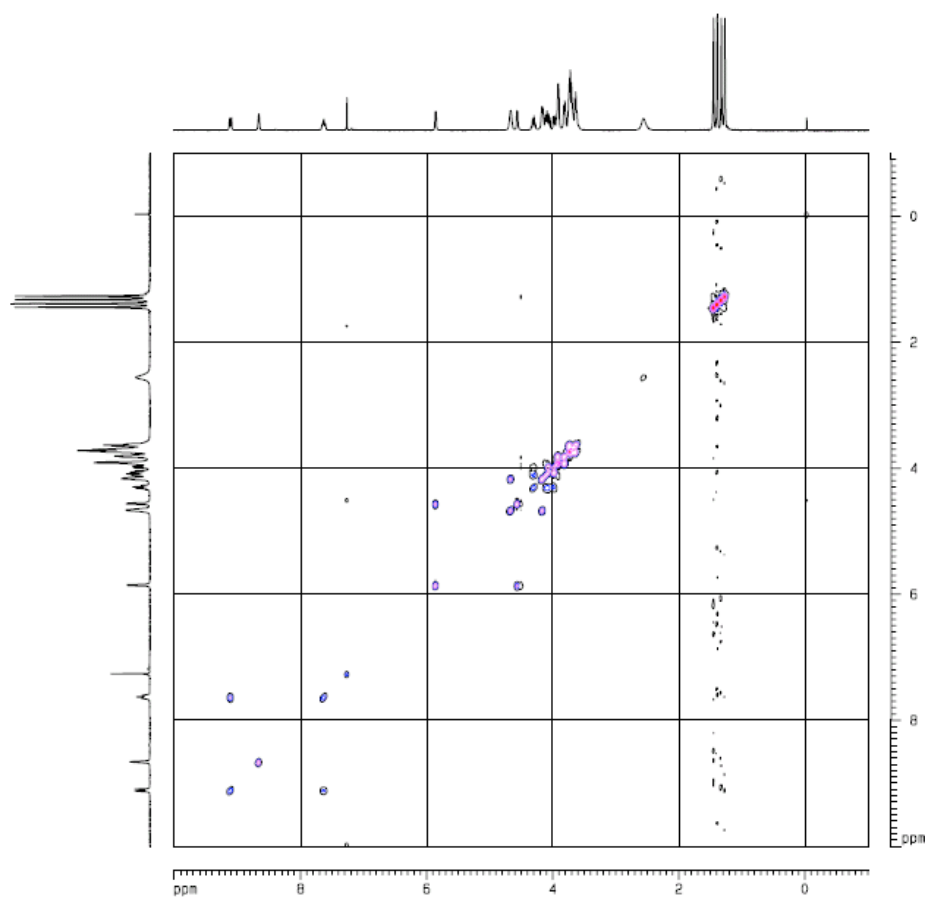
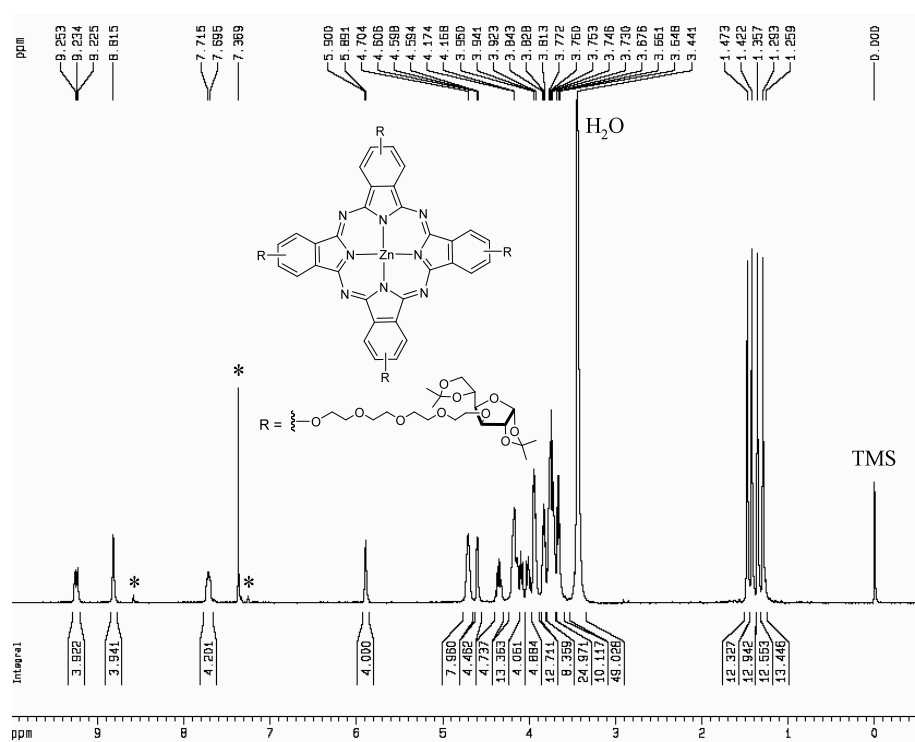
Fig. S1 HPLC analysis of the purified (a) $\text{ZnPc}(\beta\text{-Glu})_4$ (**5**) and (b) $\text{ZnPc}(\alpha\text{-Glu})_2$ (**12**). The mobile phase was $\text{CH}_3\text{OH}/\text{H}_2\text{O}$ (4:1 v/v) and $\text{CH}_3\text{OH}/\text{H}_2\text{O}$ (2:3 v/v) respectively. The relatively broad signal for $\text{ZnPc}(\beta\text{-Glu})_4$ (**5**) can be attributed to the fact that it exists as a mixture of structural isomers.

In all of the following spectra, residual solvent signals are marked with asterisks.

