

Marchal, Figliola and Thompson

**Conjugation of prodigiosenes
to tamoxifen and estradiol**

Estelle Marchal, Carlotta Figliola and Alison Thompson*

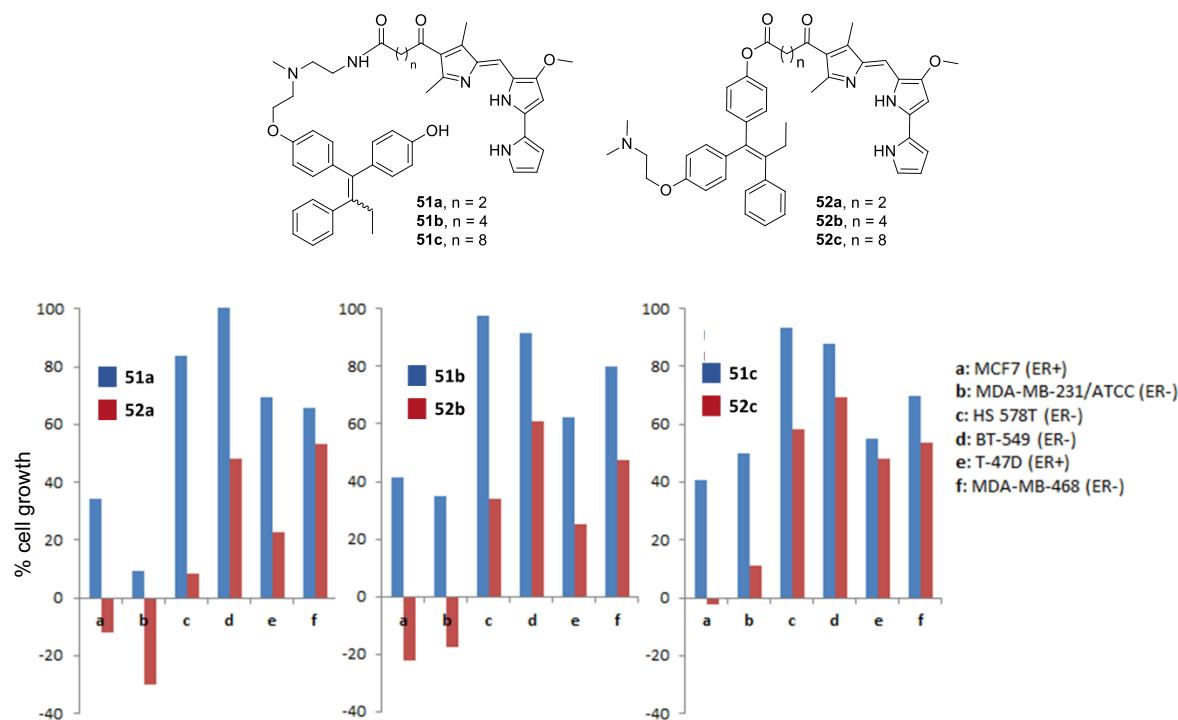
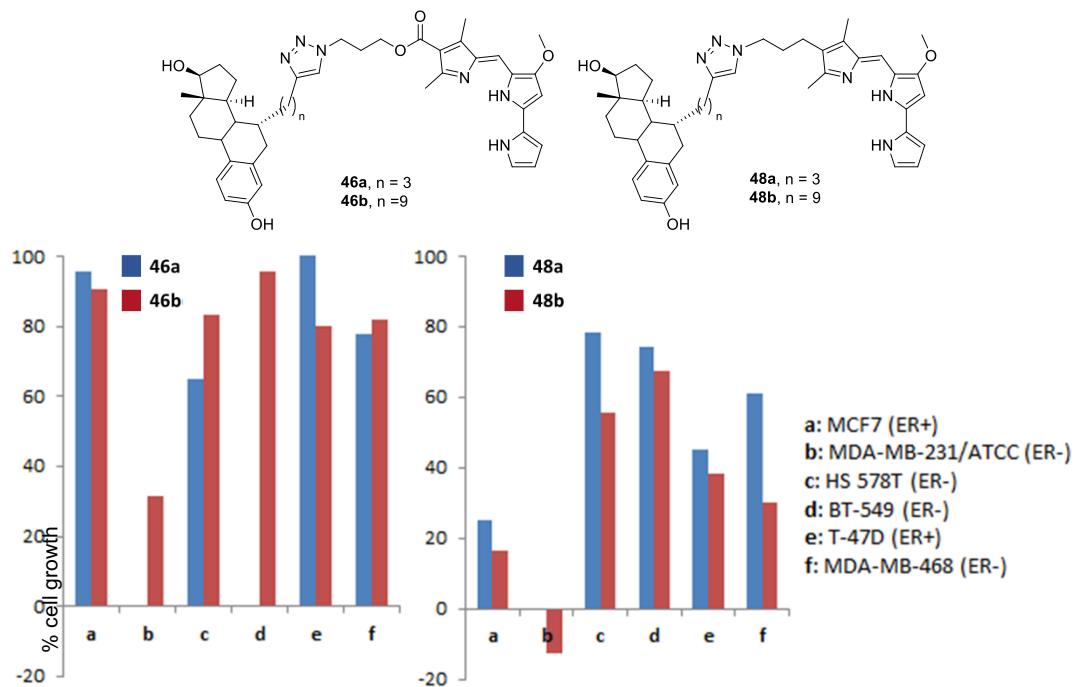
Department of Chemistry, Dalhousie University, PO BOX 15000, Halifax, NS, B3H 4R2, Canada

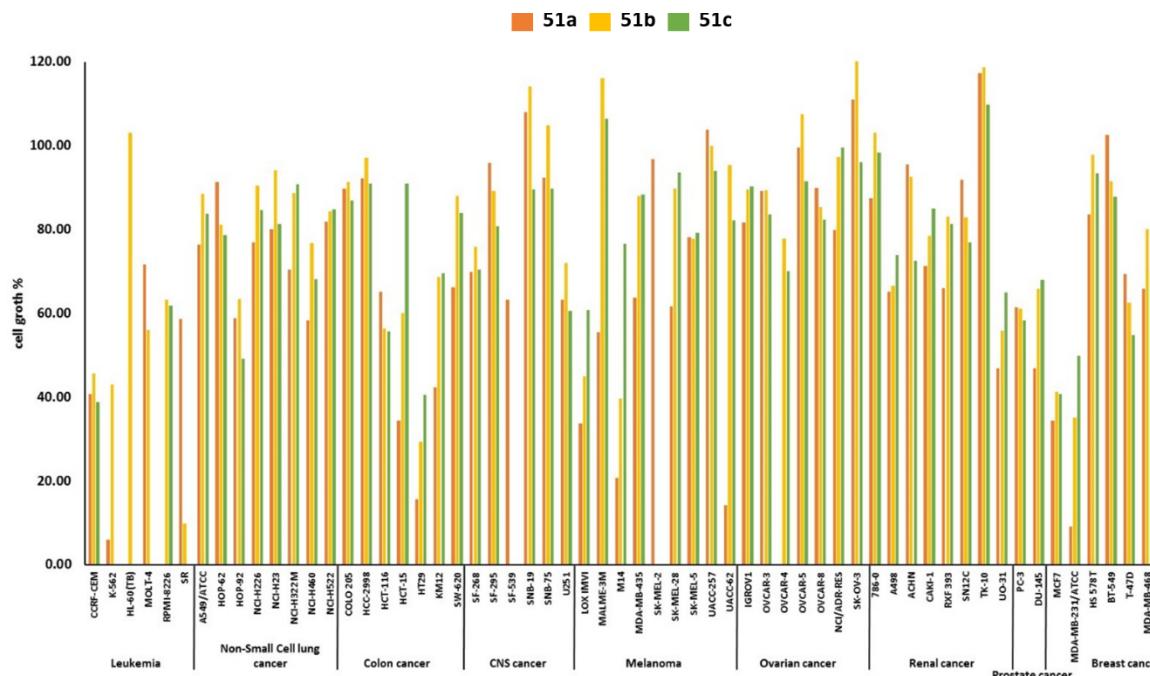
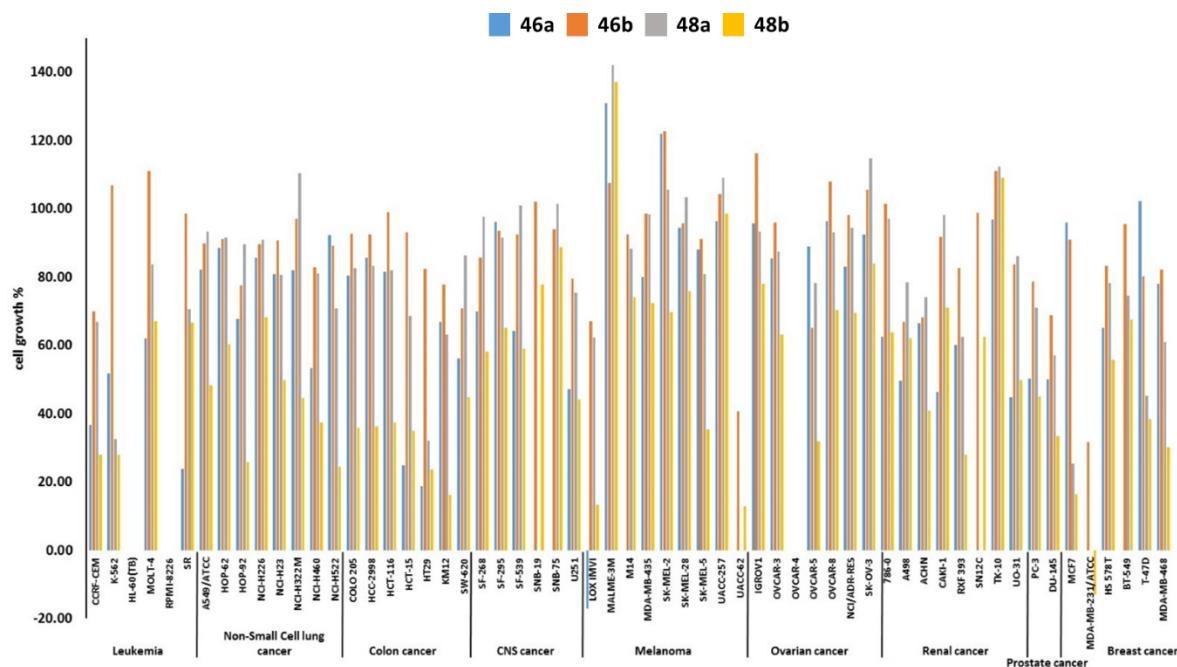
Supplementary Information

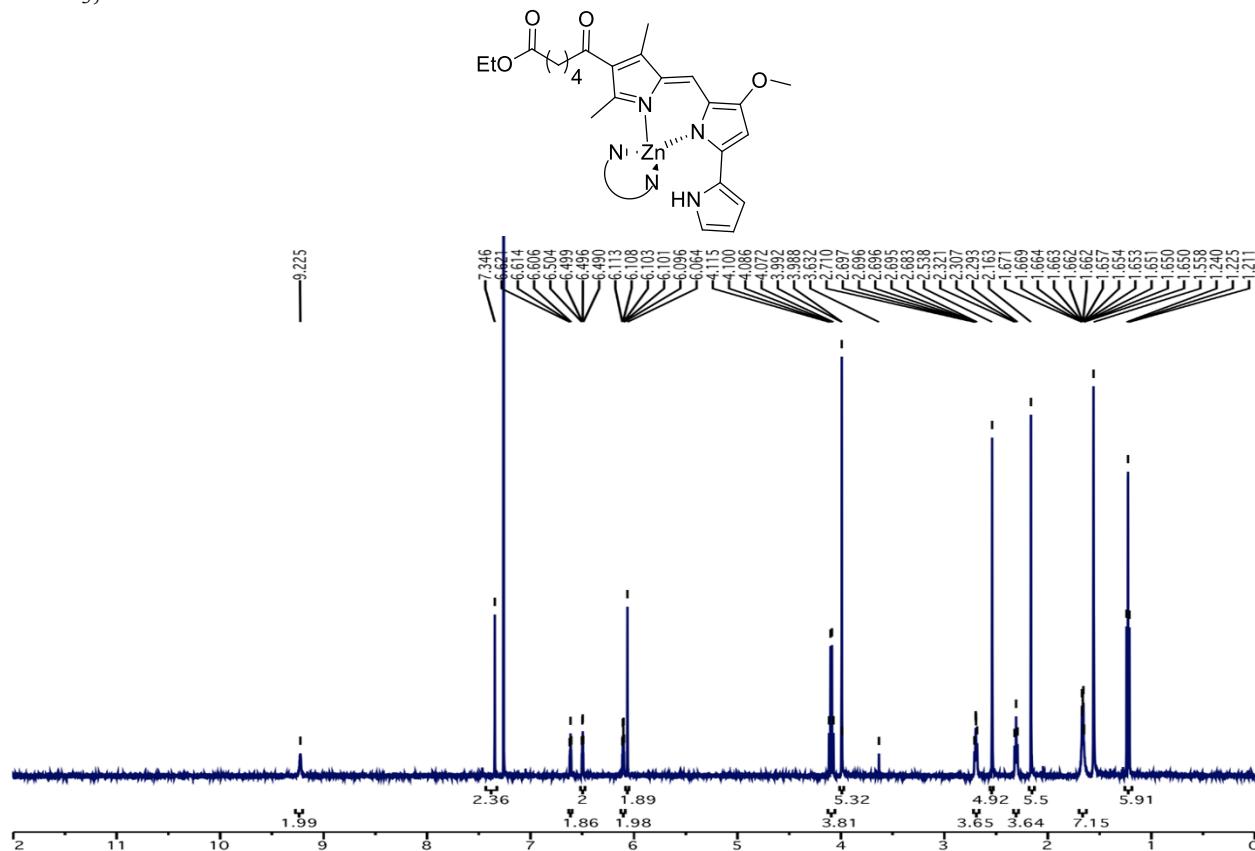
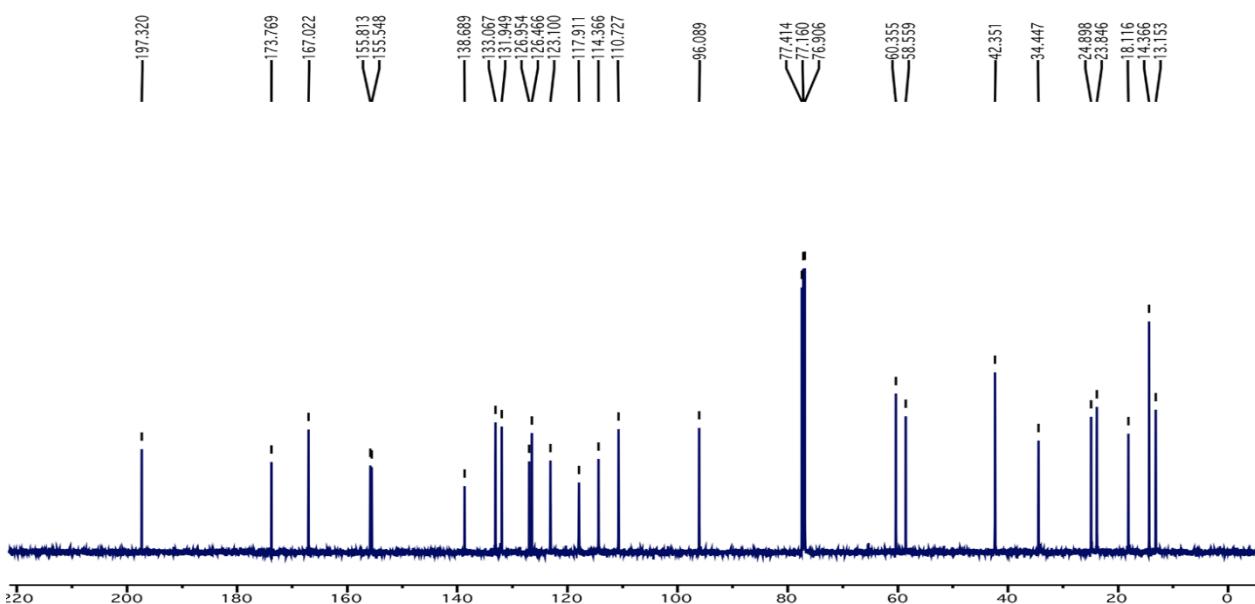
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Growth Inhibition Data

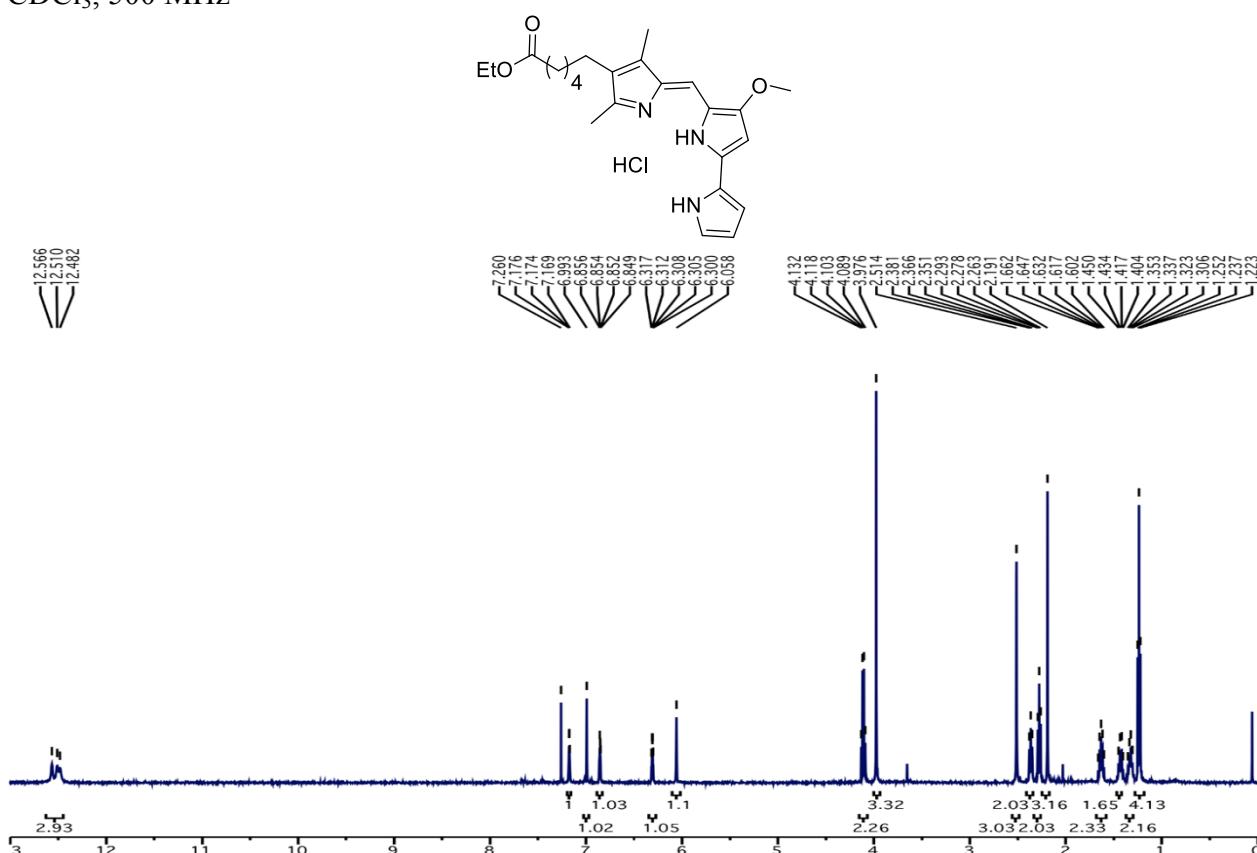
Figure 1. Percent cell growth at 10 μ M 51a-c and 52a-c.Figure 2. Percent cell growth at 10 μ M 46a-b and 48a-b.

**Figure 3.** NCI60 growth inhibition with 10 μ M of conjugates 51a-c.**Figure 4.** NCI60 growth inhibition with 10 μ M of conjugates 46a-b and 48a-b.