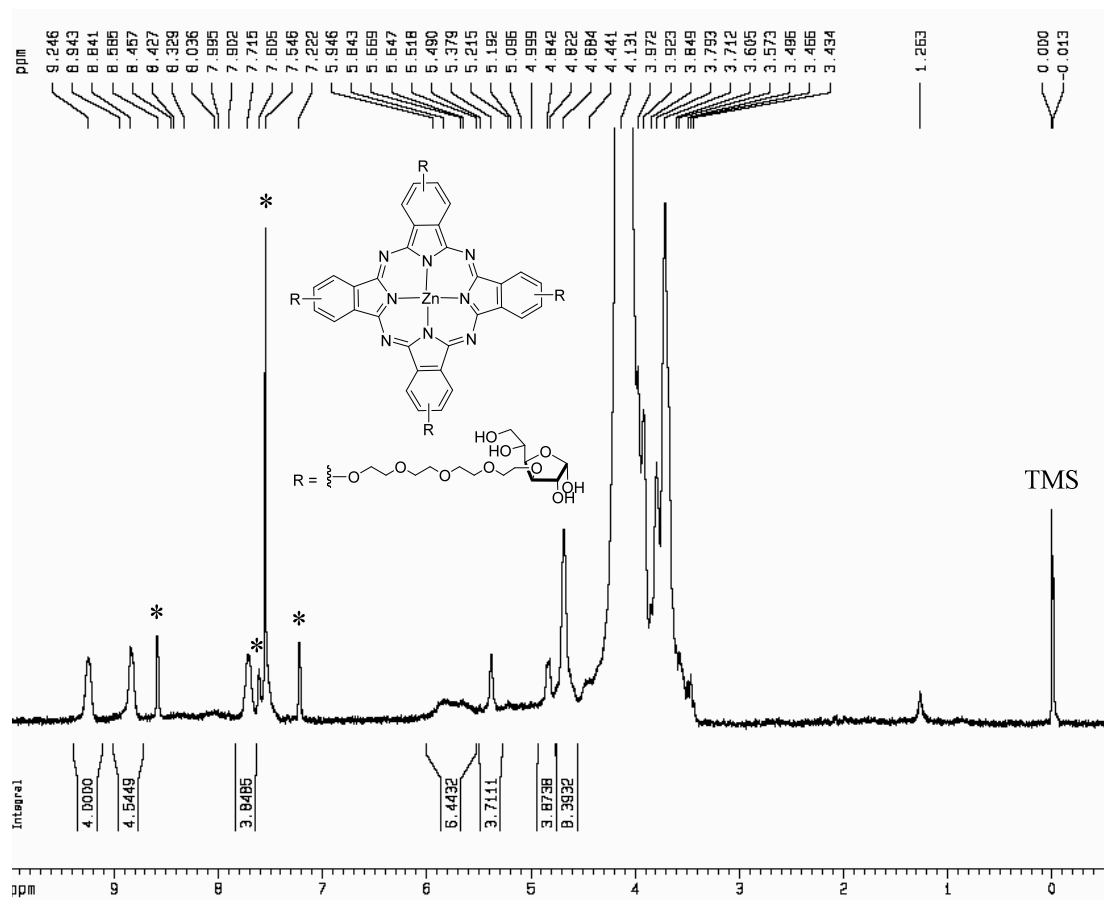
^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **3** in CDCl_3



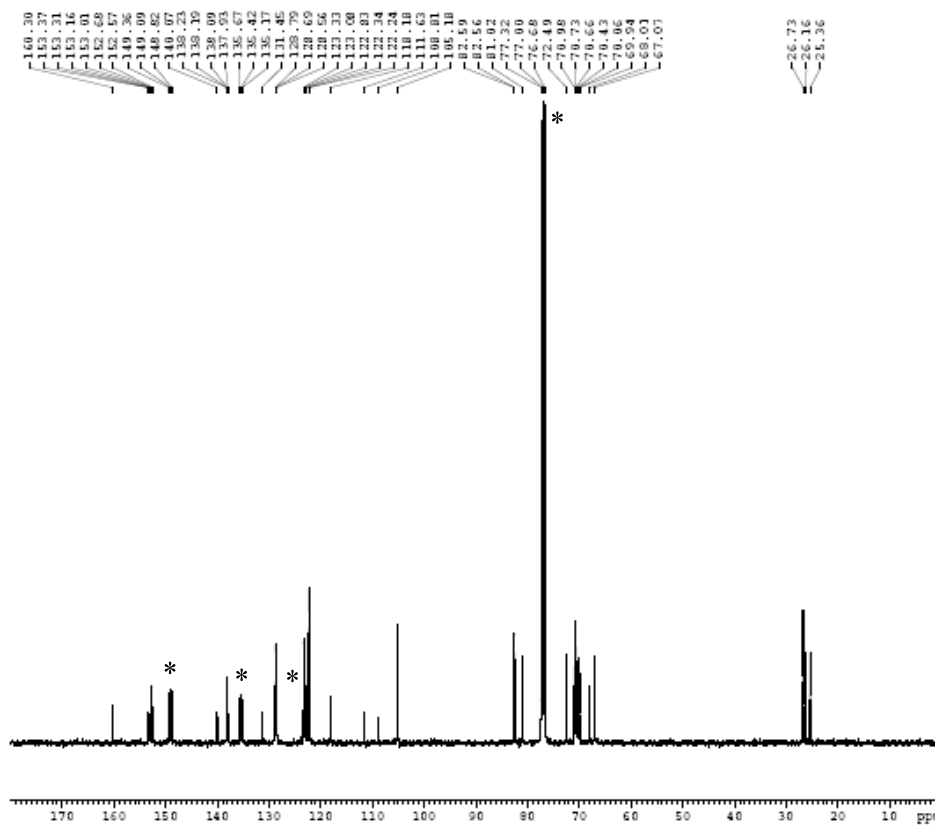
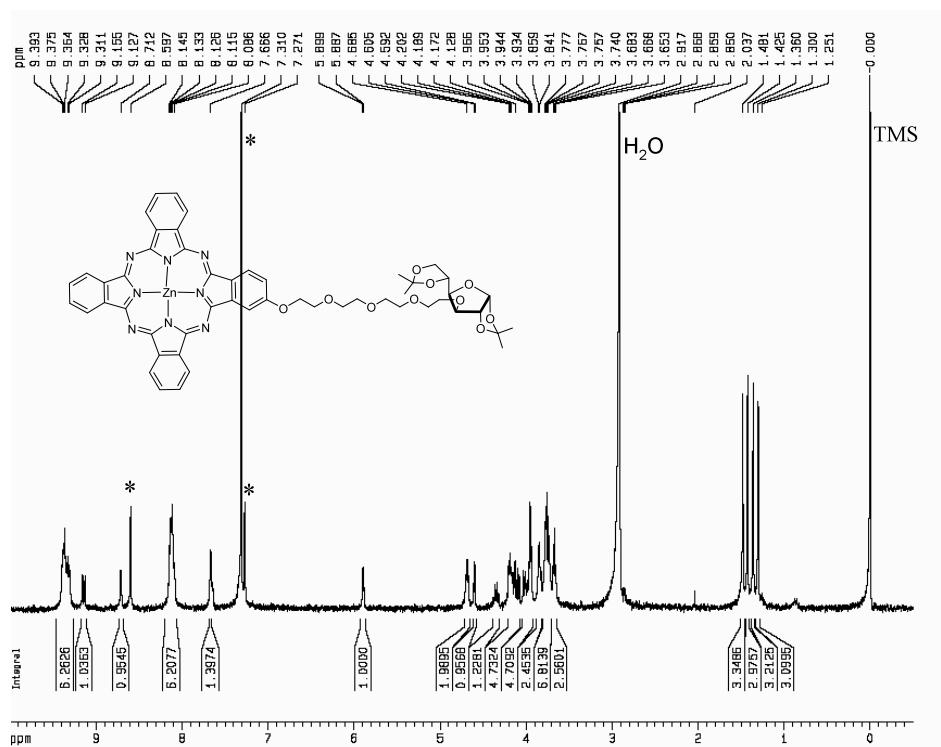
^1H NMR and ^1H - ^1H COSY spectra of compound **4** in CDCl_3 with a trace amount of pyridine- d_5



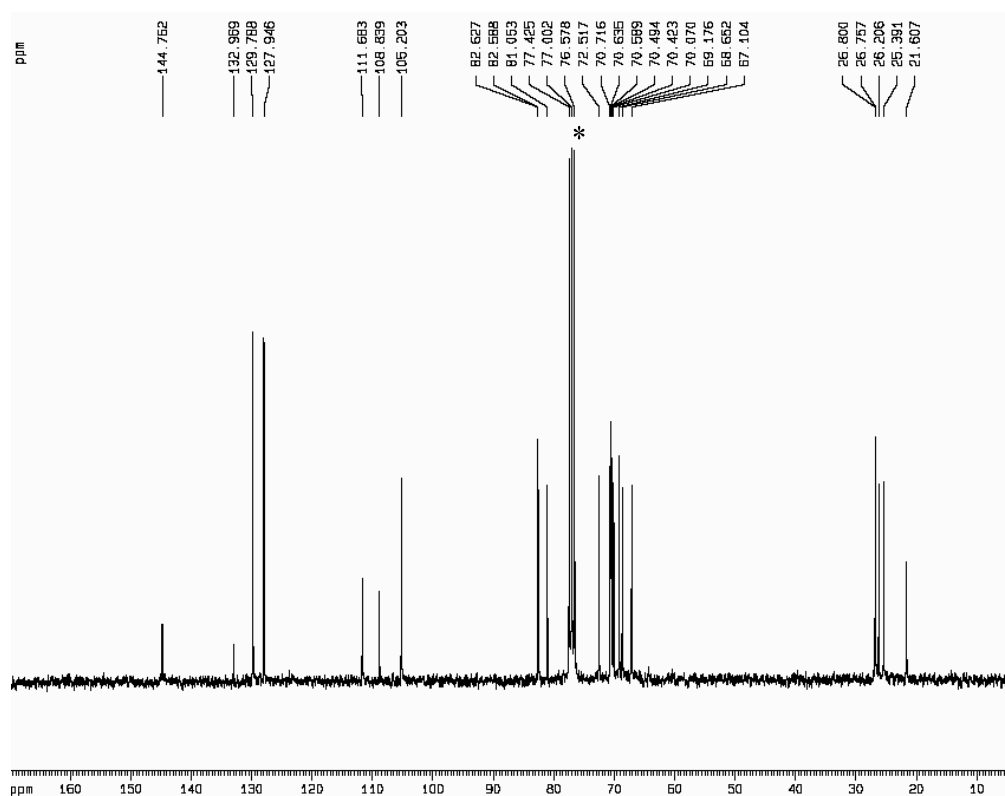
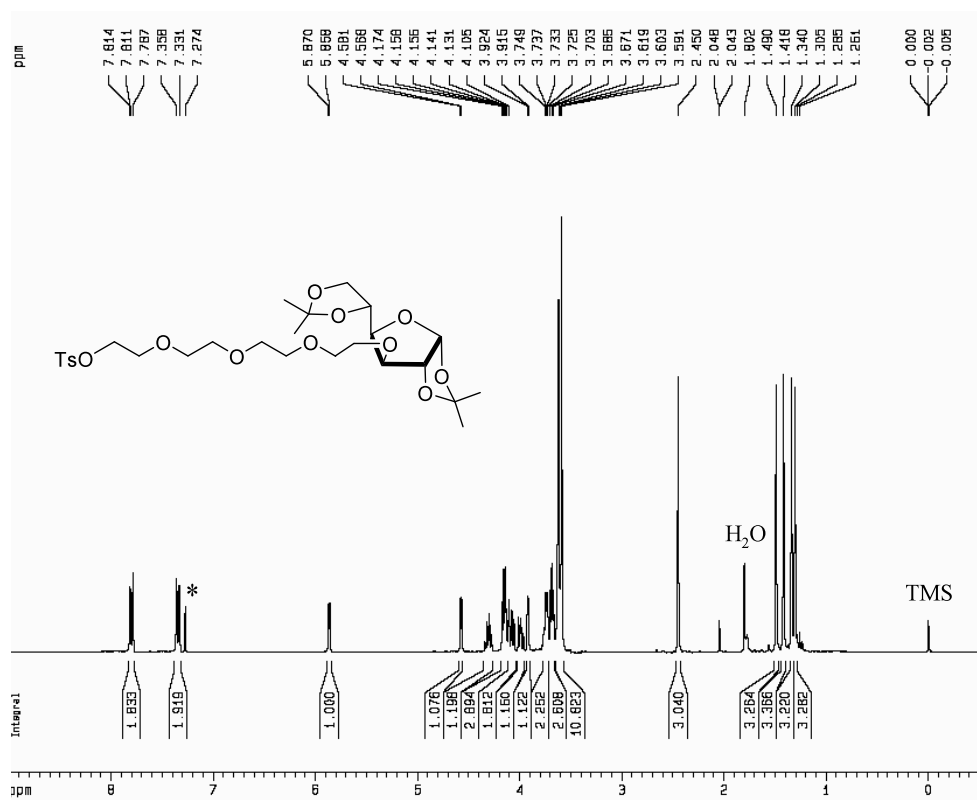
^1H NMR spectrum of compound **5** in CDCl_3 with a trace amount of pyridine- d_5