¹H and ¹³C NMR Spectra¹H spectrum for 3CDCl₃, 500 MHz¹³C spectrum for 3CDCl₃, 125 MHz

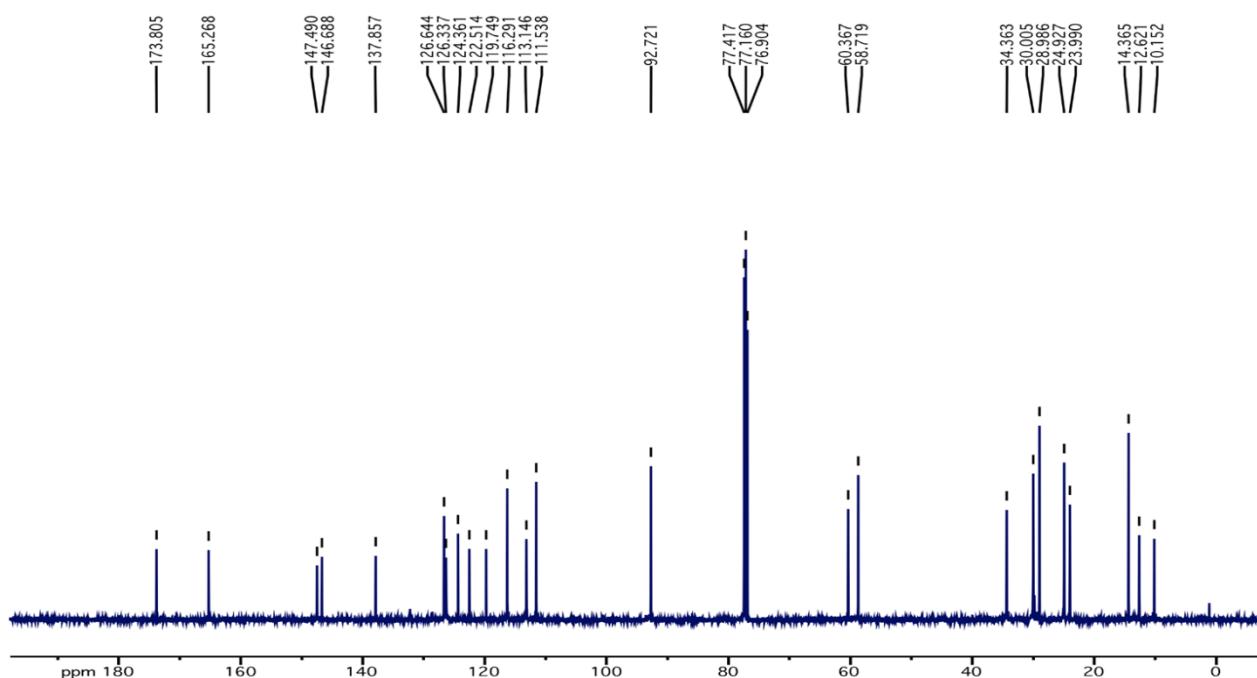
¹H spectrum for 4

¹H spectrum for
CDCl₃, 500 MHz



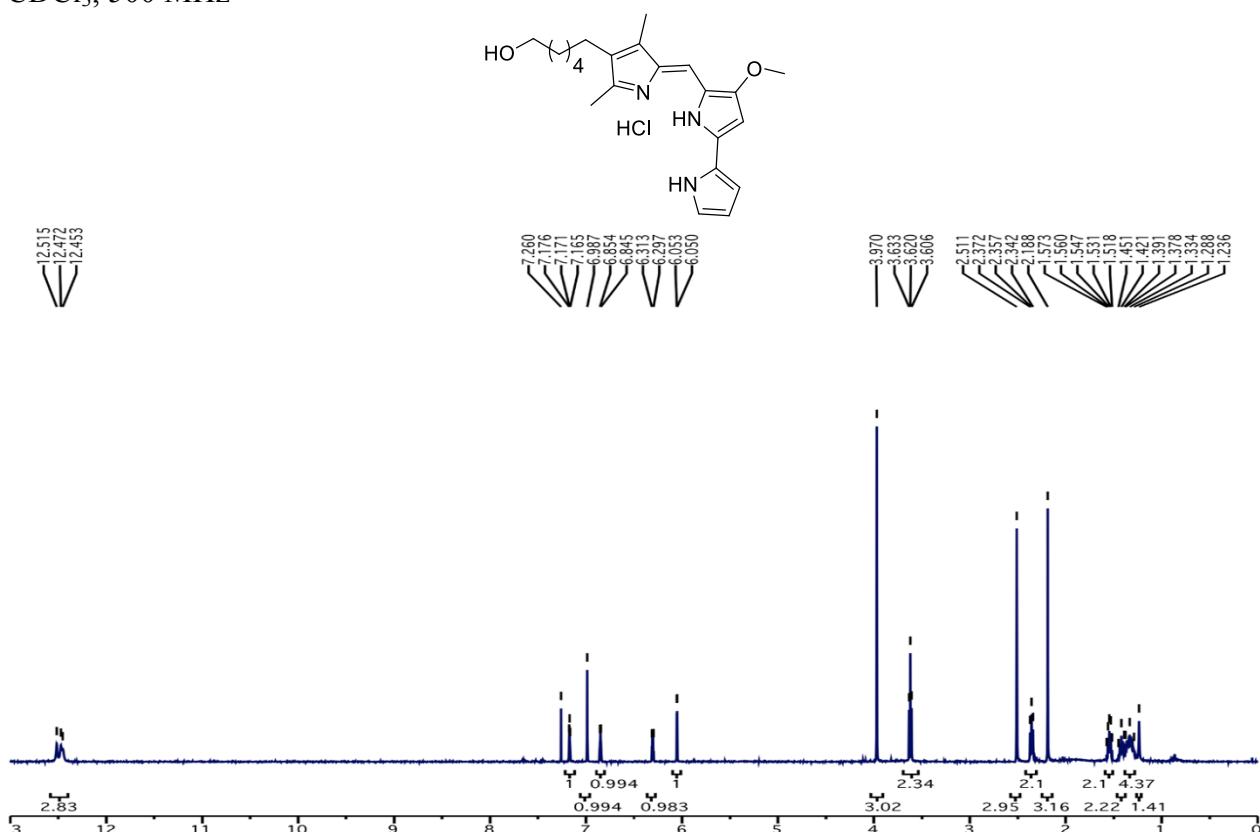
¹³C spectrum for 4

δ spectrum 103



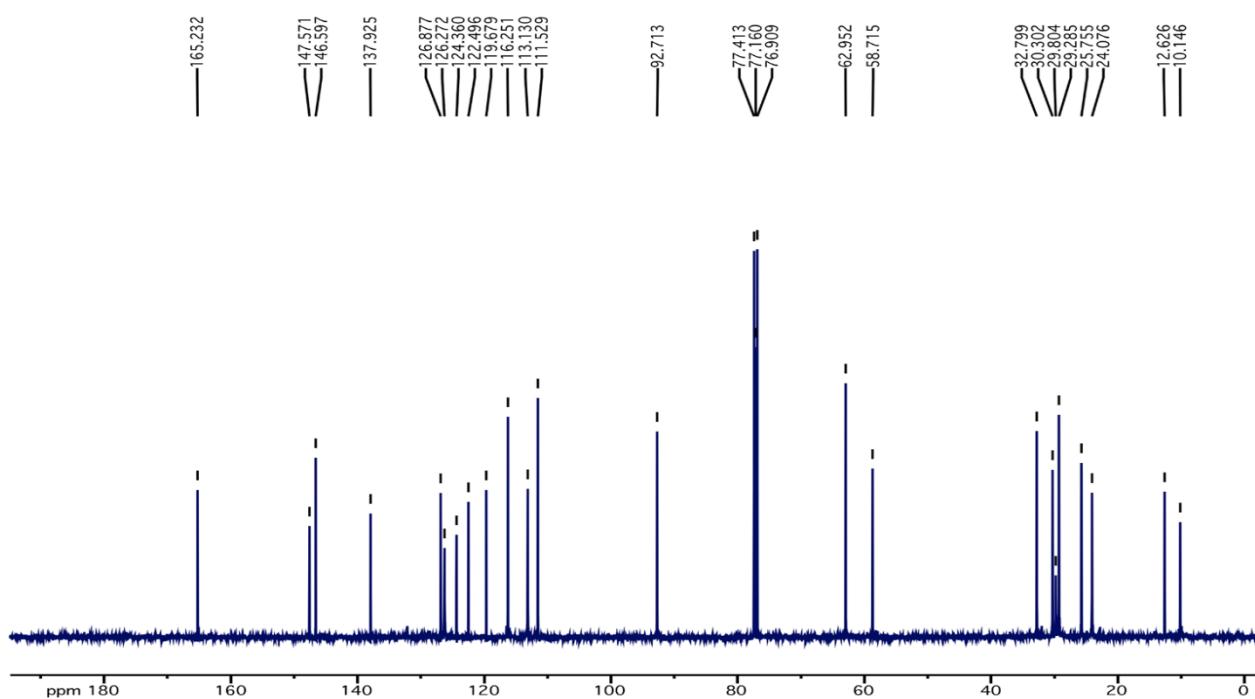
¹H spectrum for 5

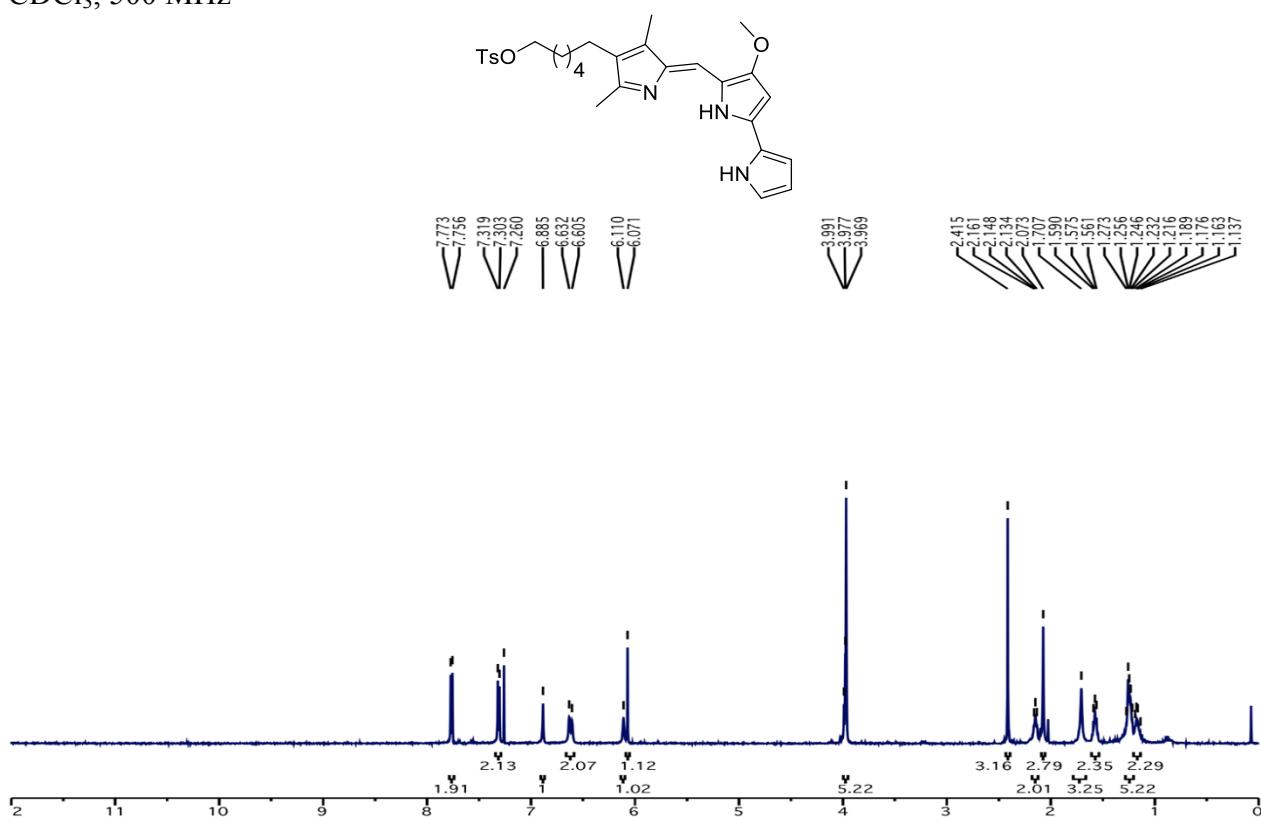
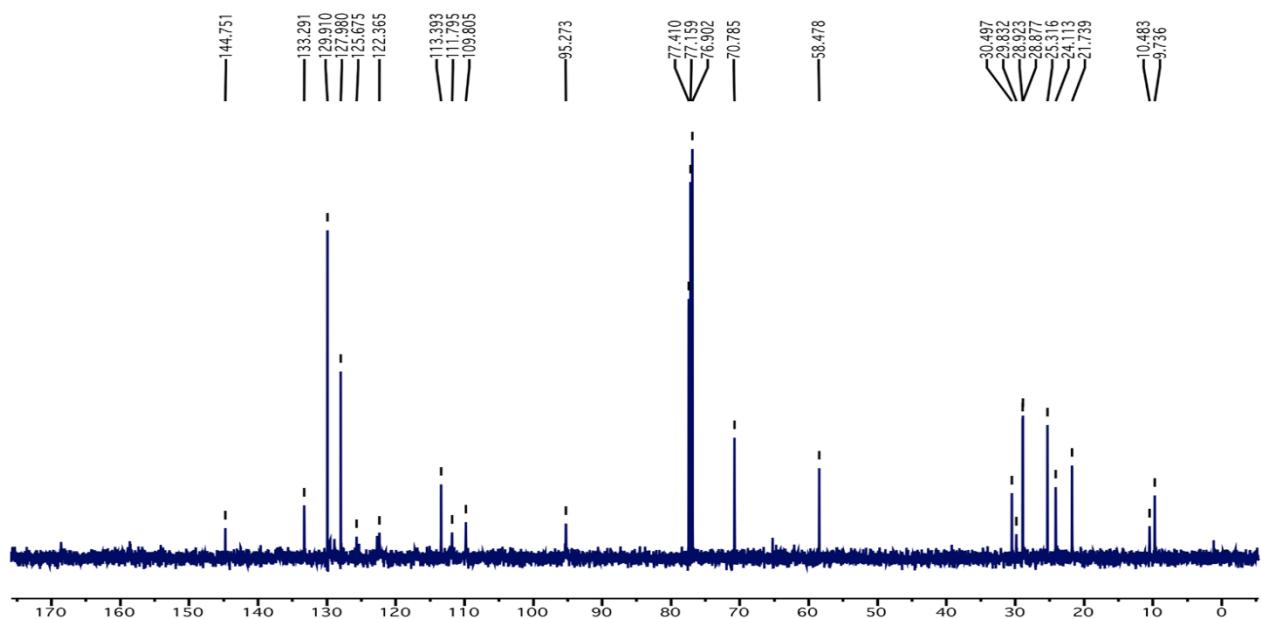
¹H spectrum for
CDCl₃, 500 MHz



¹³C spectrum for 5

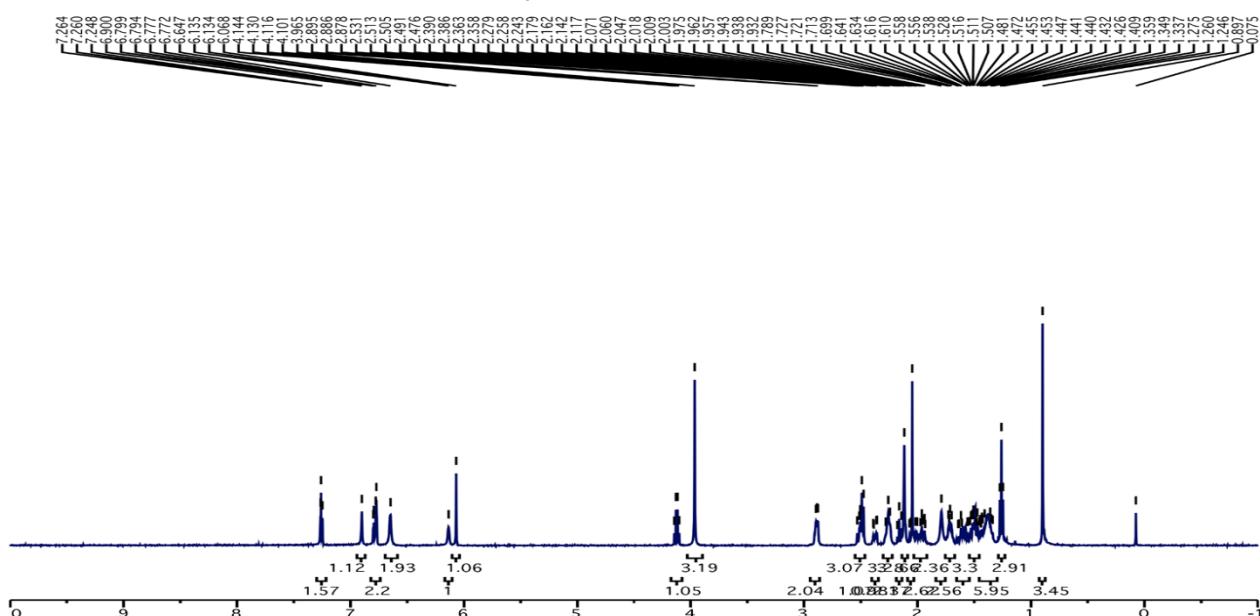
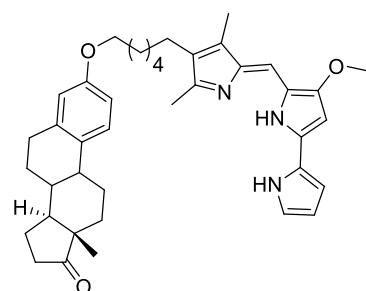
¹³C NMR spectrum taken in



¹H spectrum for 10CDCl₃, 500 MHz¹³C spectrum for 10CDCl₃, 125 MHz

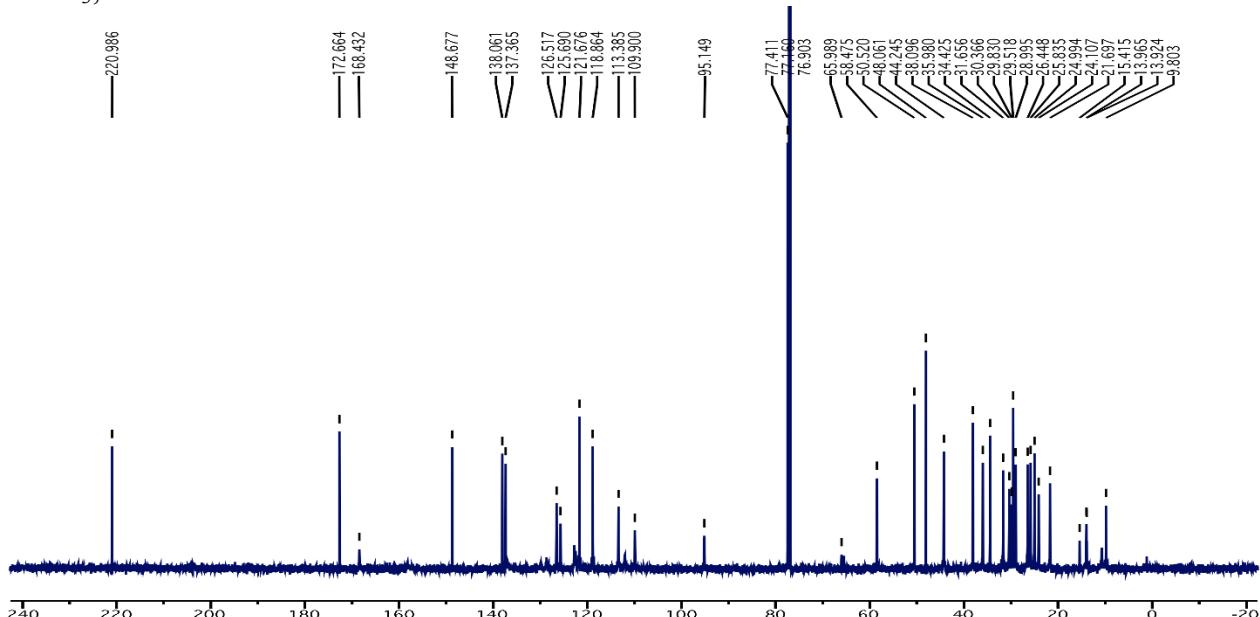
¹H spectrum for 11a

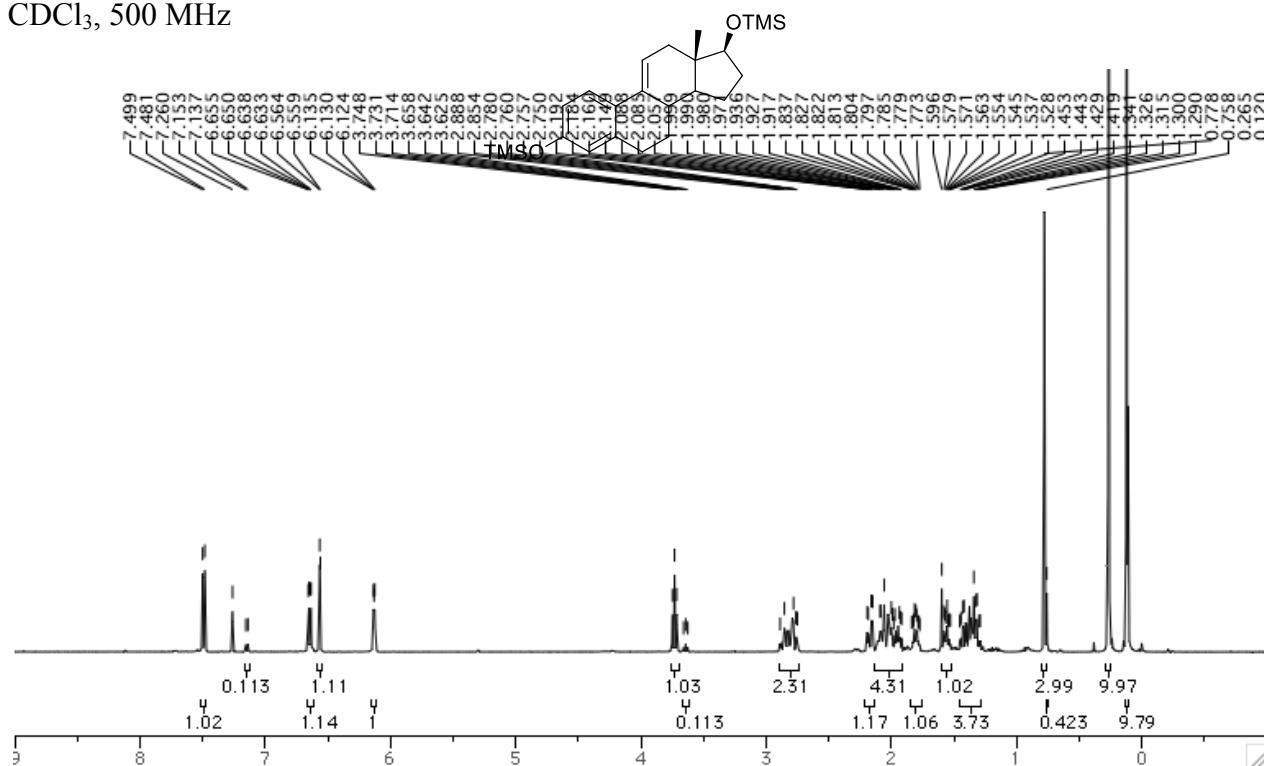
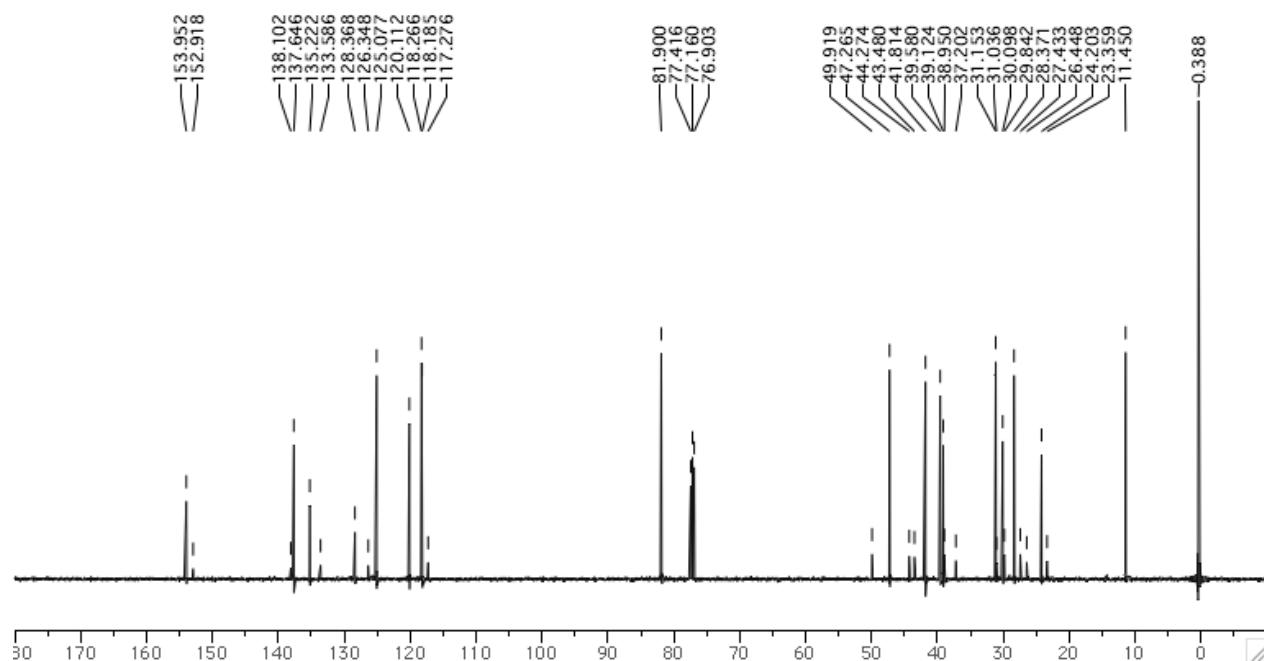
δ spectrum in CDCl_3 , 500 MHz