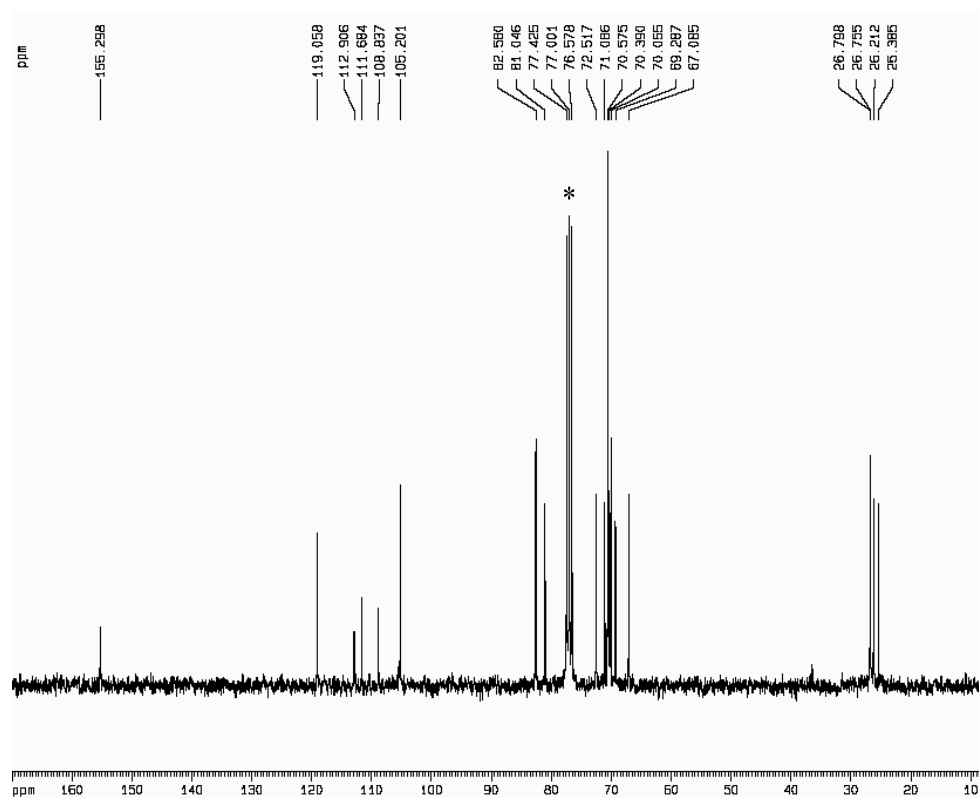
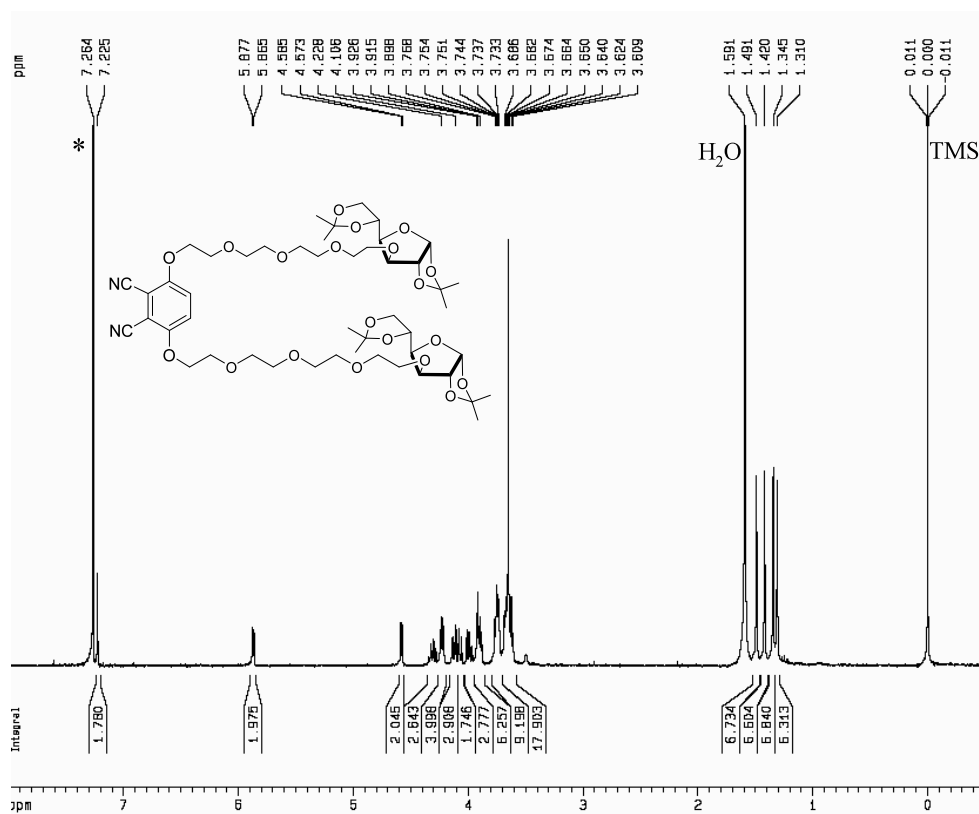
^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **7** in CDCl_3 with a trace amount of pyridine- d_5



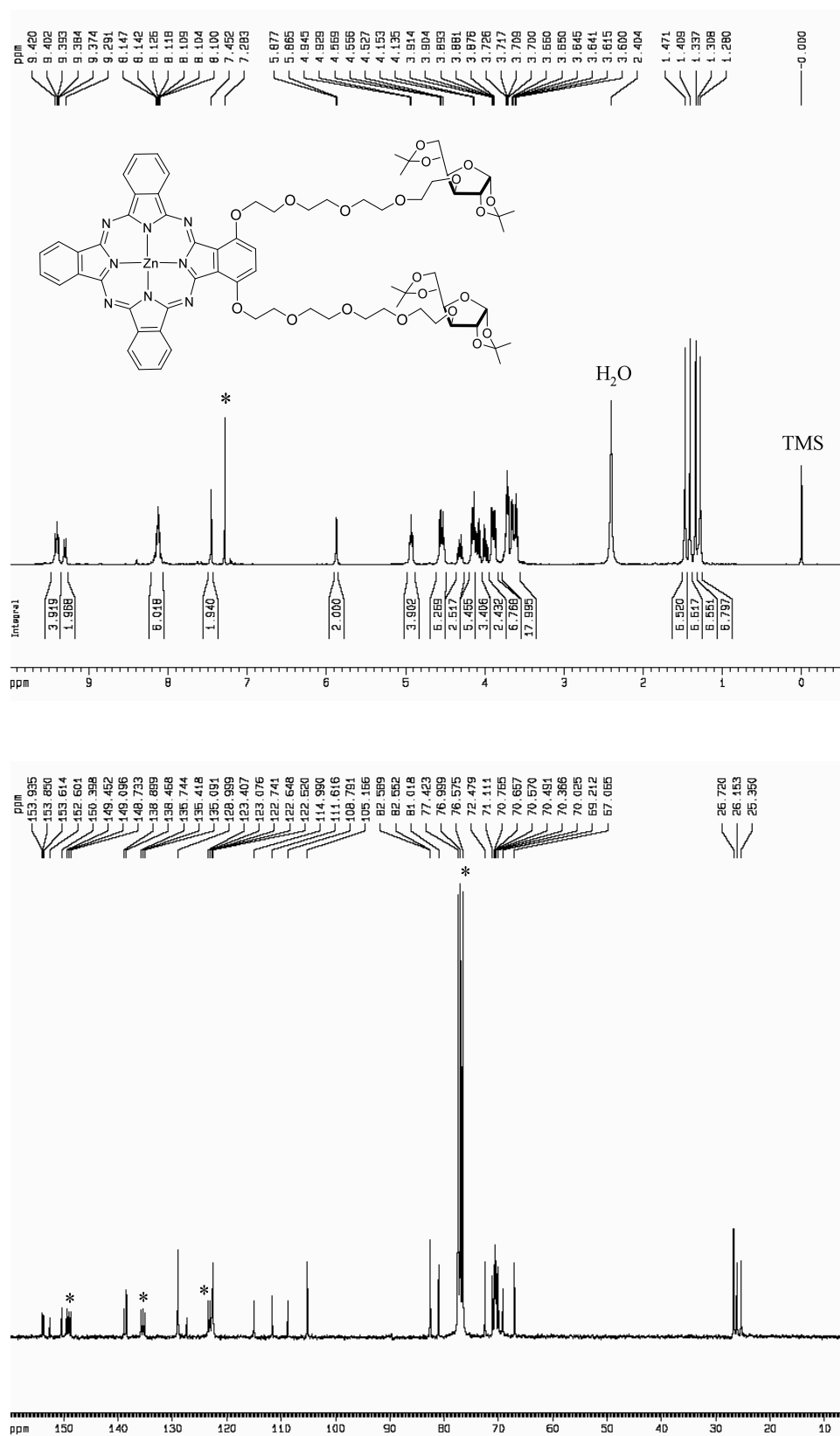
^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **8** in CDCl_3



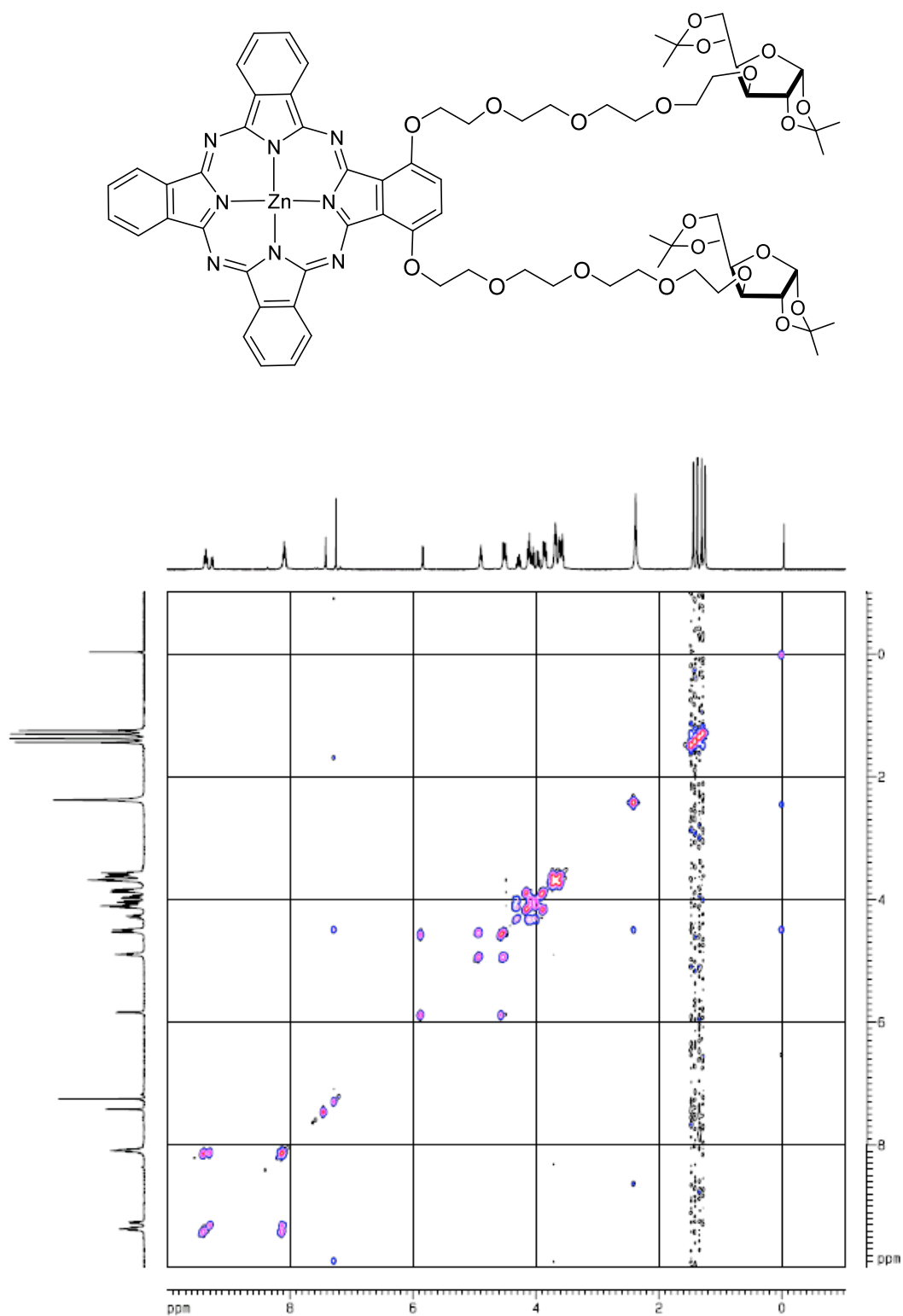
^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **10** in CDCl_3



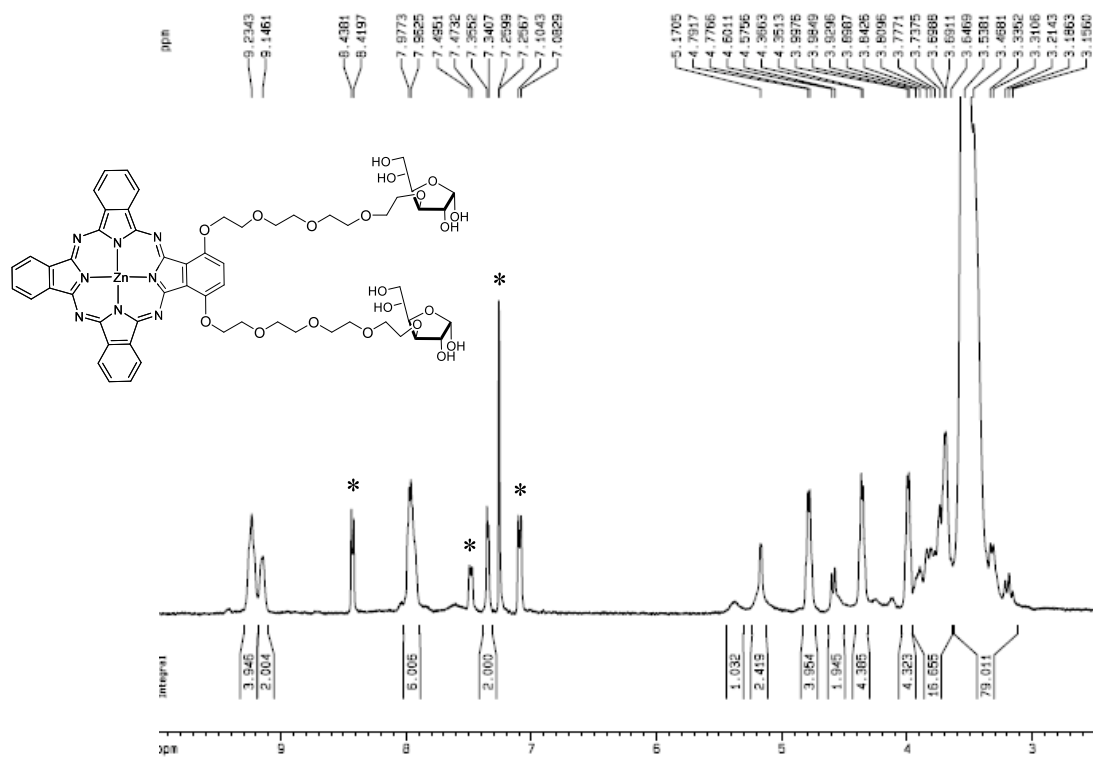
^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **11** in CDCl_3 with a trace amount of pyridine- d_5