¹³C spectrum for 11a

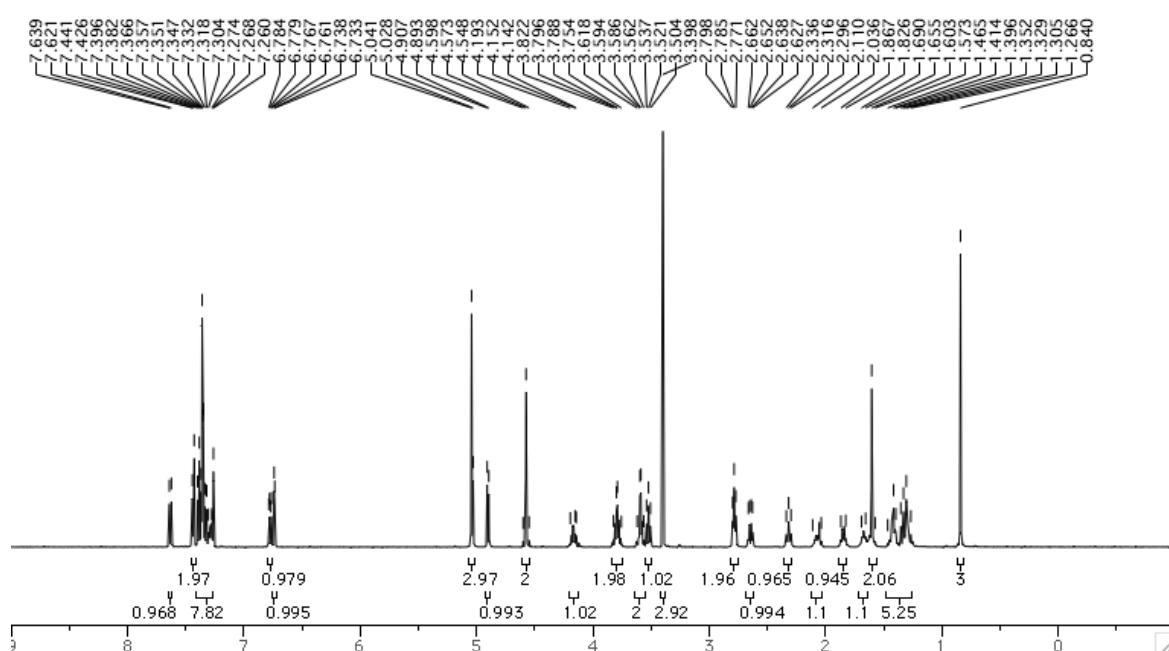
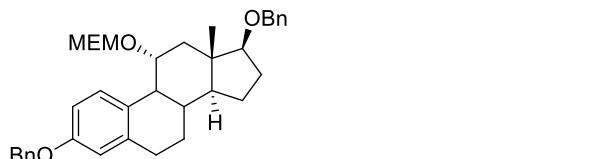
¹³C spectrum 103



¹H spectrum for 14CDCl₃, 500 MHz¹³C spectrum for 14CDCl₃, 125 MHz

¹H spectrum for 18

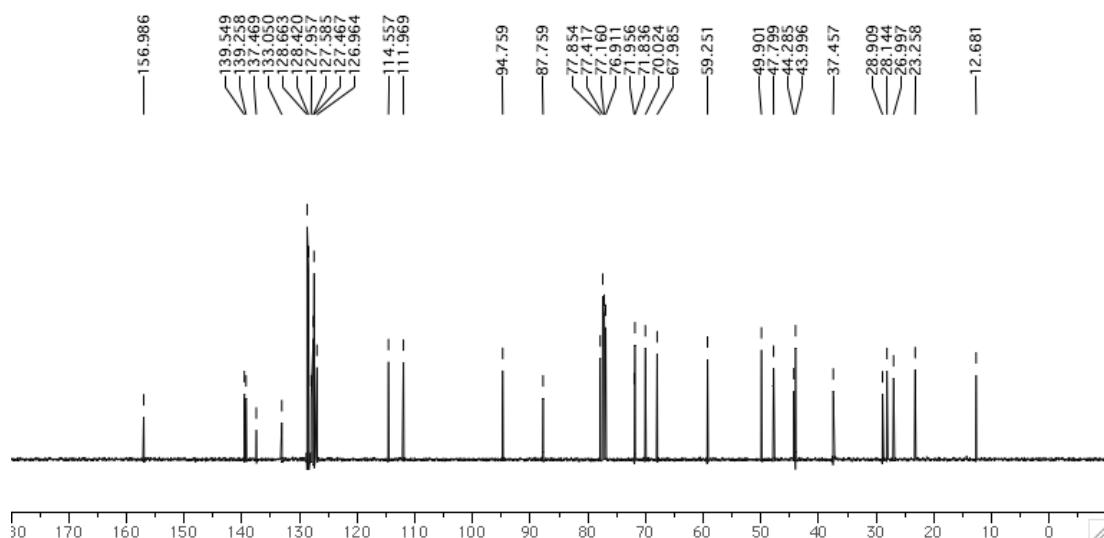
δ (ppm) relative to TMS in CDCl_3 , 500 MHz

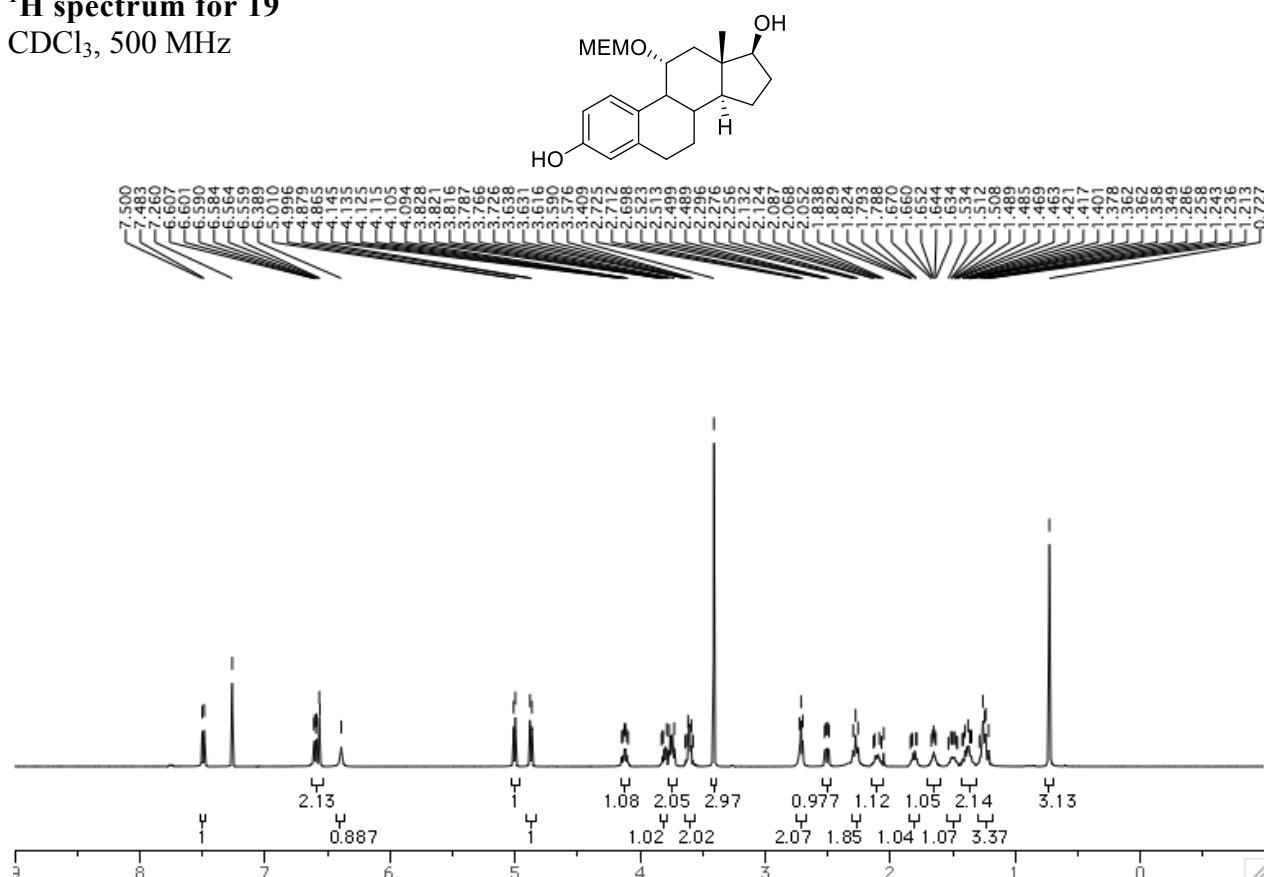
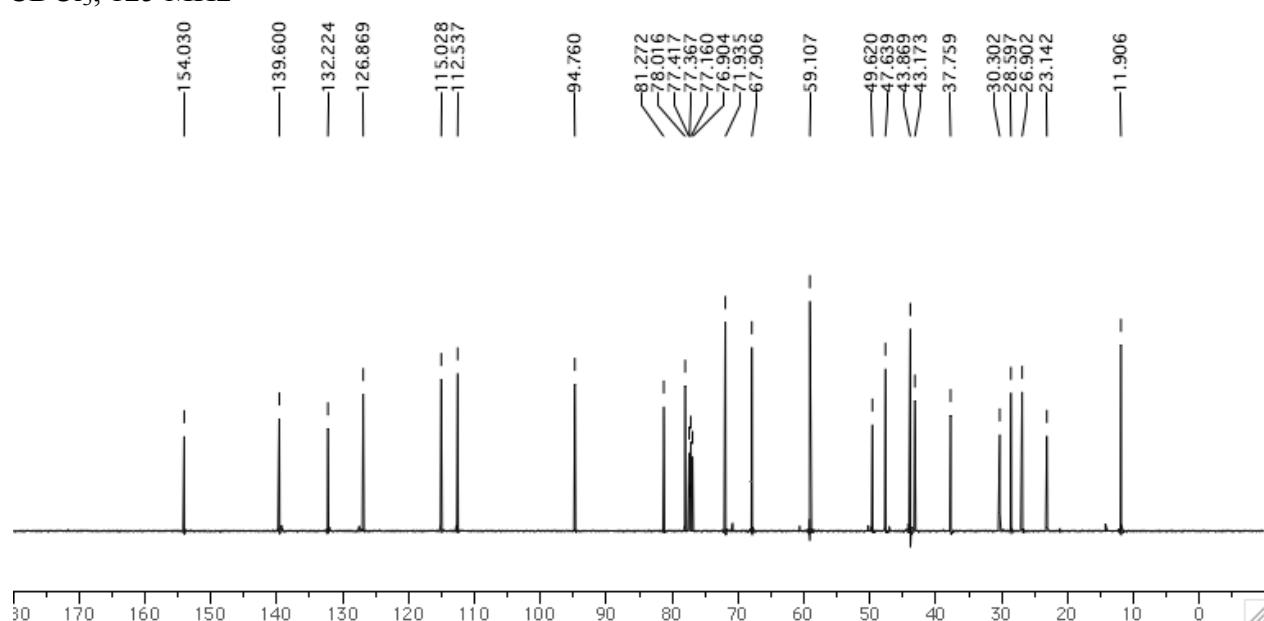


¹³C spectrum for 18

δ Spectrum in

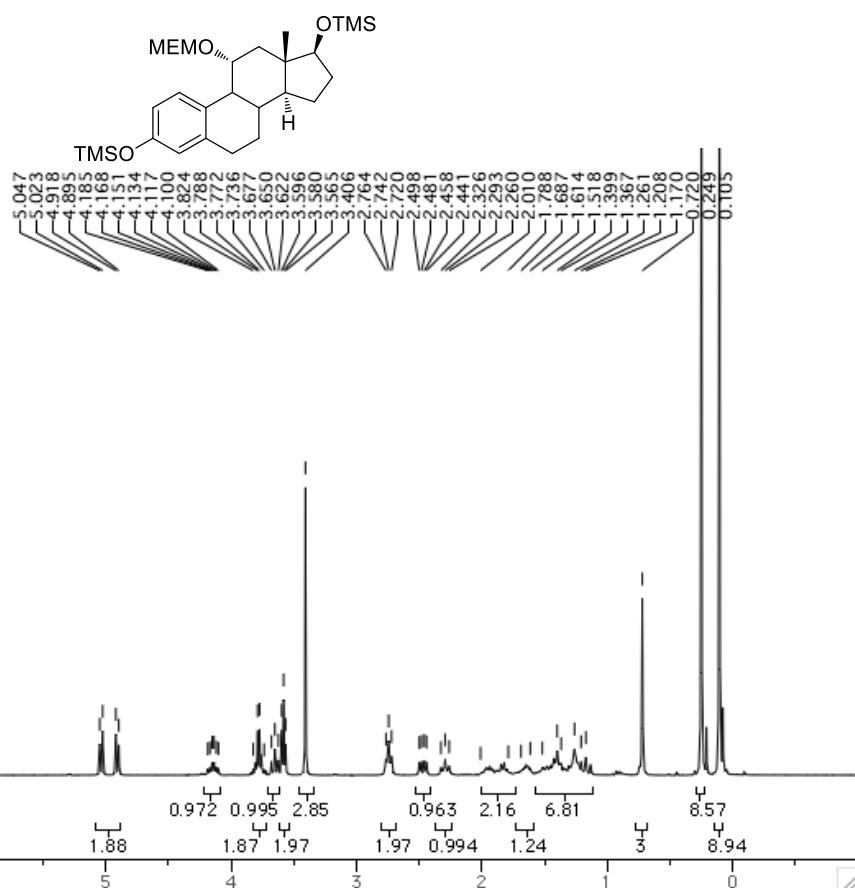
CDCl_3 125 MHz



¹H spectrum for 19CDCl₃, 500 MHz¹³C spectrum for 19CDCl₃, 125 MHz

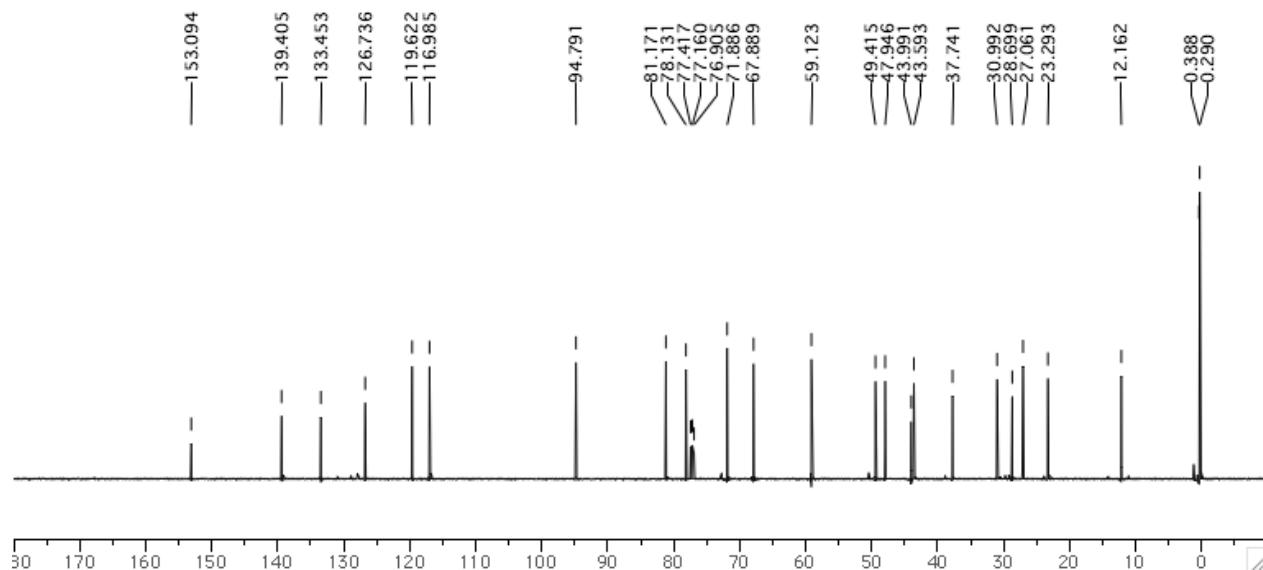
¹H spectrum for 20

CDCl_3 , 300 MHz



¹³C spectrum for 20

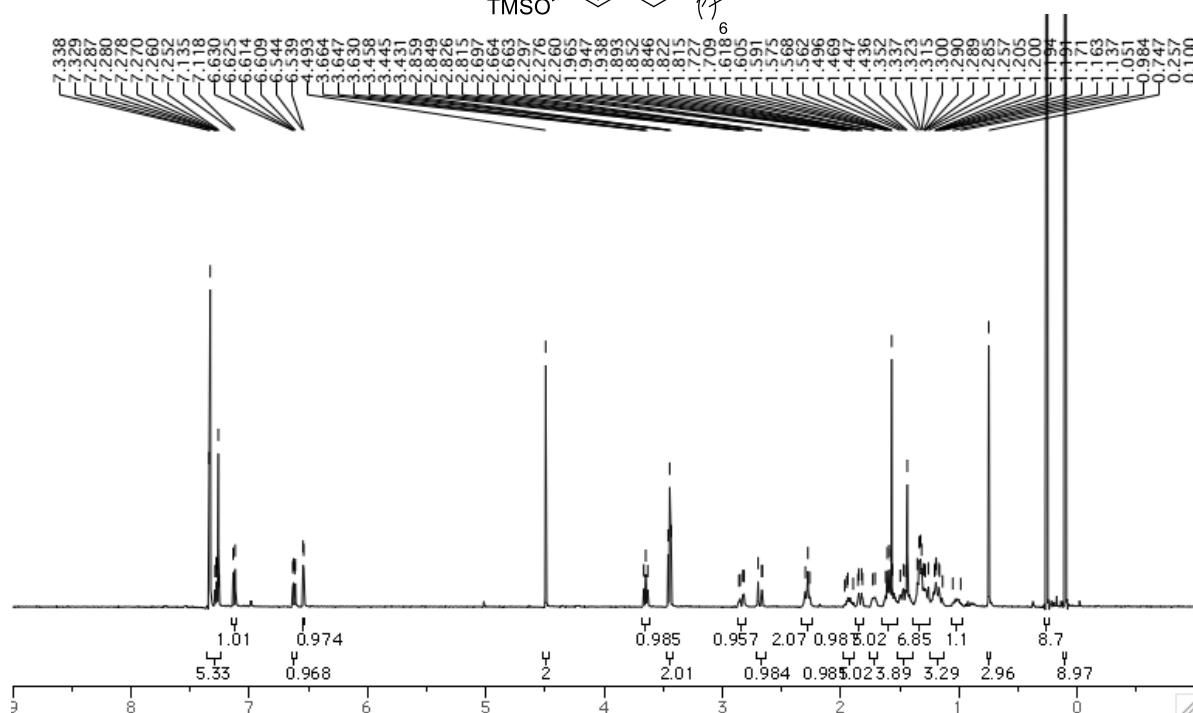
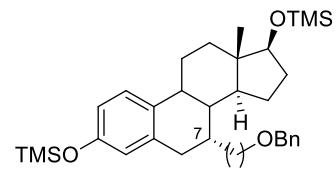
δ (ppm) vs
 CDCl_3 , 125 MHz



¹H spectrum for 22a

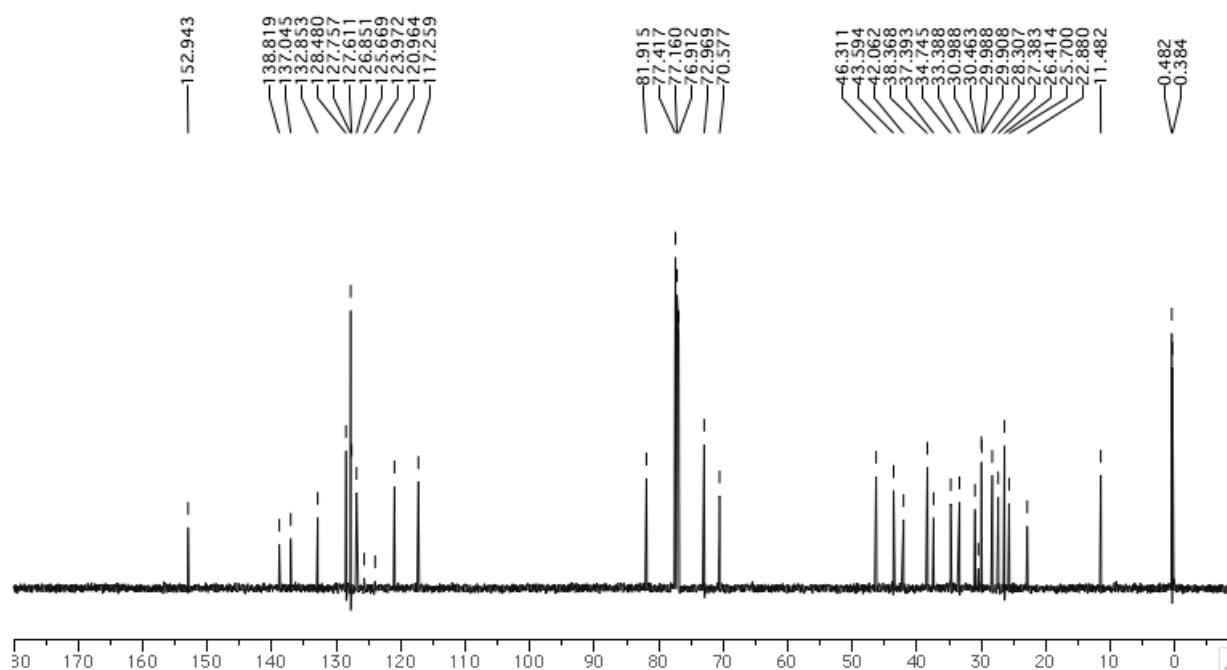
δ Spectrum for

CDCl_3 , 500 MHz



¹³C spectrum for 22a

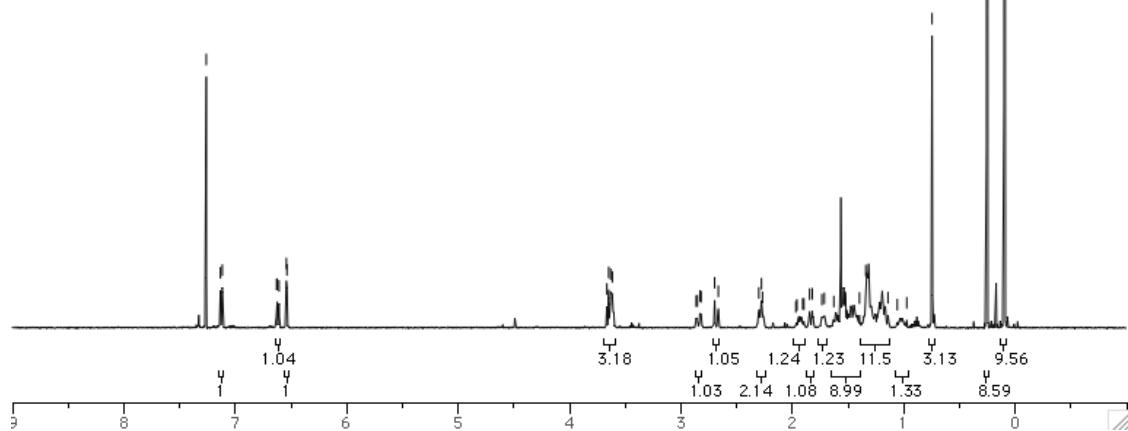
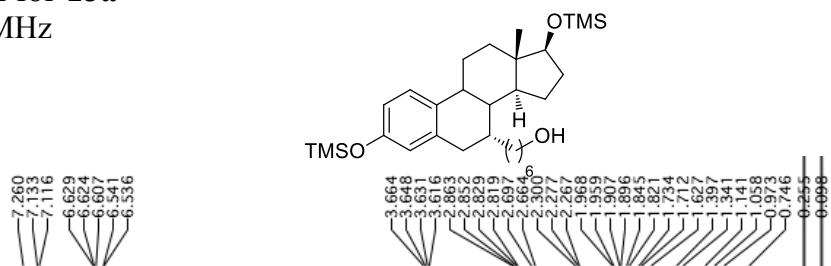
δ spectrum to



¹H spectrum for 23a

¹H spectrum for

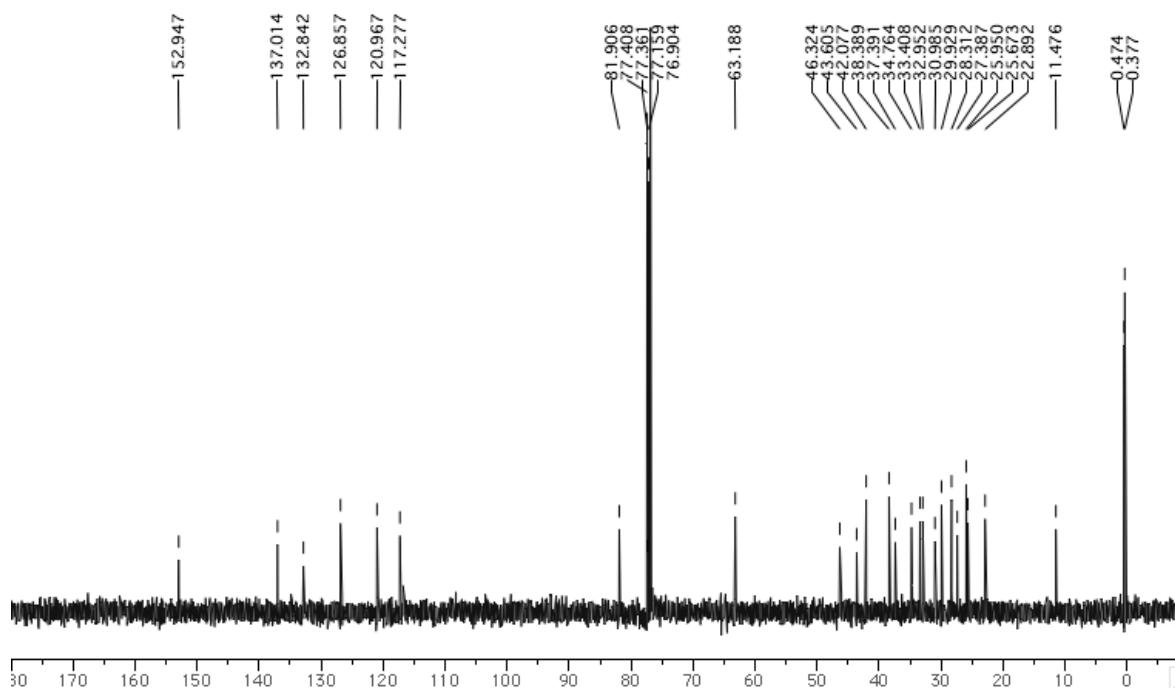
CDCl₃, 500 MHz



¹³C spectrum for 23a

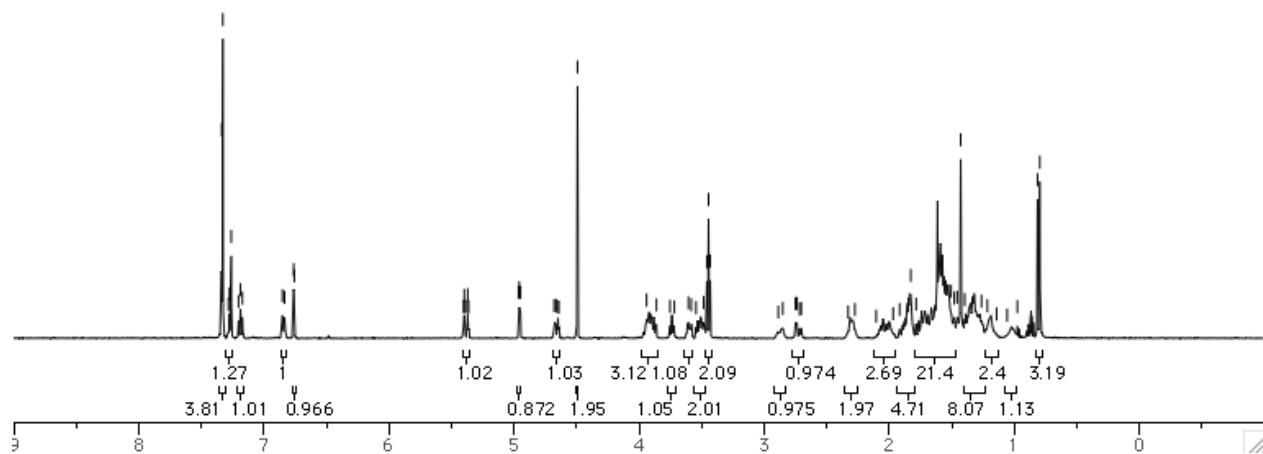
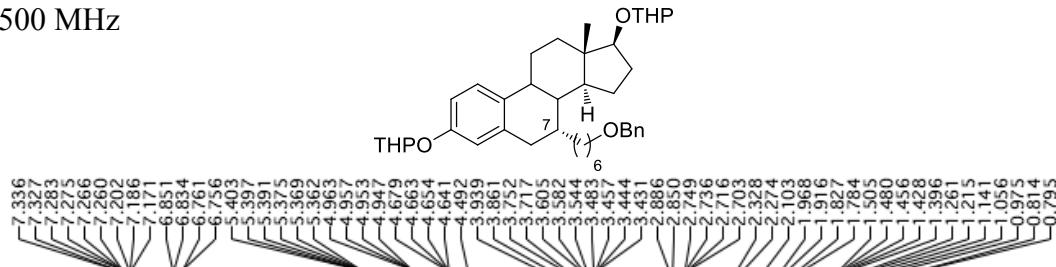
δ spectrum in

CDCl_3 , 125 MHz



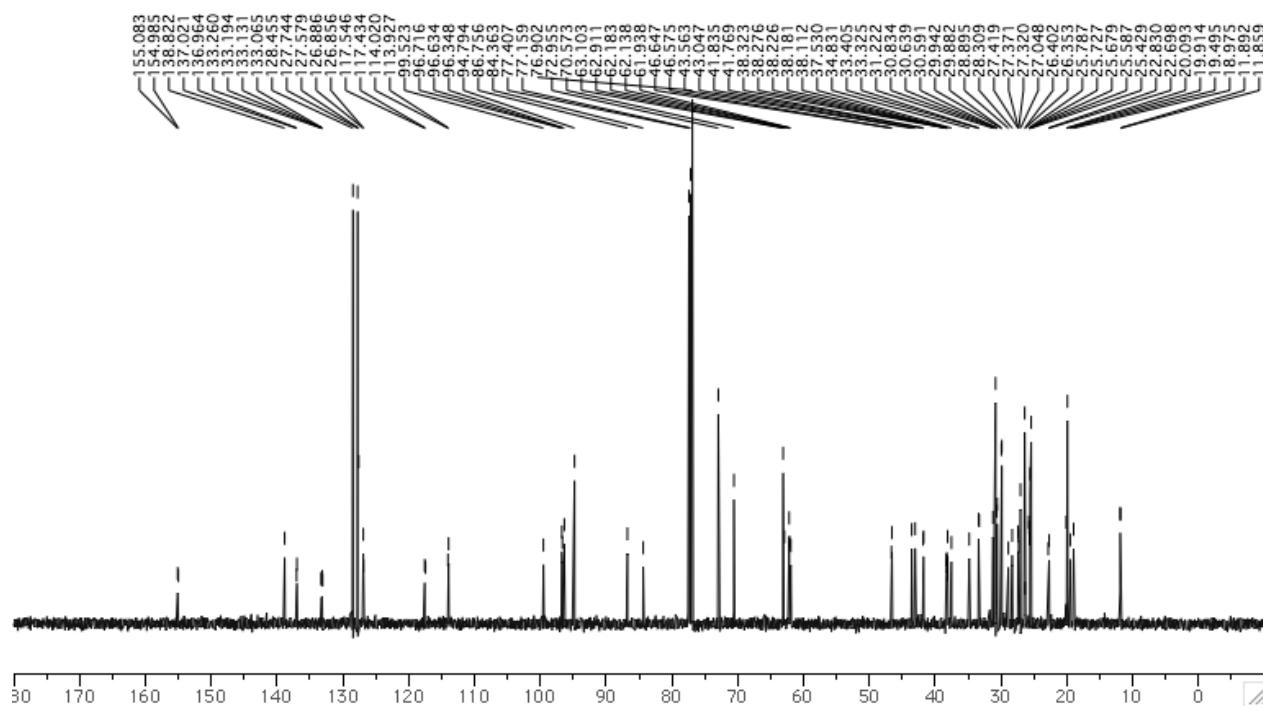
¹H spectrum for 22b

CDCl_3 , 500 MHz



¹³C spectrum for 22b

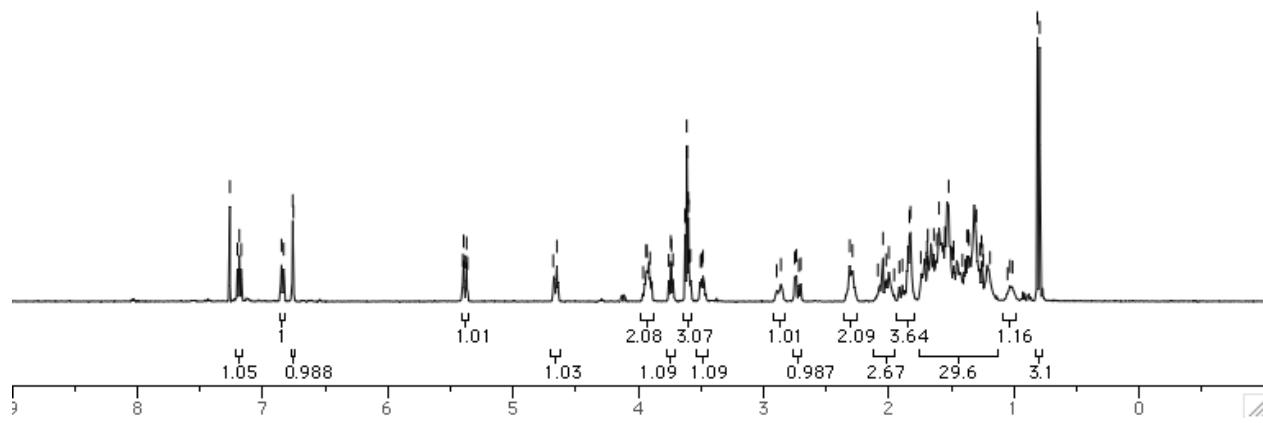
CDCl_3 , 125 MHz



¹H spectrum for 23b

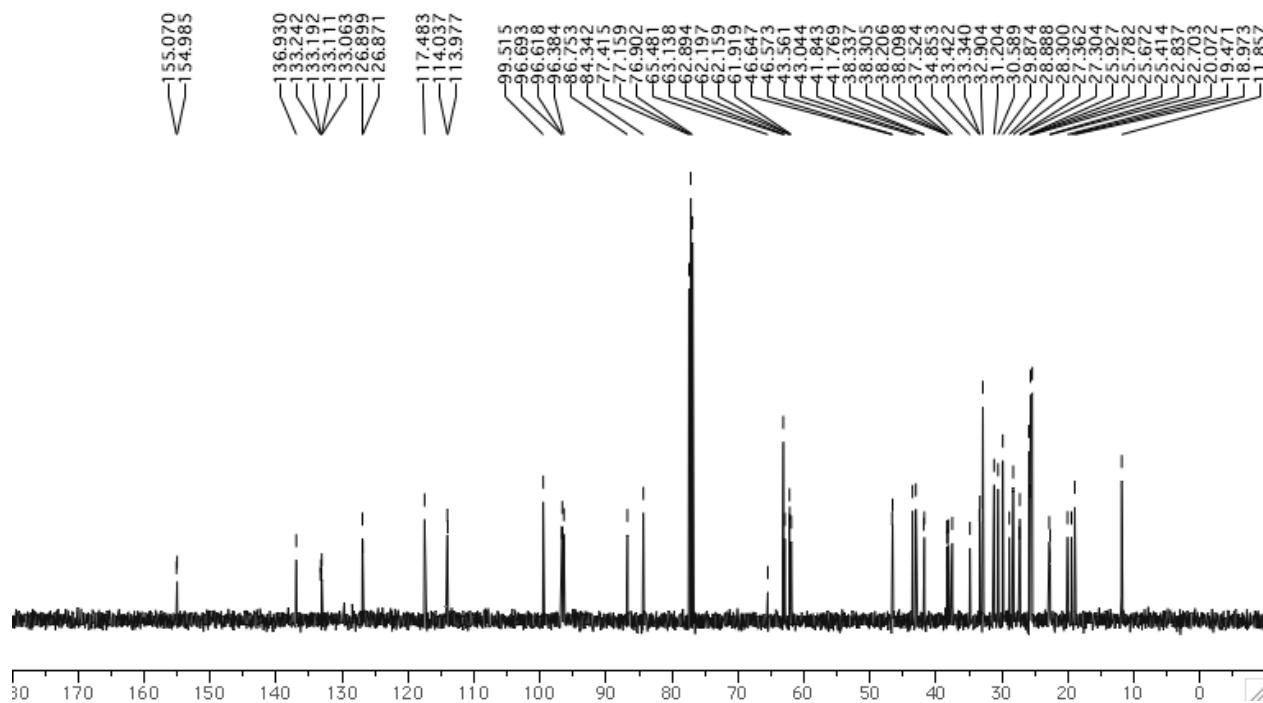
¹H spectrum for

CDCl₃, 500 MHz



¹³C spectrum for 23b

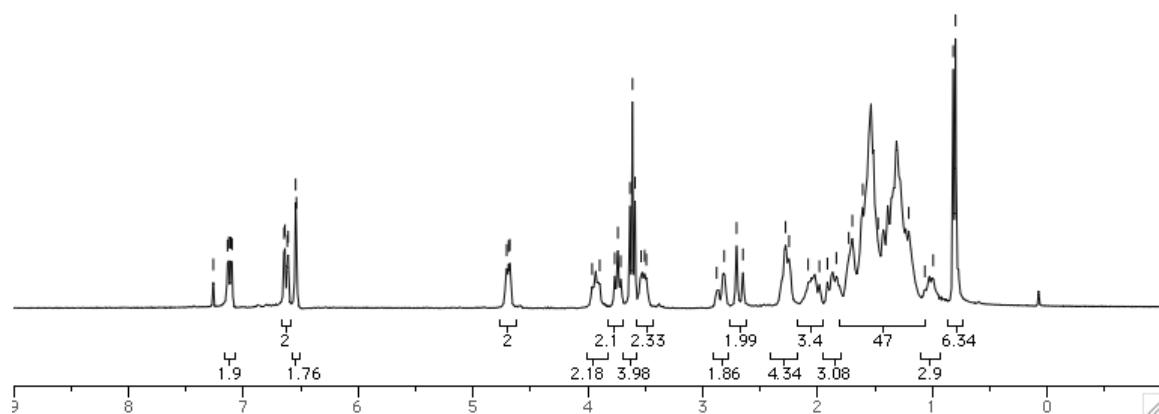
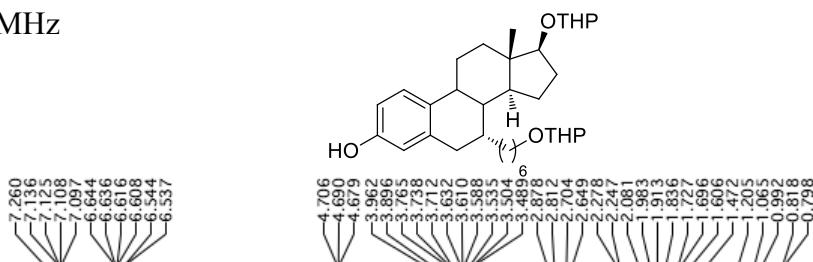
δ (ppm) vs
 CDCl_3 , 125 MHz