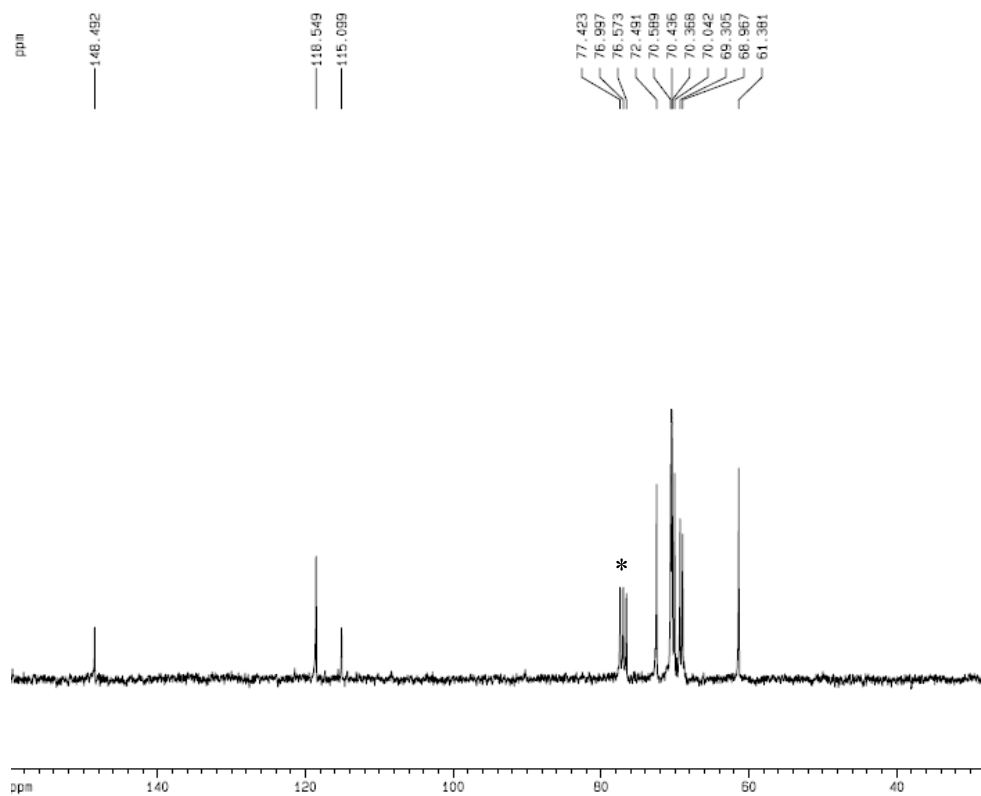
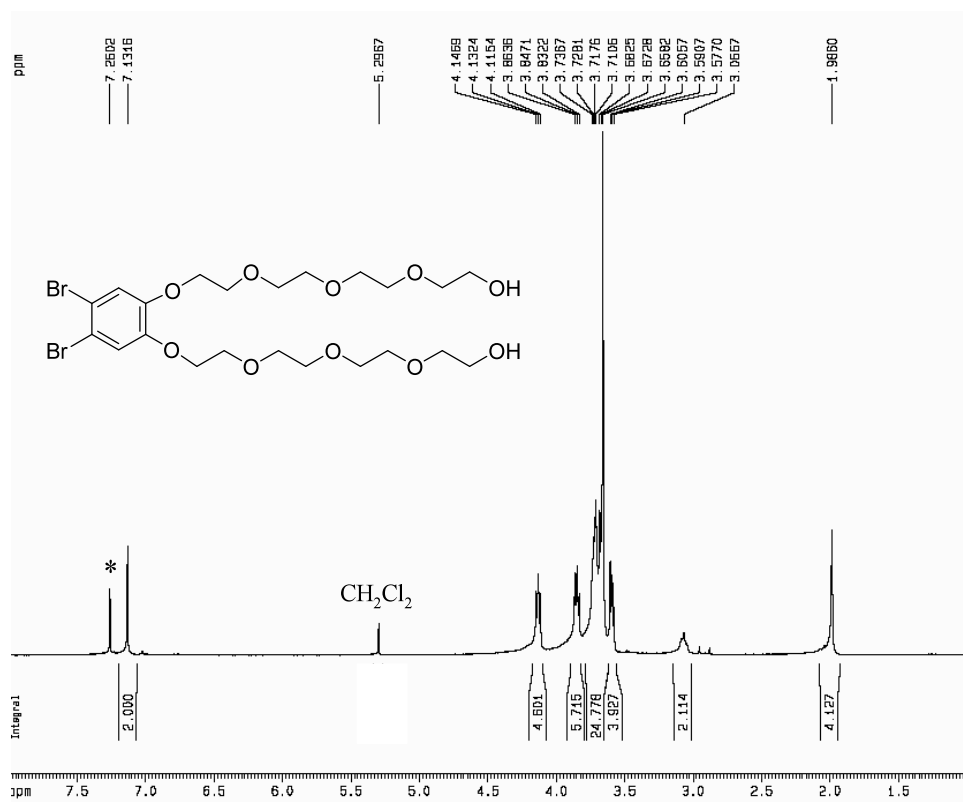
^1H - ^1H COSY spectrum of **11** in CDCl_3 with a trace amount of pyridine- d_5