¹H spectrum for 24

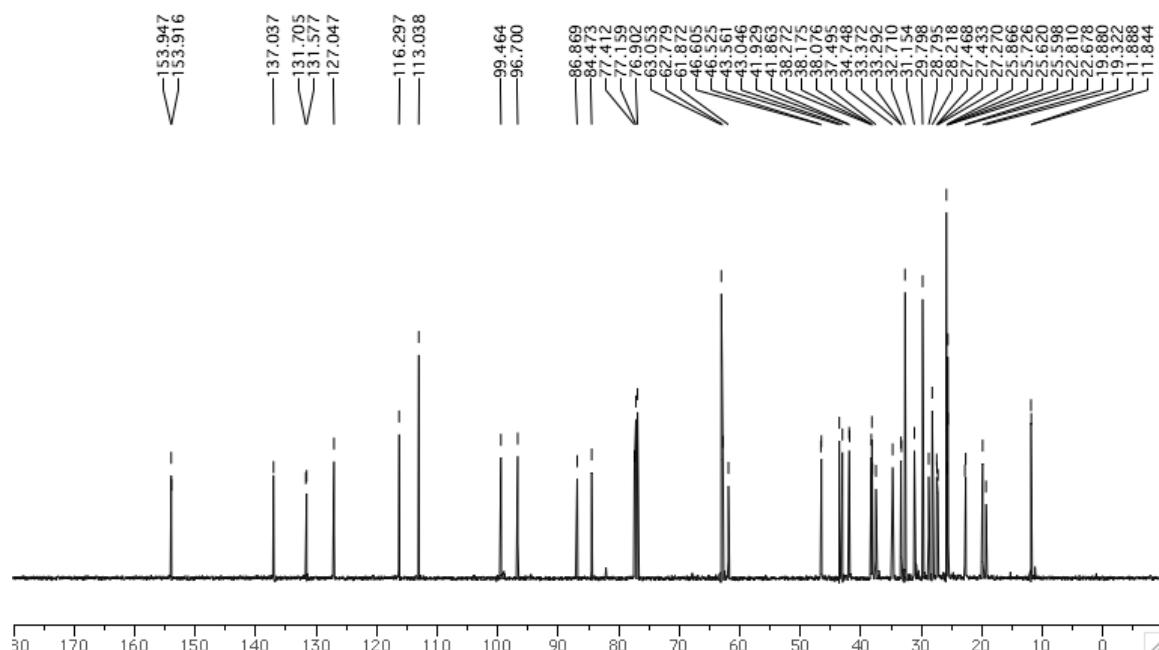
δ spectrum in

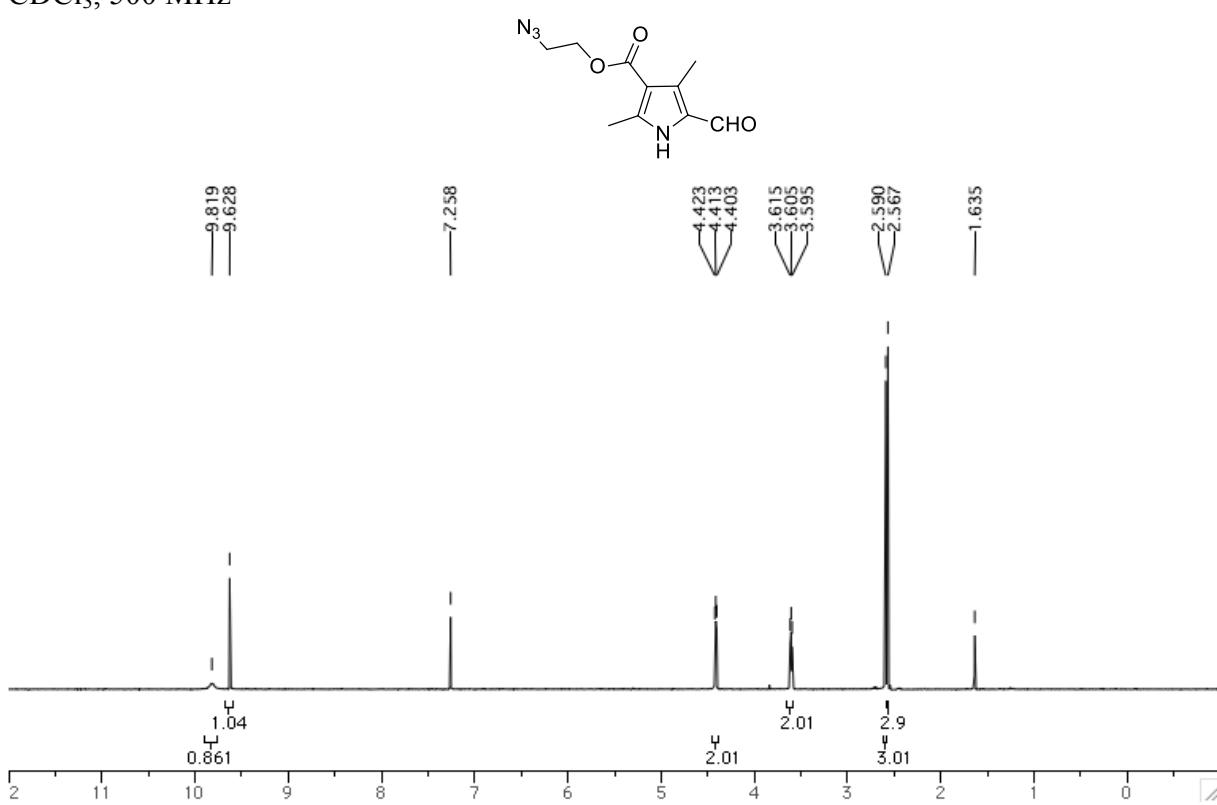
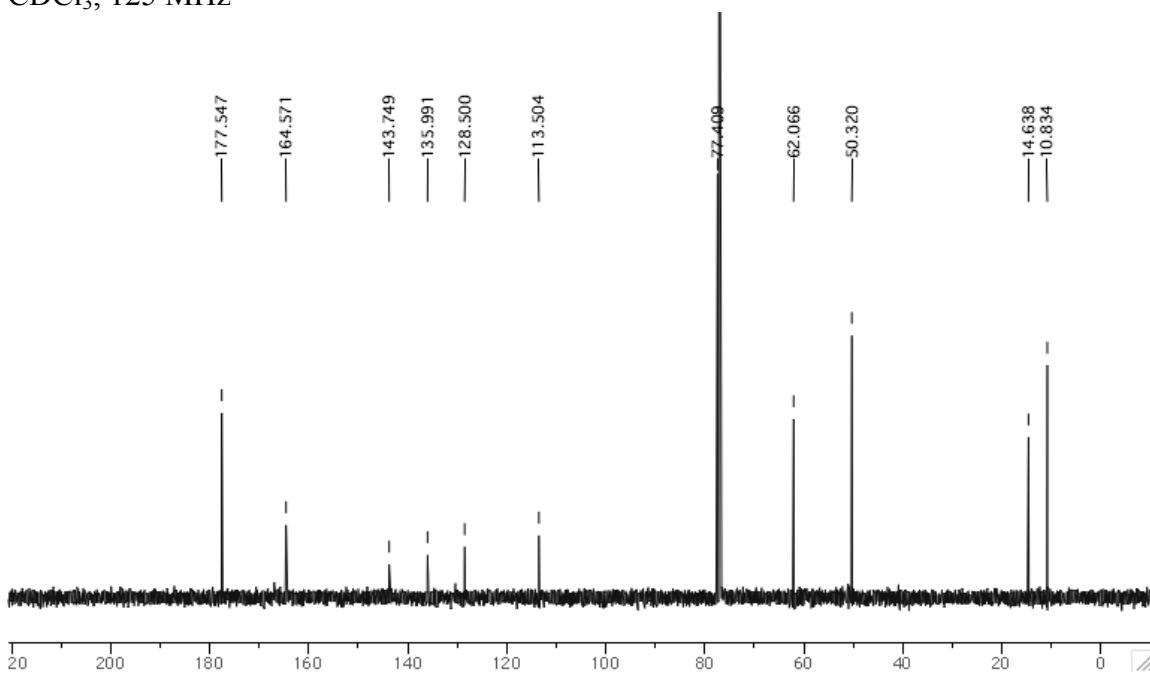
CDCl_3 , 300 MHz

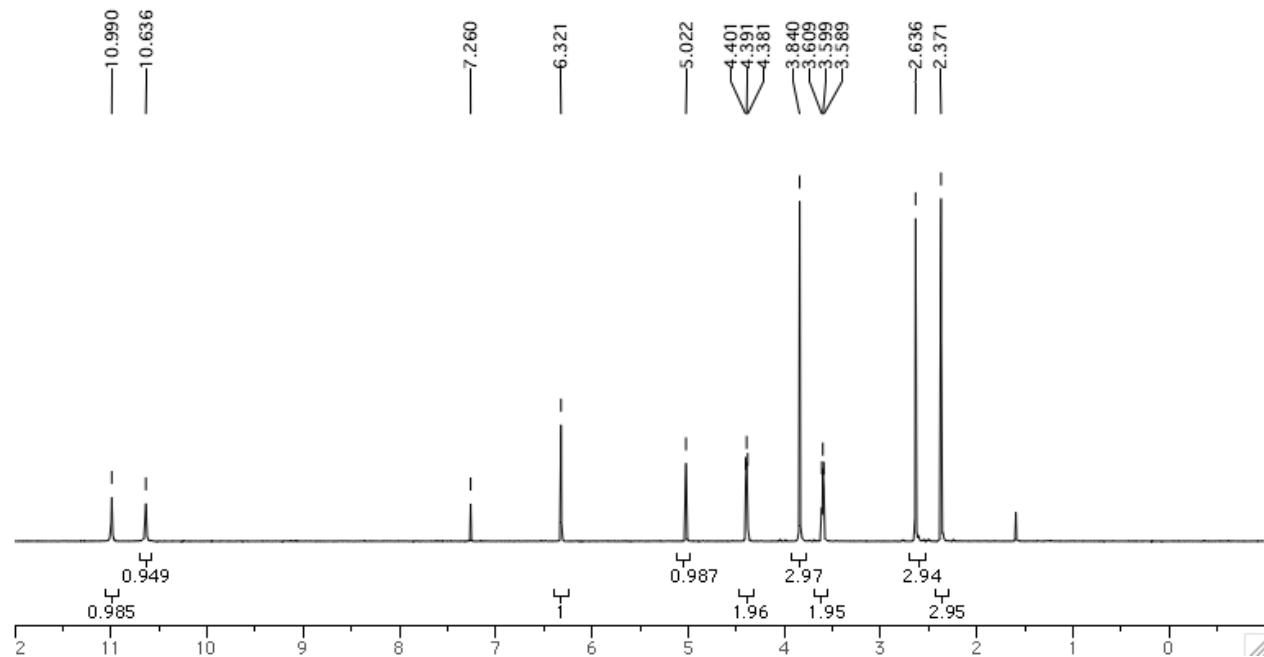
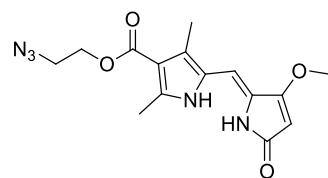
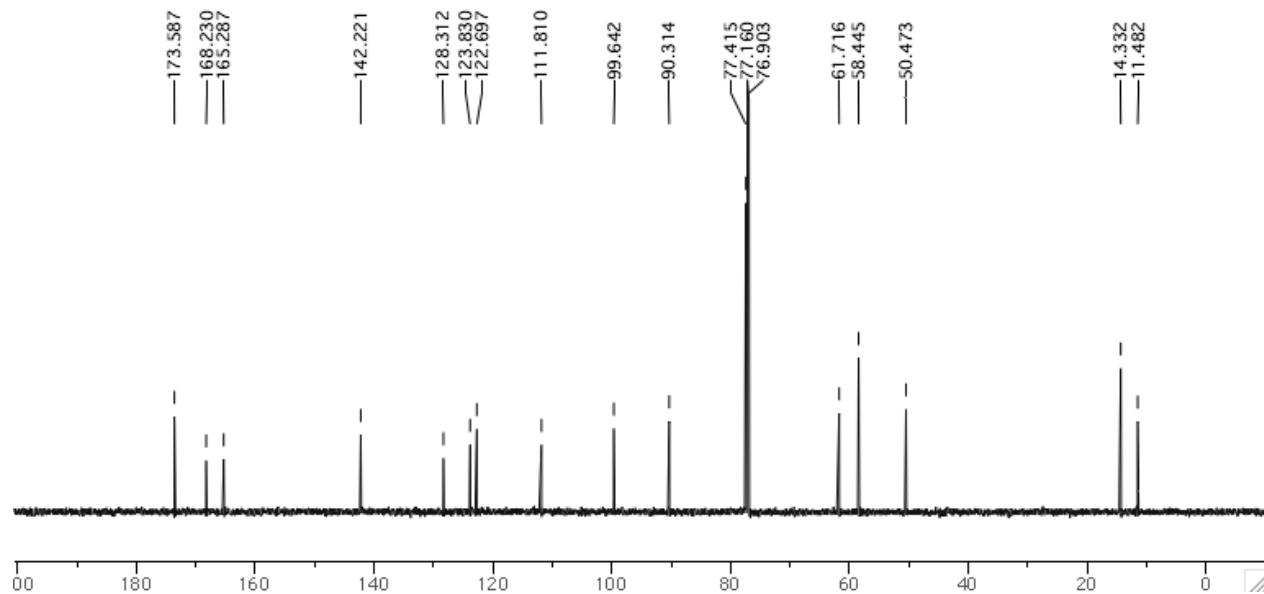


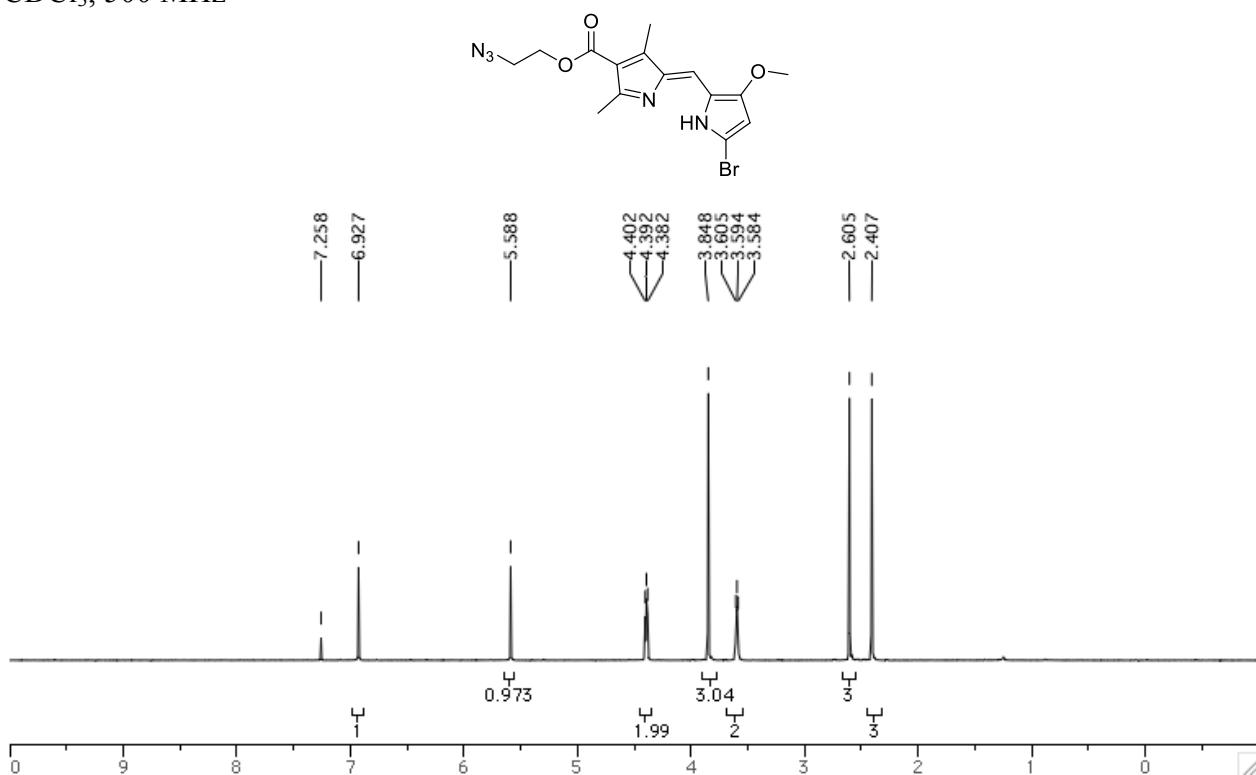
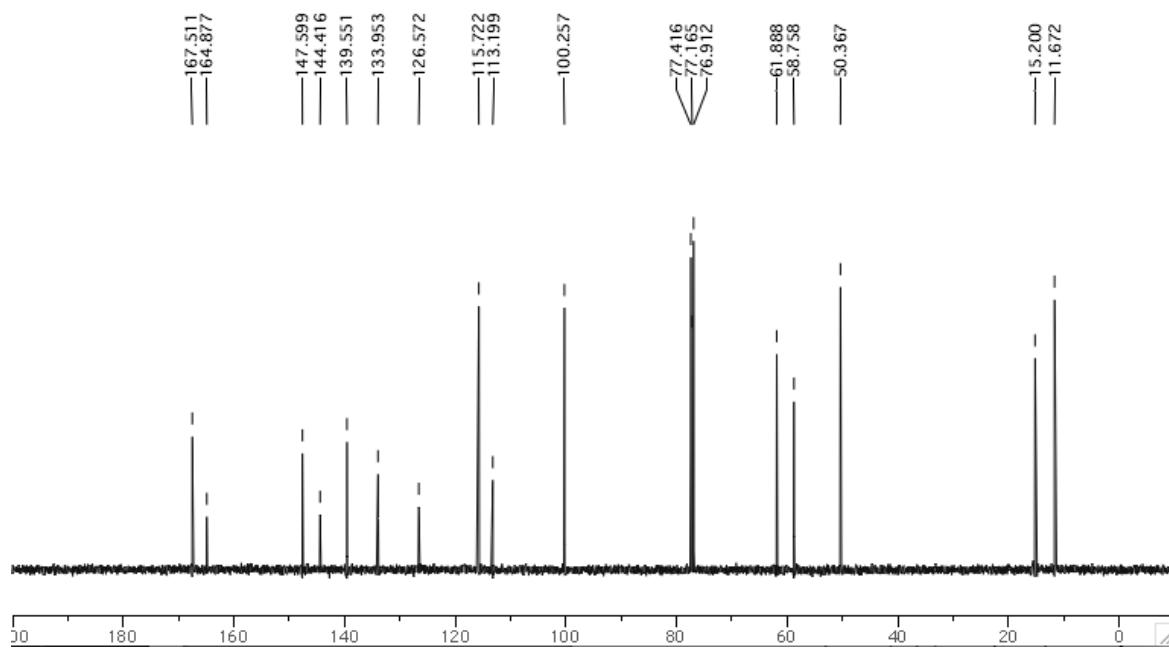
¹³C spectrum for 24

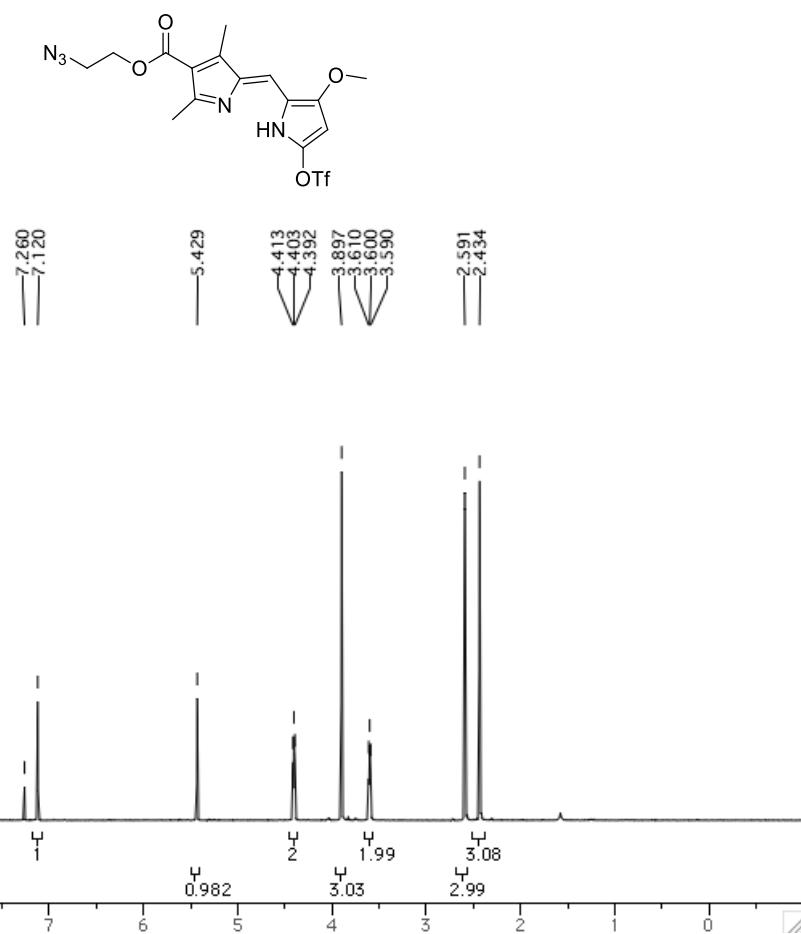
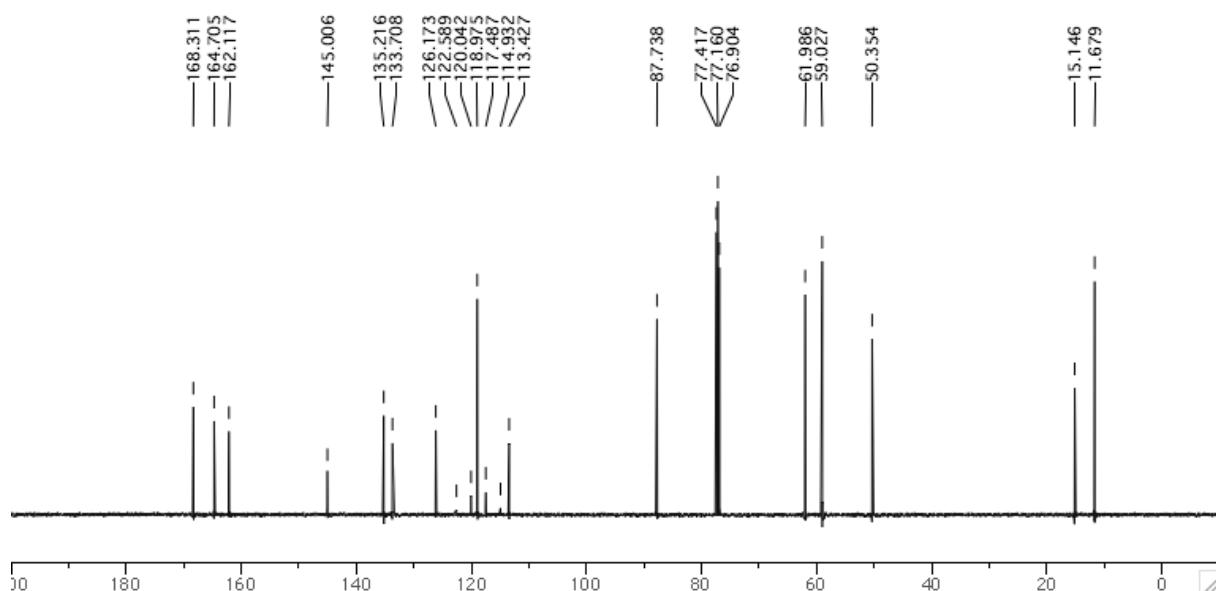
¹³C spectrum 10.