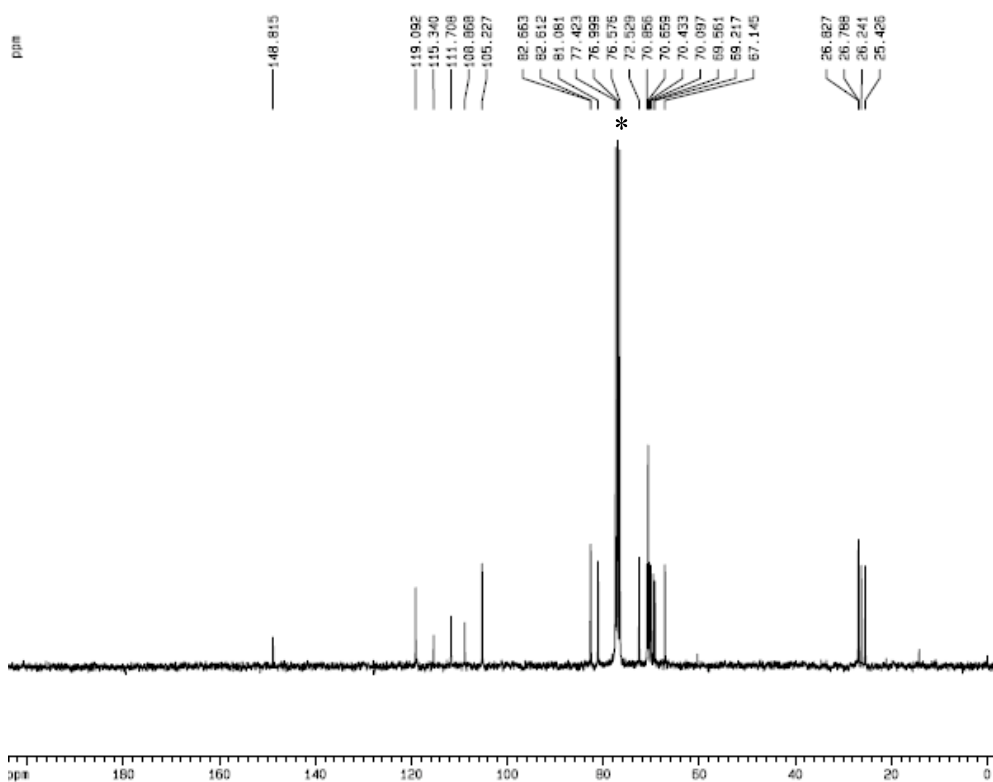
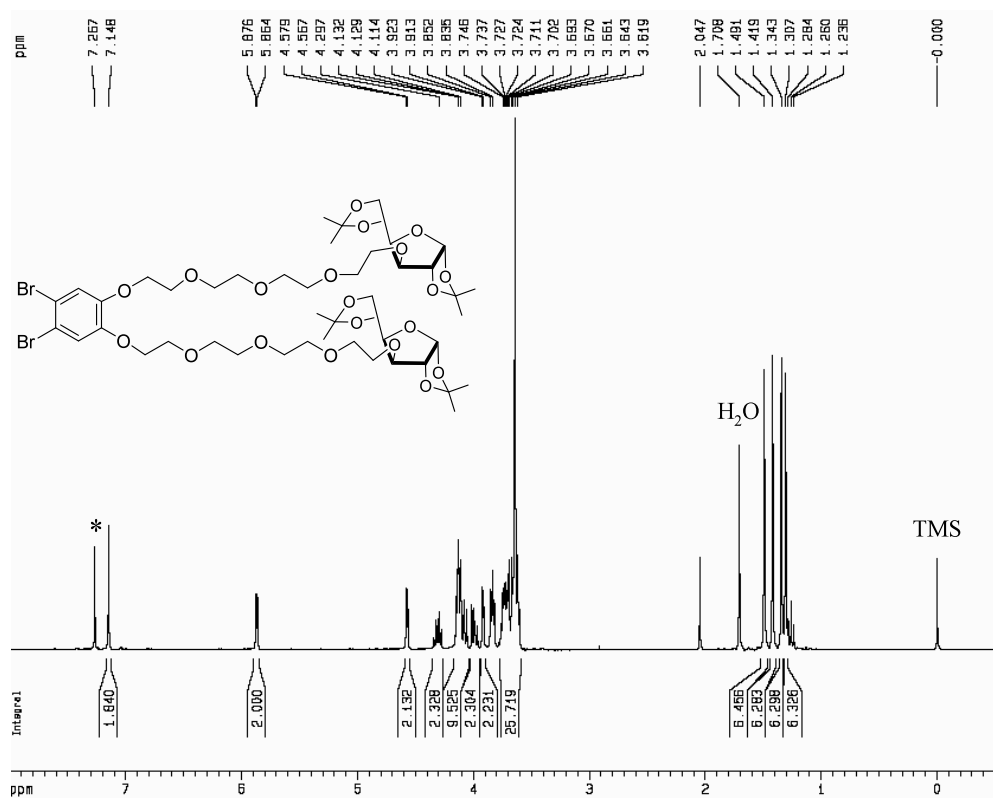
^1H NMR spectrum of compound **12** in CDCl_3 with a trace amount of pyridine- d_5



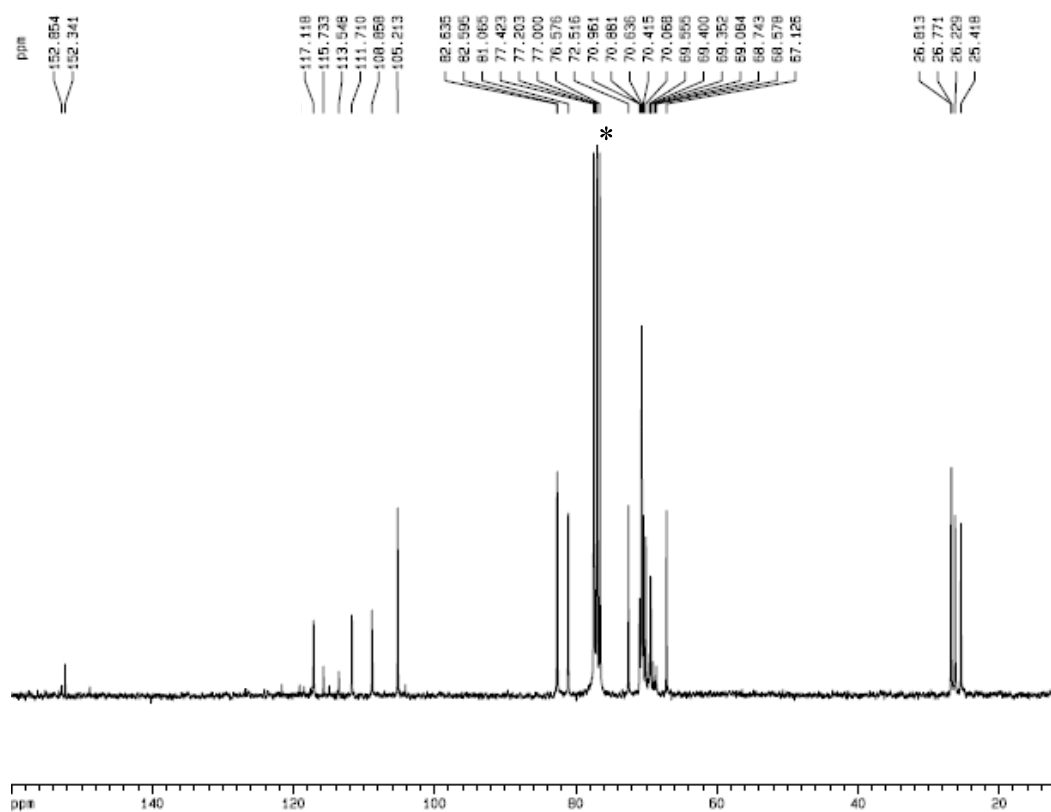
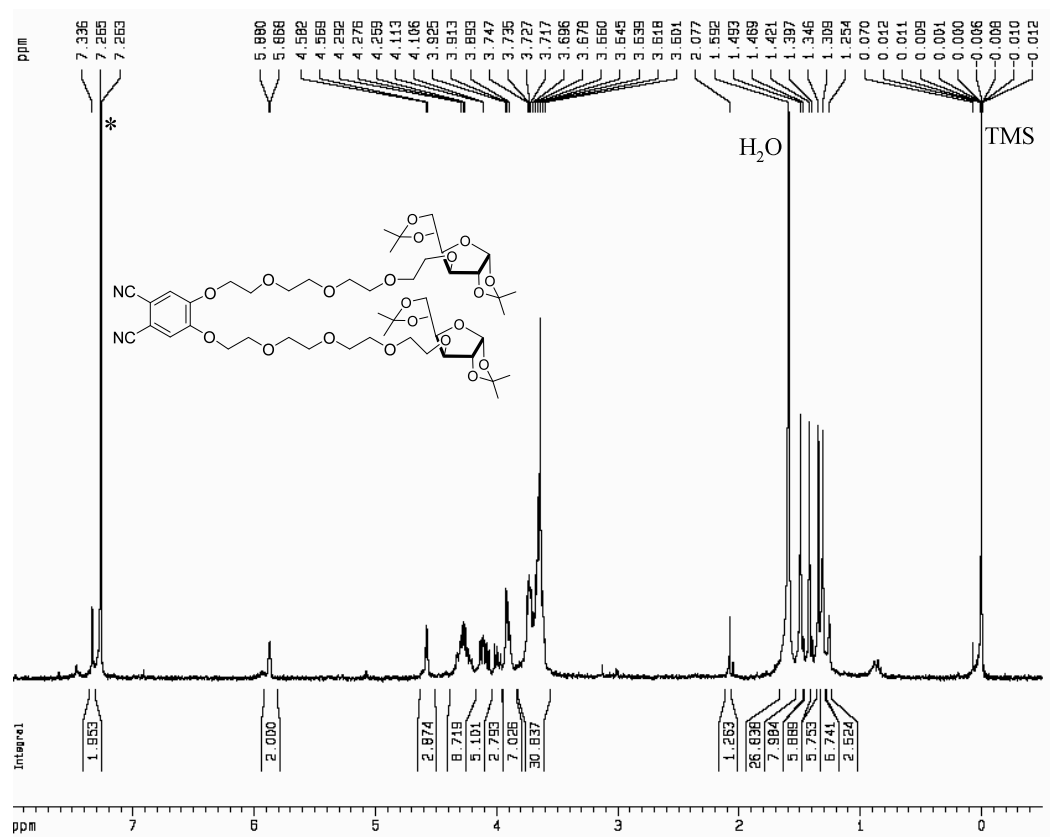
^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **15** in CDCl_3