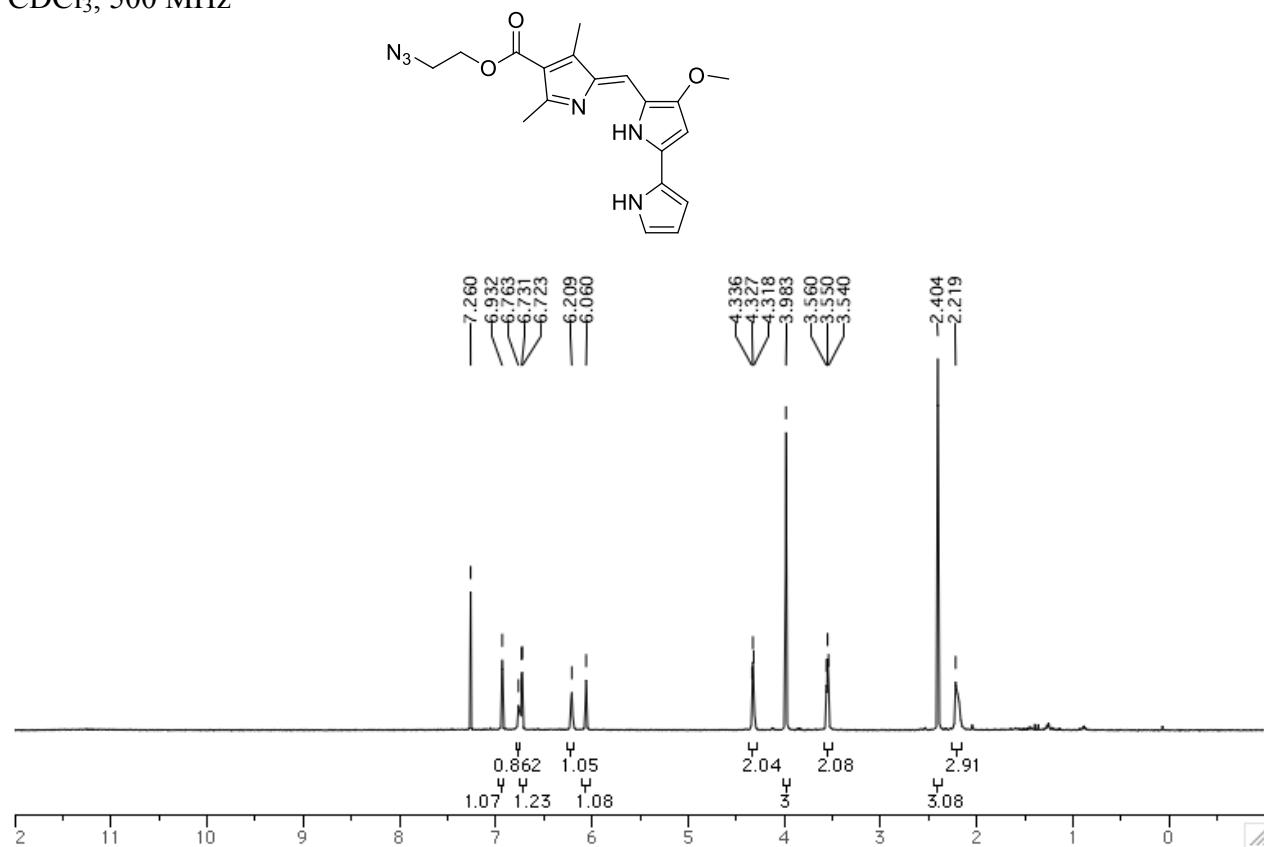
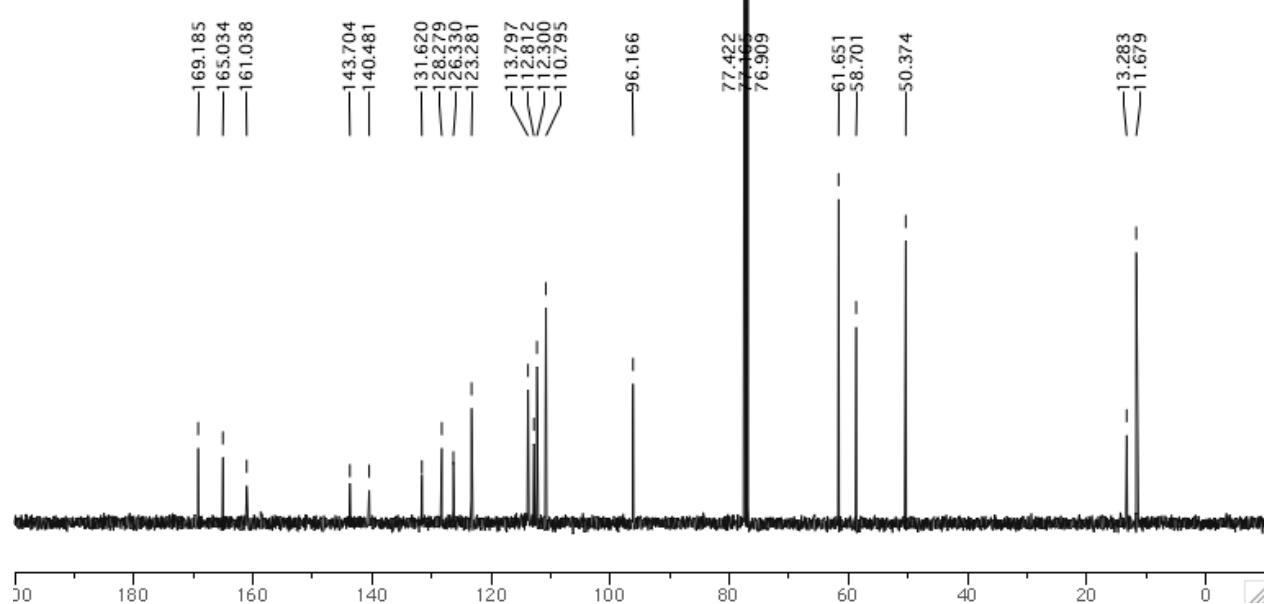


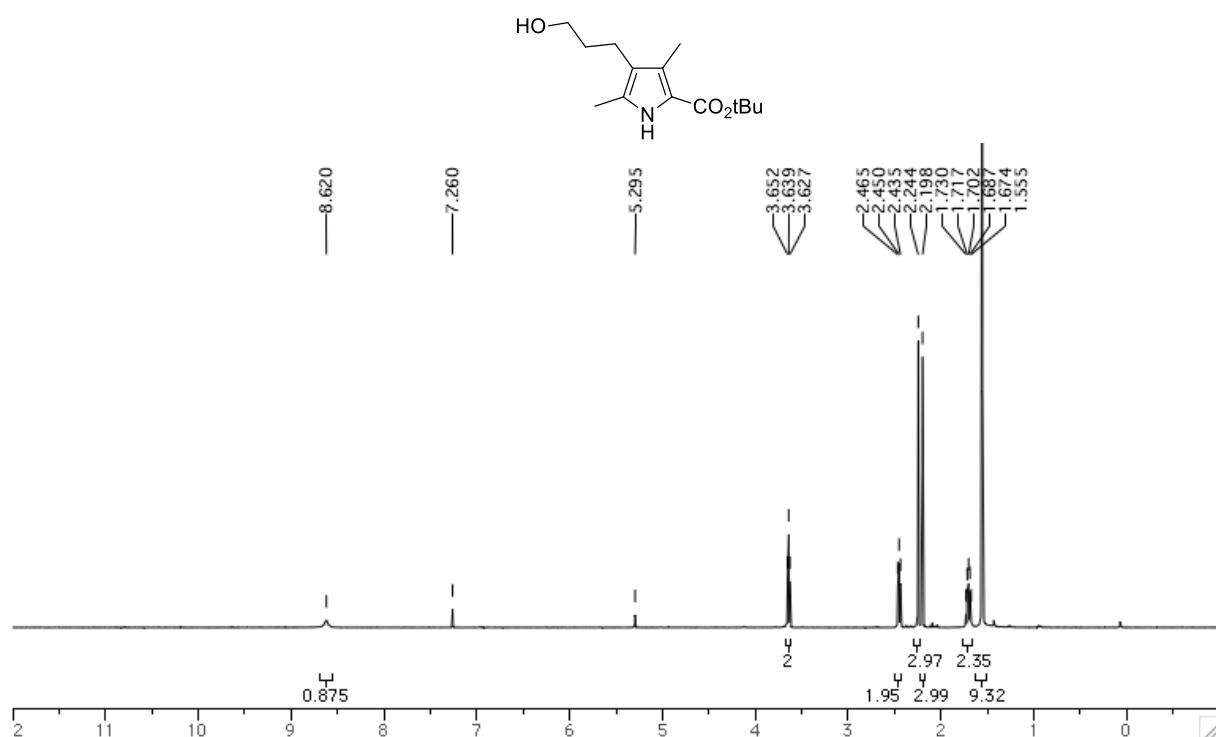
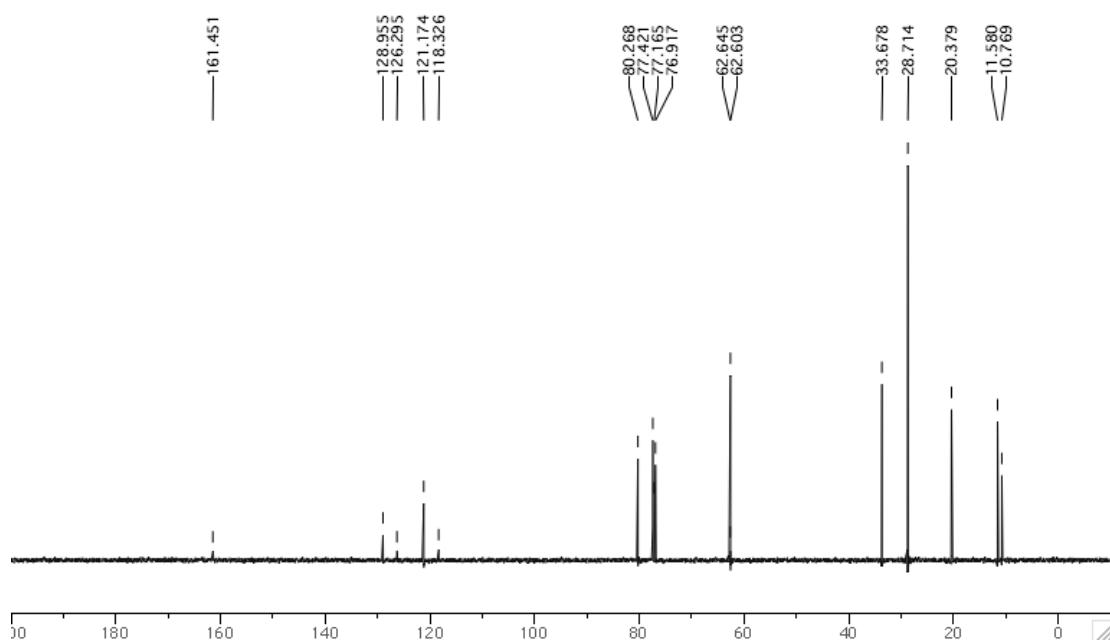
¹H spectrum for 34CDCl₃, 500 MHz¹³C spectrum for 34CDCl₃, 125 MHz

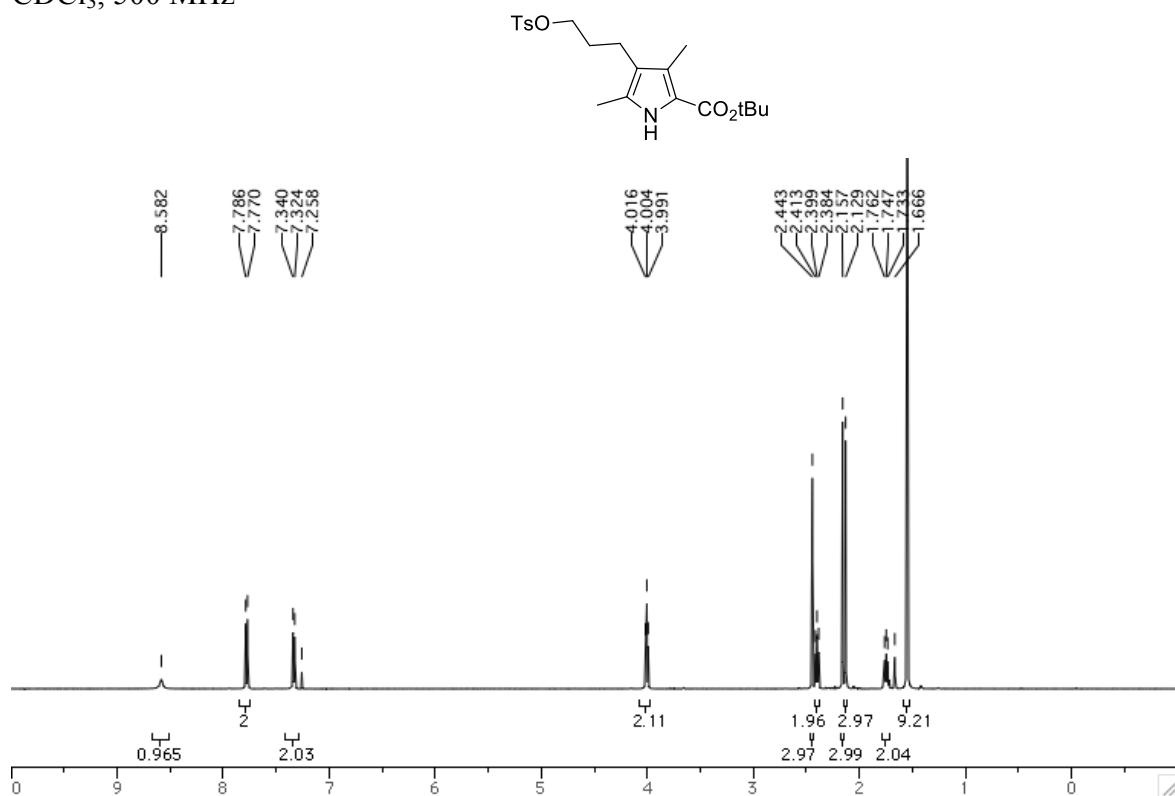
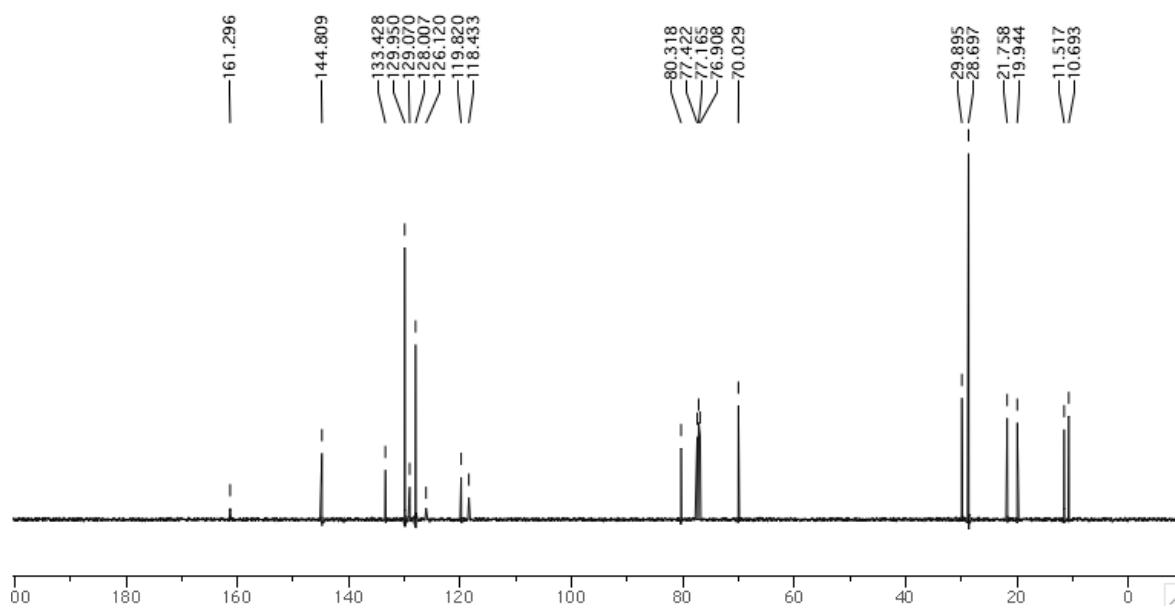
¹H spectrum for 36CDCl₃, 500 MHz¹³C spectrum for 36CDCl₃, 125 MHz

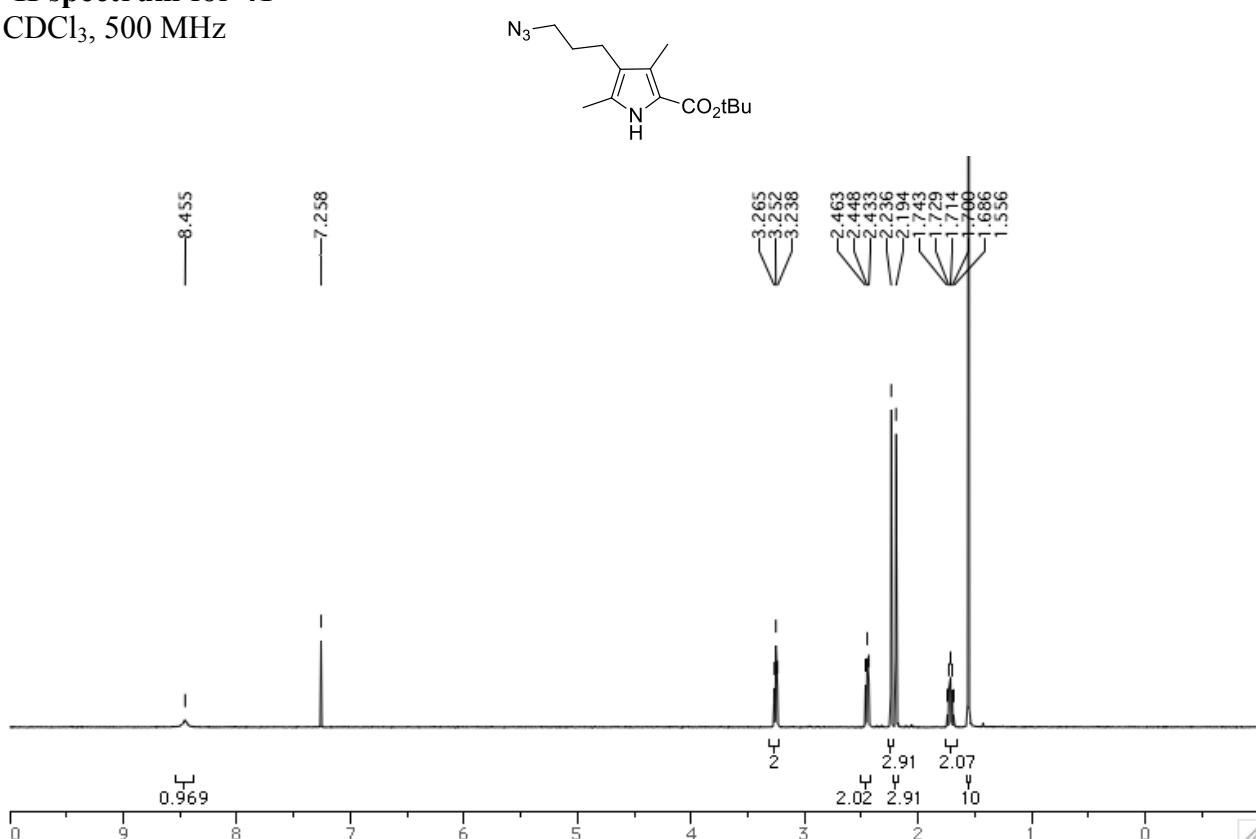
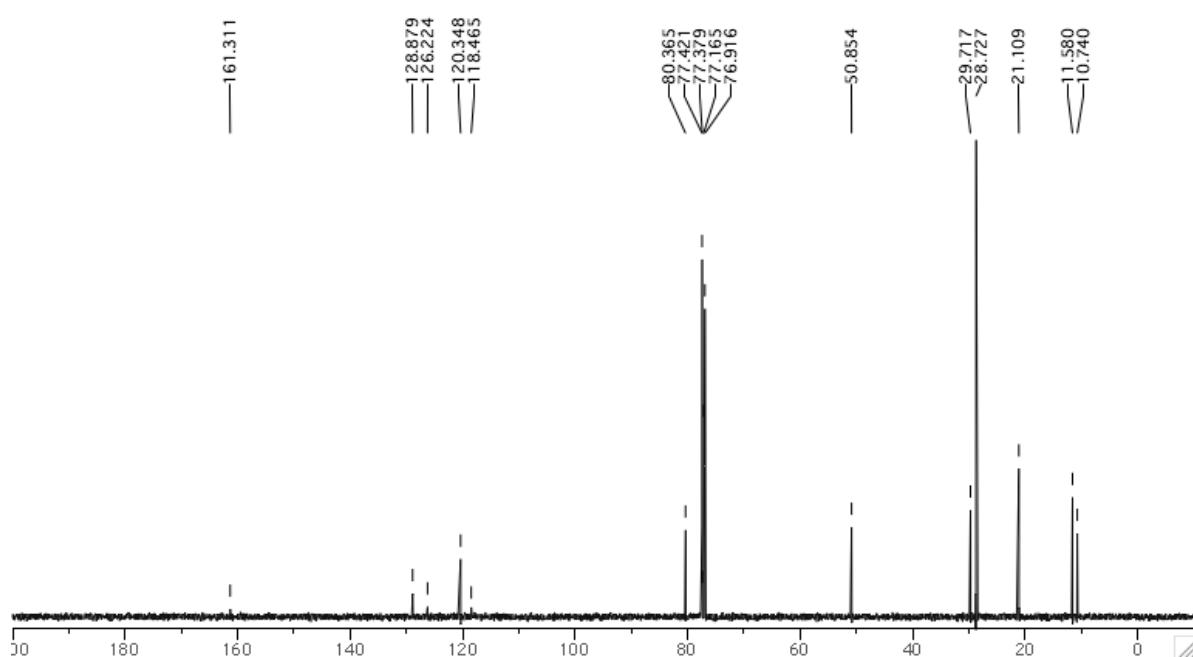
¹H spectrum for 37aCDCl₃, 500 MHz¹³C spectrum for 37aCDCl₃, 125 MHz