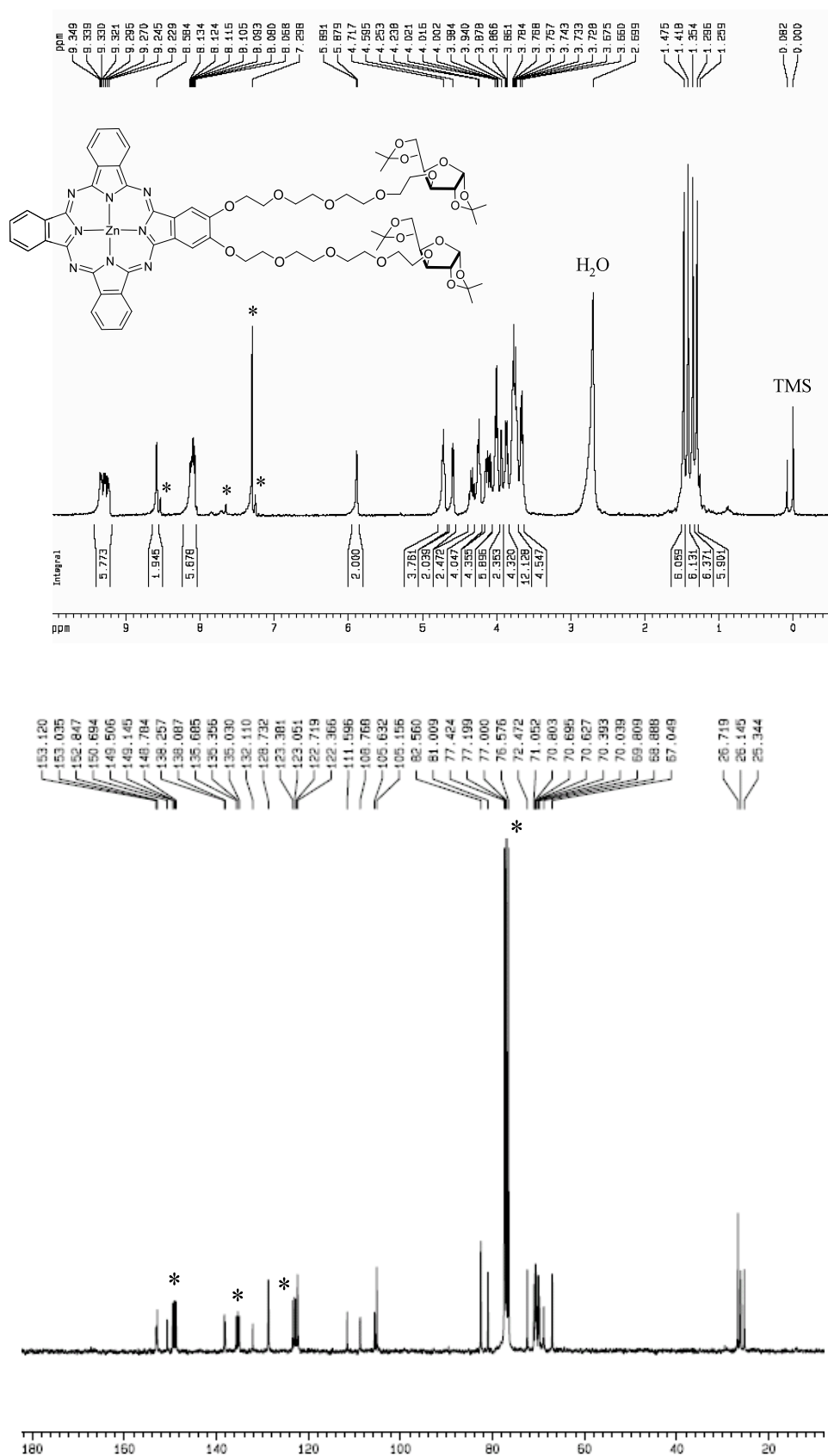
^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **18** in CDCl_3



^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **19** in CDCl_3



^1H NMR and $^{13}\text{C}\{^1\text{H}\}$ NMR spectra of compound **20** in CDCl_3 with a trace amount of pyridine- d_5



^1H - ^1H COSY spectrum of **20** in CDCl_3 with a trace amount of pyridine- d_5