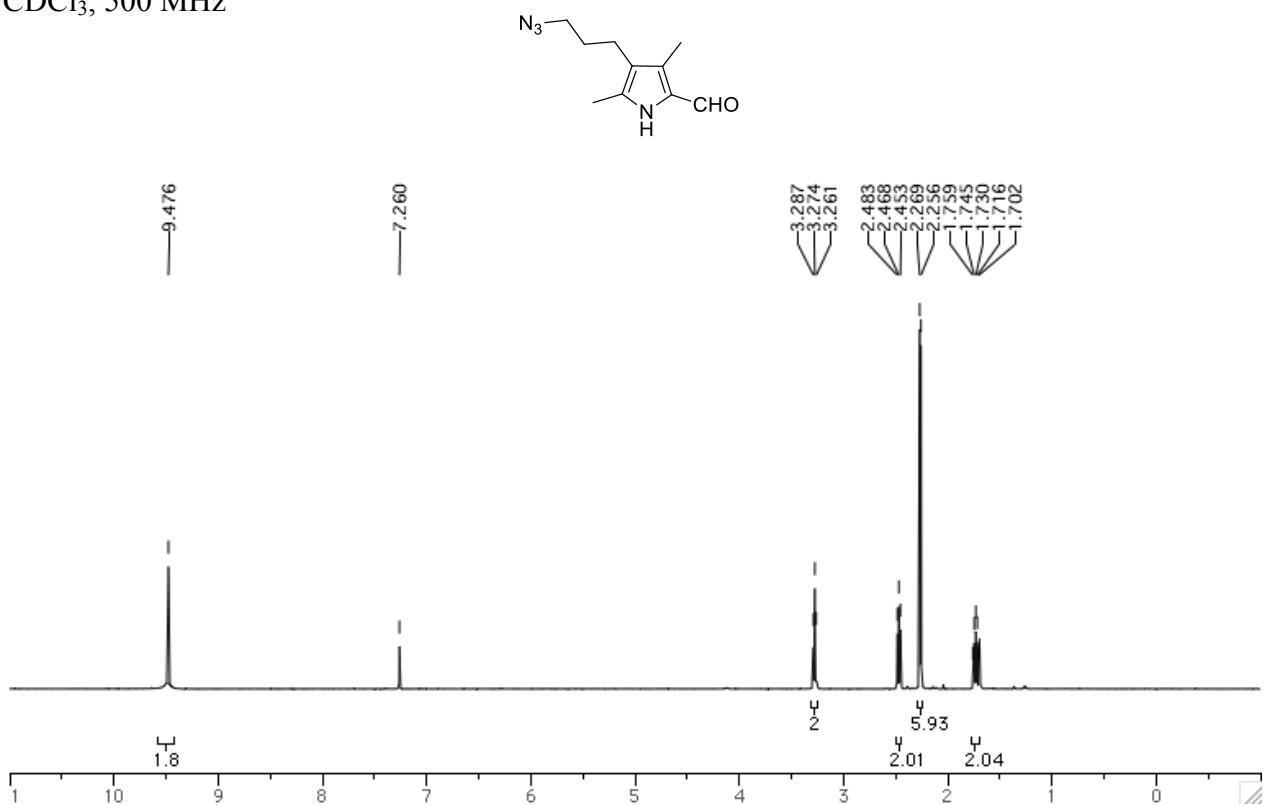
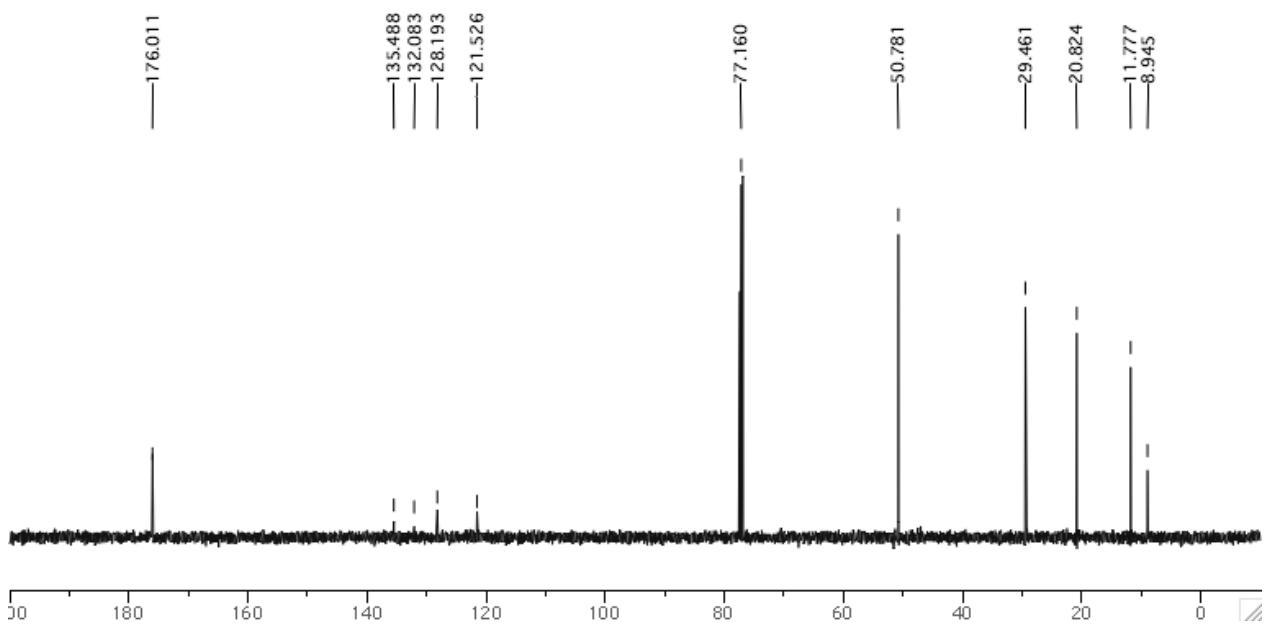
¹H spectrum for 37bCDCl₃, 500 MHz¹³C spectrum for 37bCDCl₃, 125 MHz

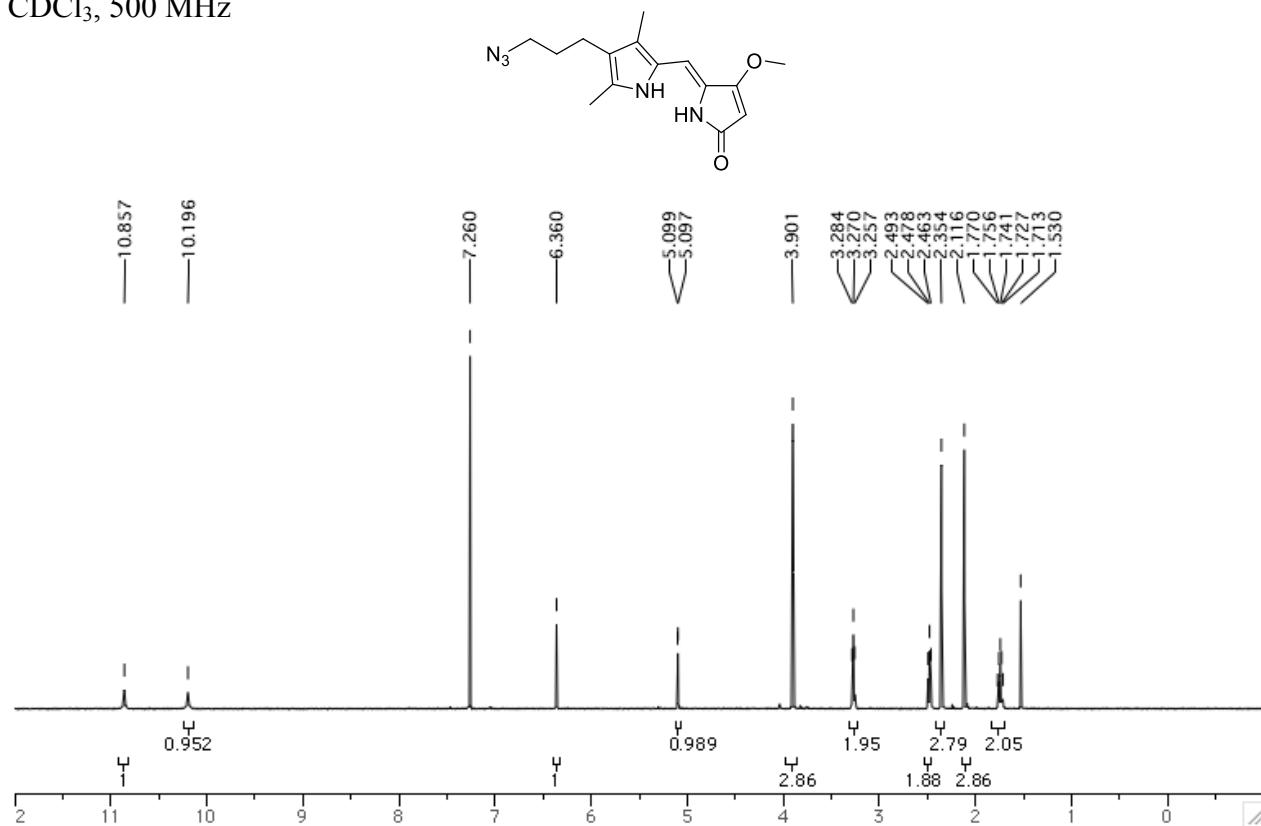
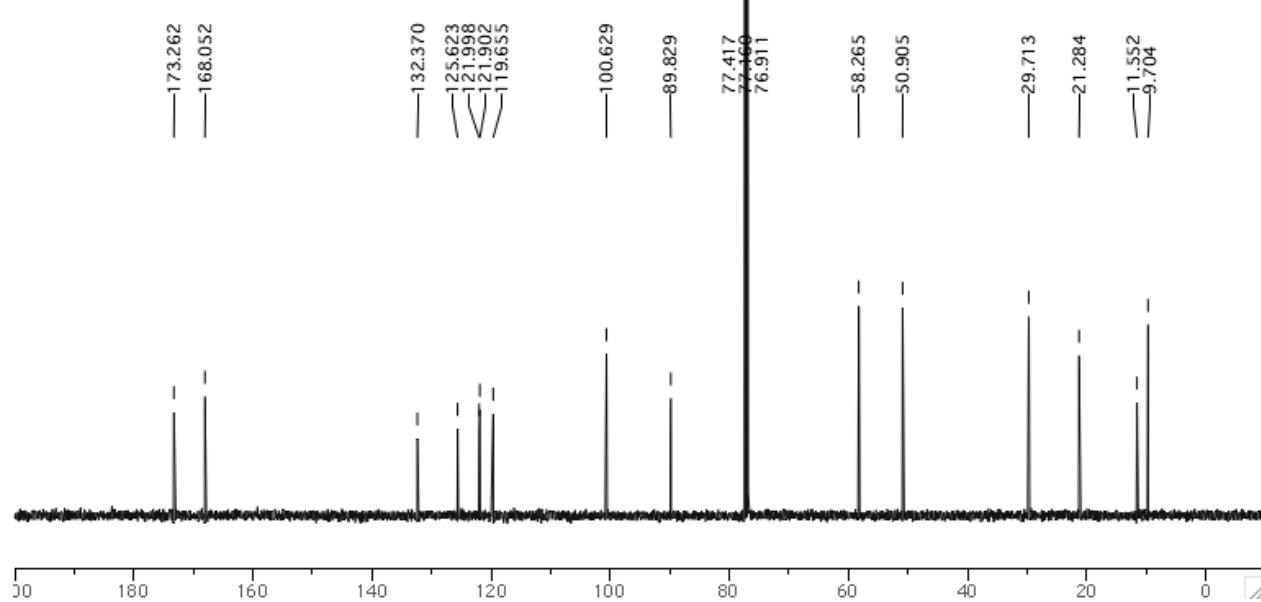
¹H spectrum for 26CDCl₃, 500 MHz¹³C spectrum for 26CDCl₃, 125 MHz

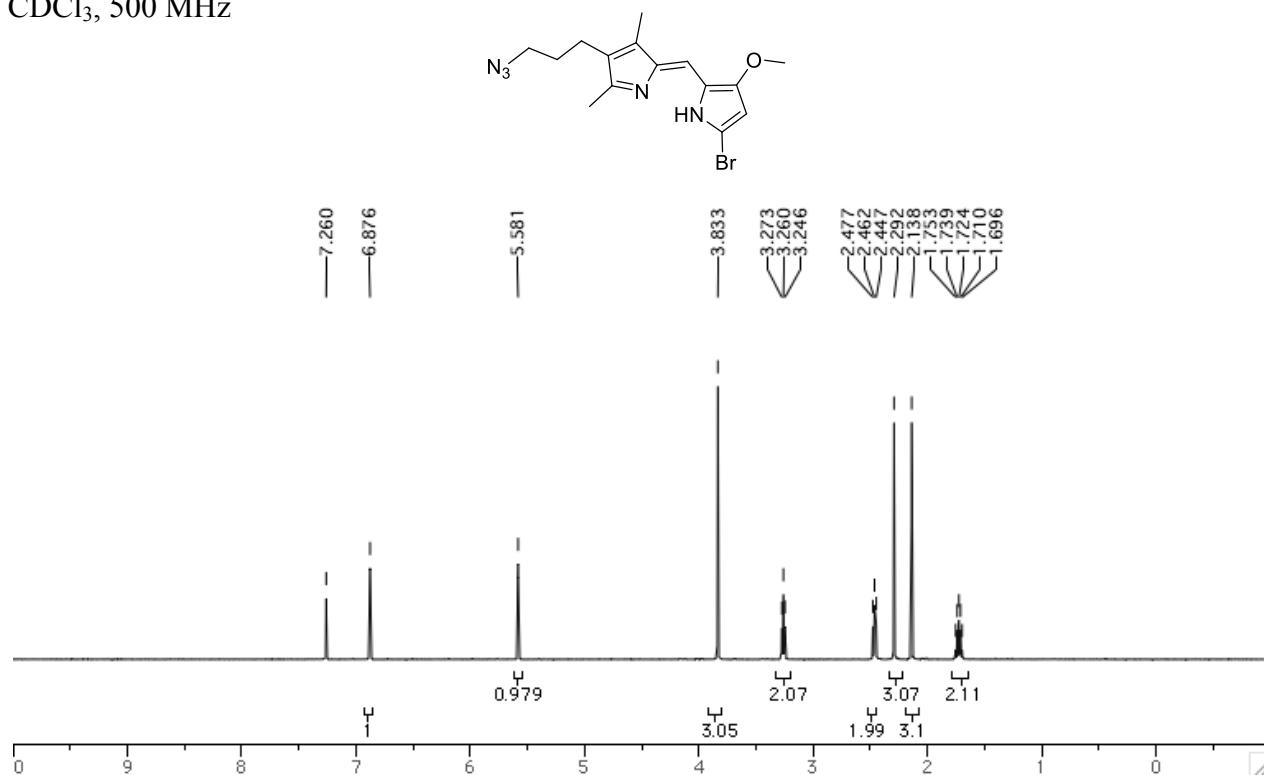
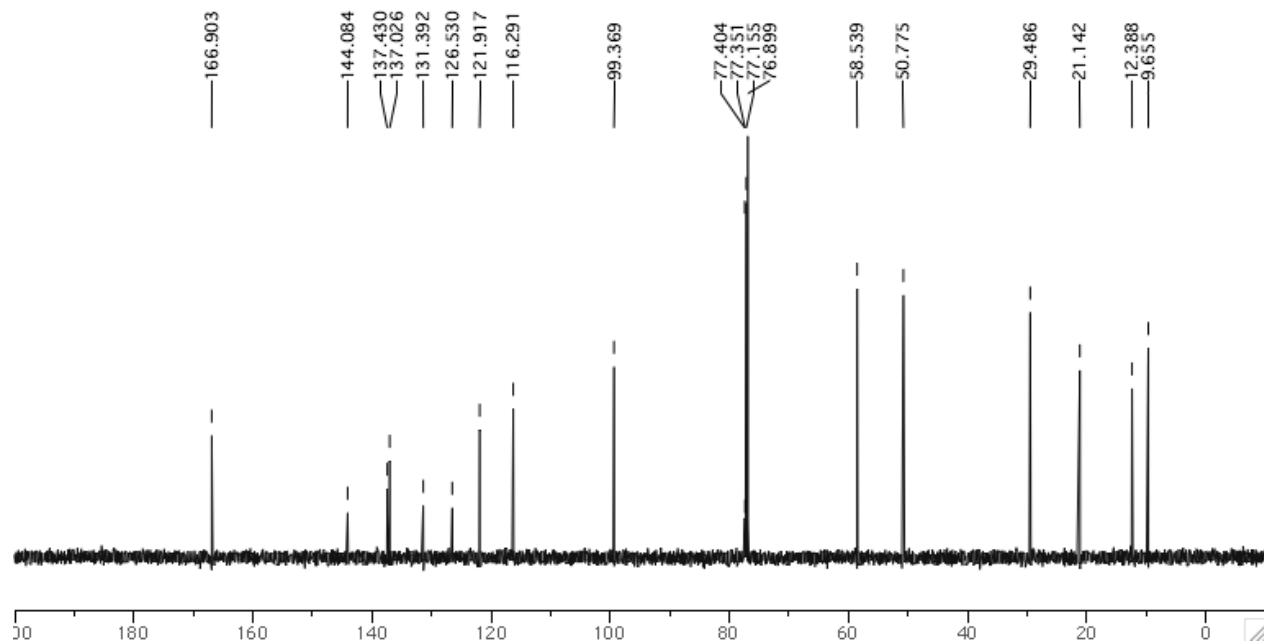
¹H spectrum for 39CDCl₃, 500 MHz¹³C spectrum for 39CDCl₃, 125 MHz

¹H spectrum for 40CDCl₃, 500 MHz¹³C spectrum for 40CDCl₃, 125 MHz

¹H spectrum for 41CDCl₃, 500 MHz¹³C spectrum for 41CDCl₃, 125 MHz

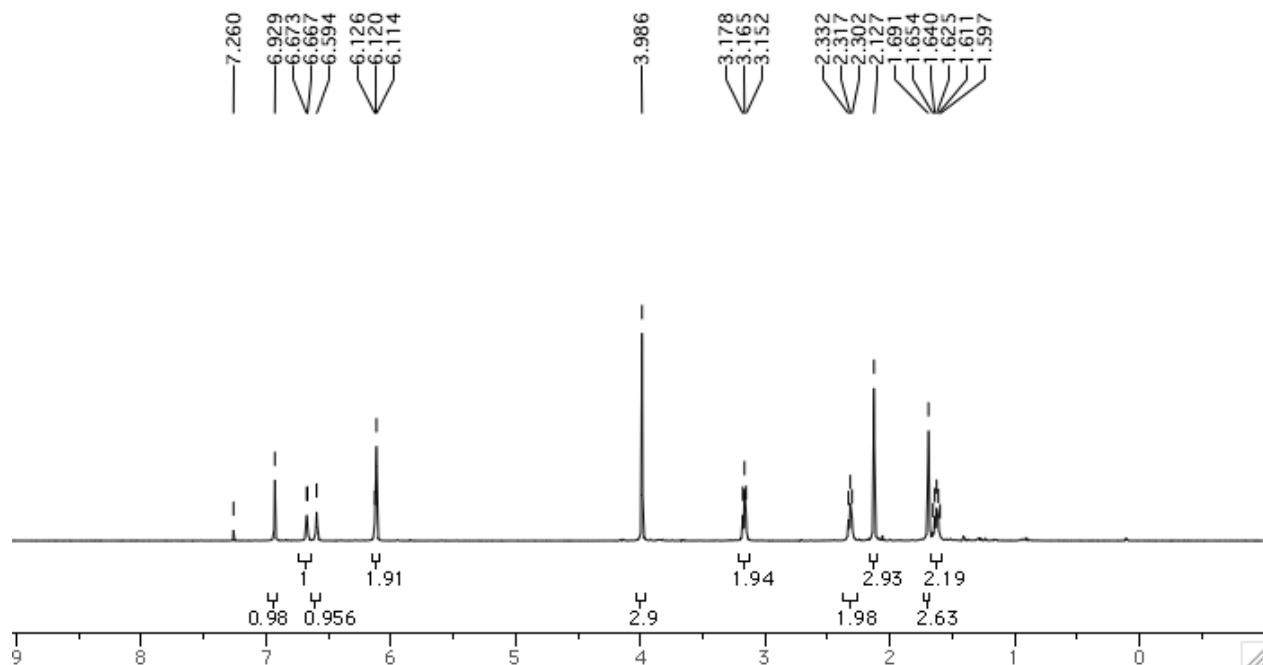
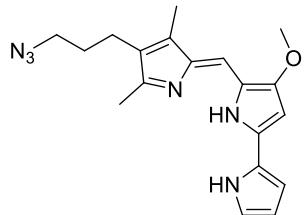
¹H spectrum for 42CDCl₃, 500 MHz¹³C spectrum for 42CDCl₃, 125 MHz

¹H spectrum for 43CDCl₃, 500 MHz¹³C spectrum for 43CDCl₃, 125 MHz

¹H spectrum for 44CDCl₃, 500 MHz¹³C spectrum for 44CDCl₃, 125 MHz

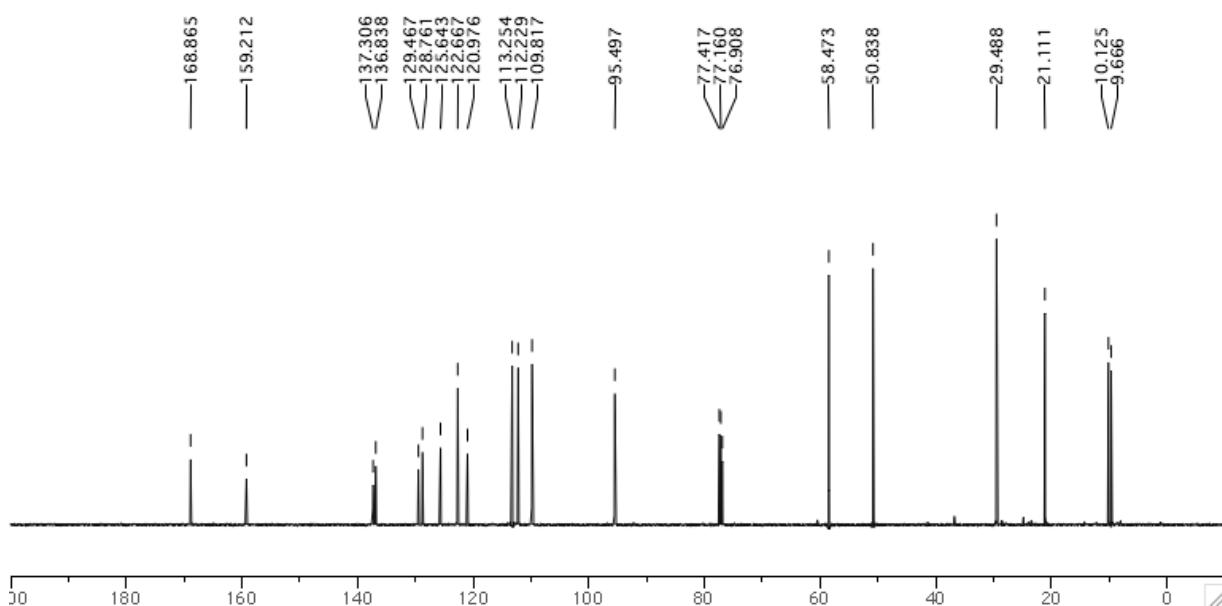
1H spectrum for 27

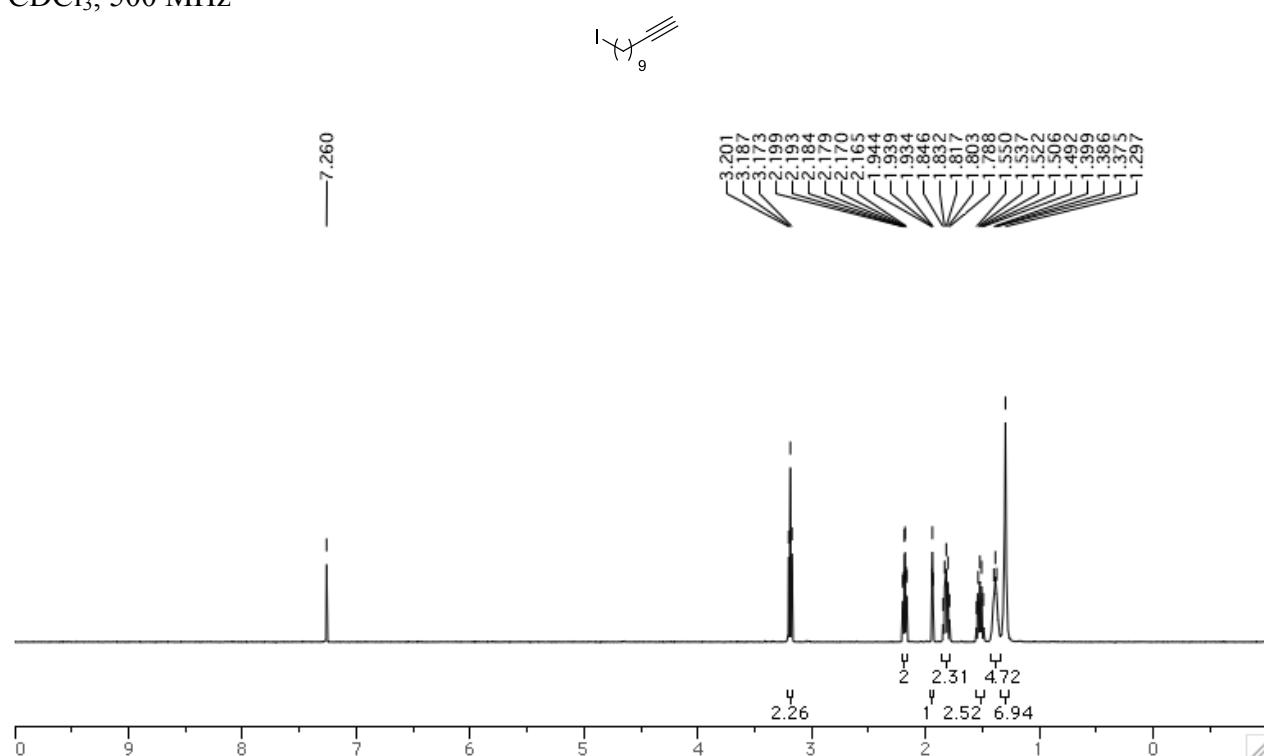
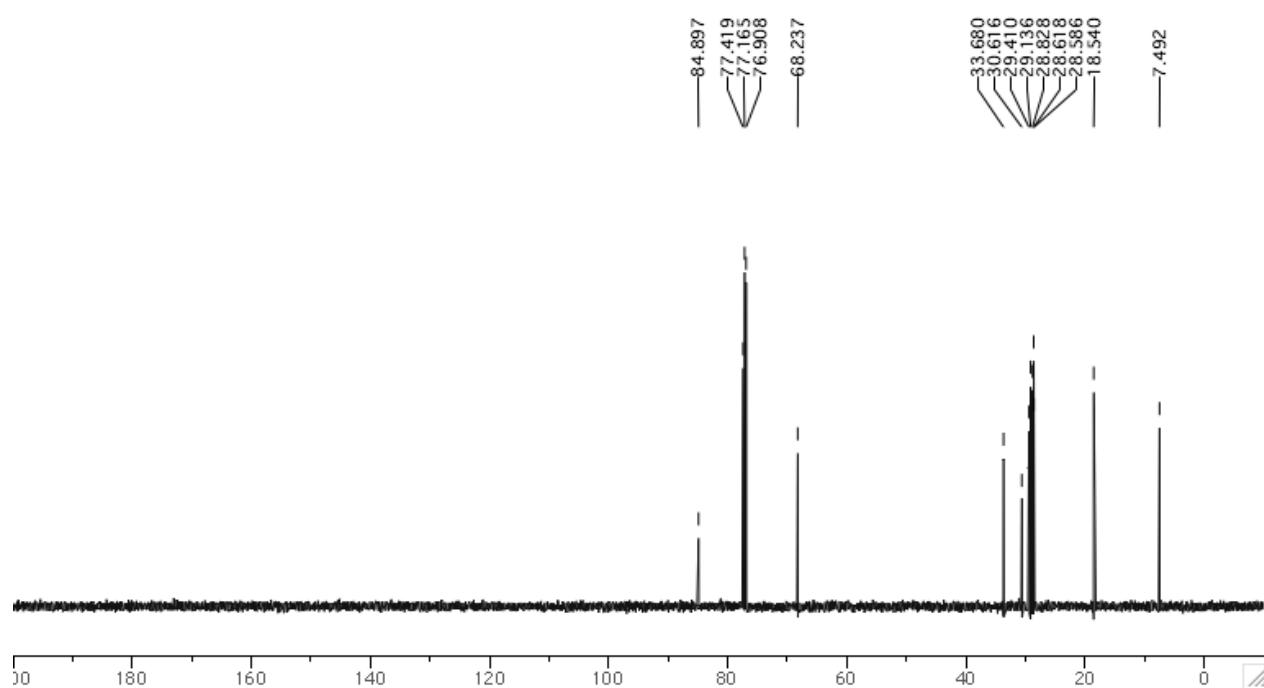
CDCl_3 , 500 MHz



¹³C spectrum for 27

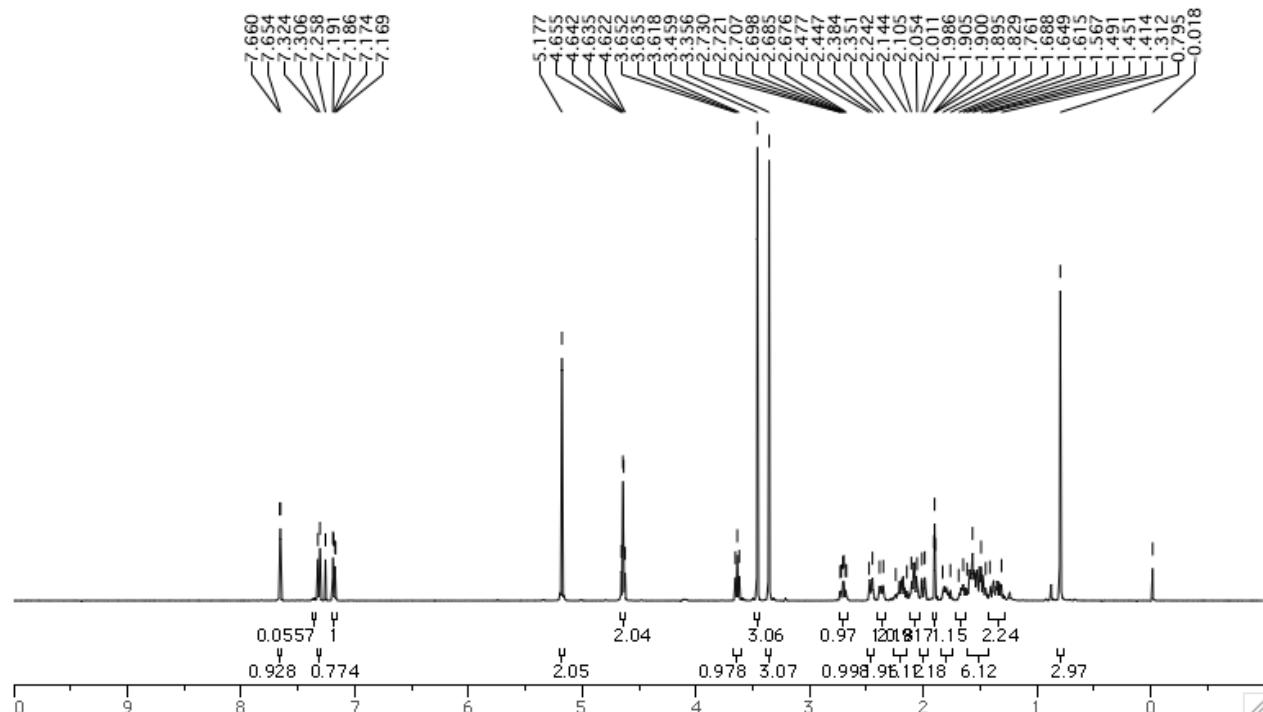
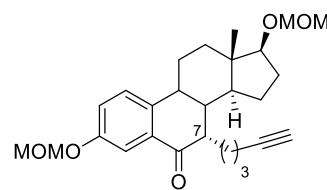
δ spectrum 13C
 CDCl_3 , 125 MHz



¹H spectrum for 29bCDCl₃, 500 MHz¹³C spectrum for 29bCDCl₃, 125 MHz

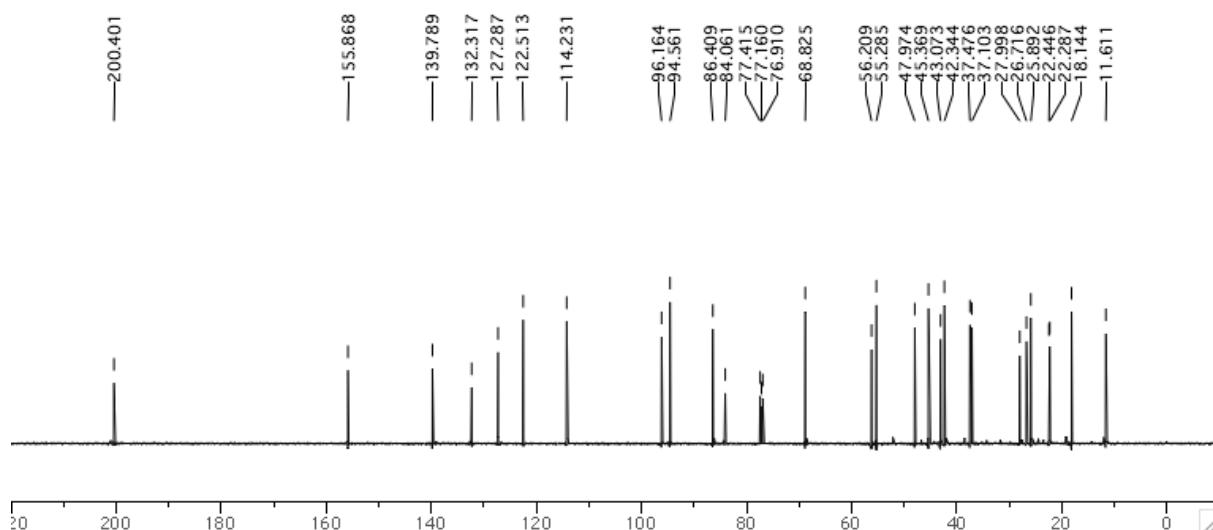
¹H spectrum for 30a

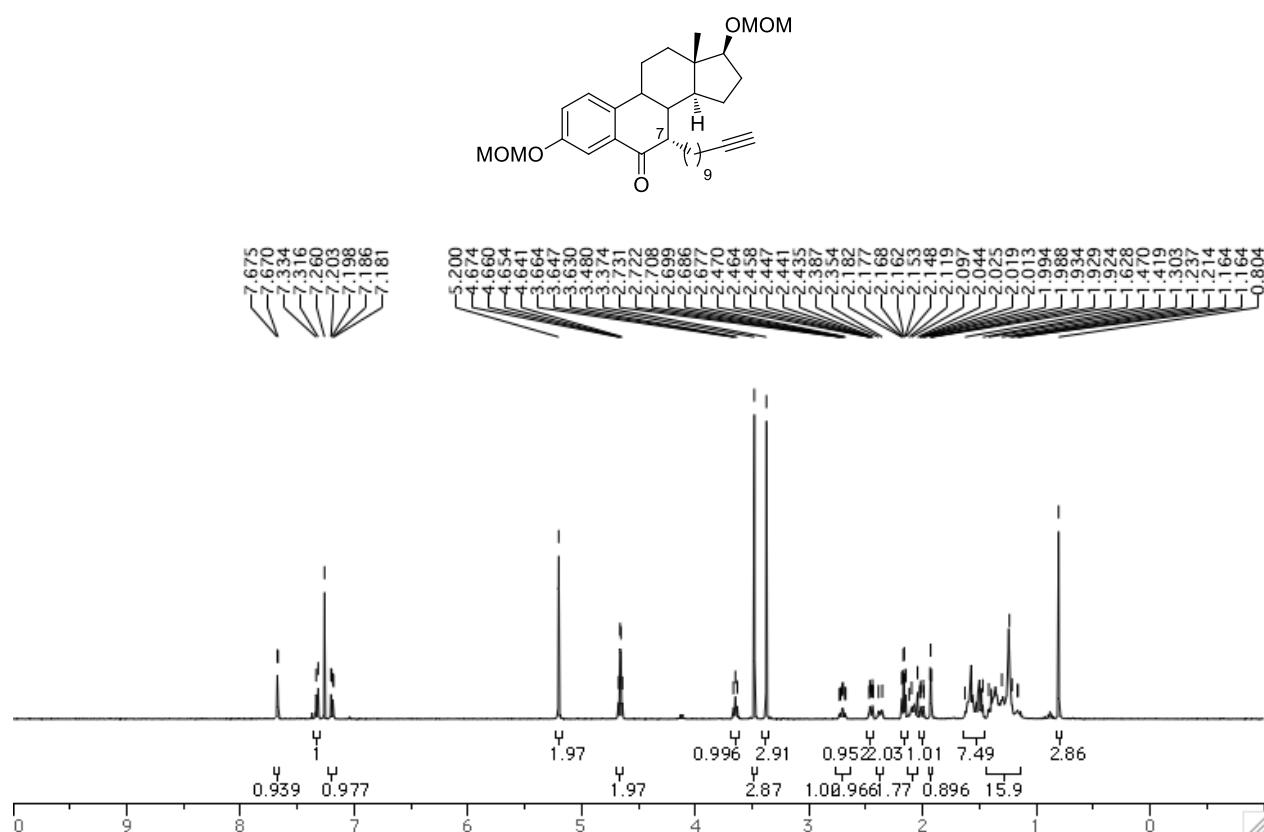
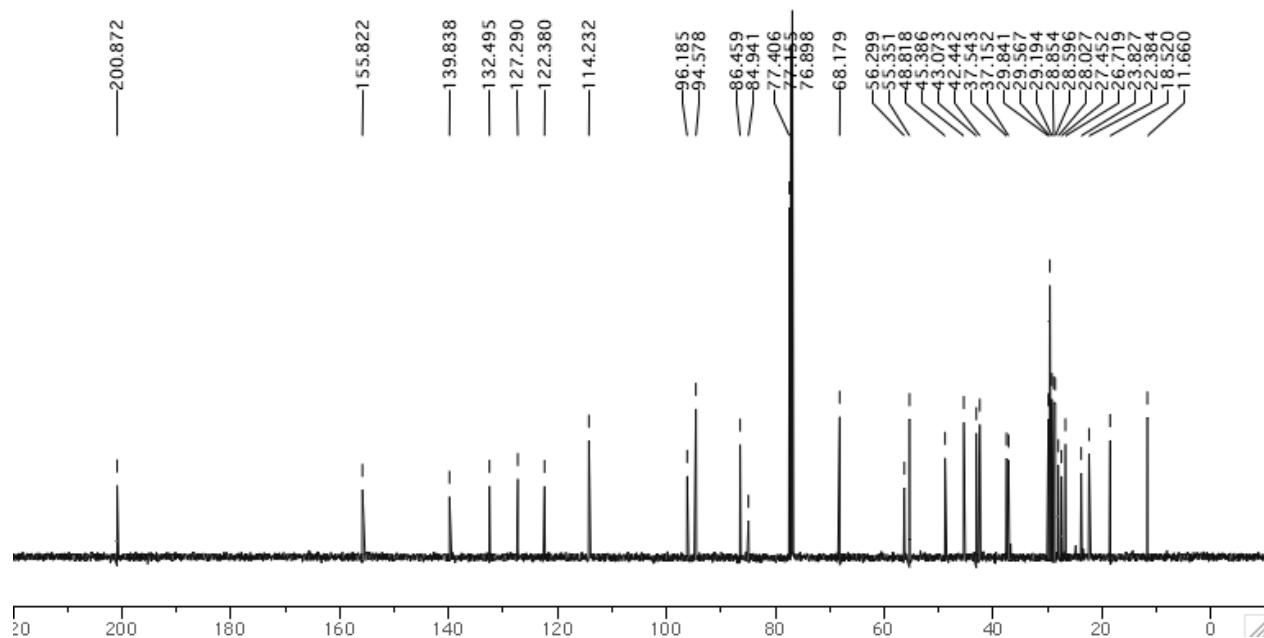
CDCl₃, 500 MHz

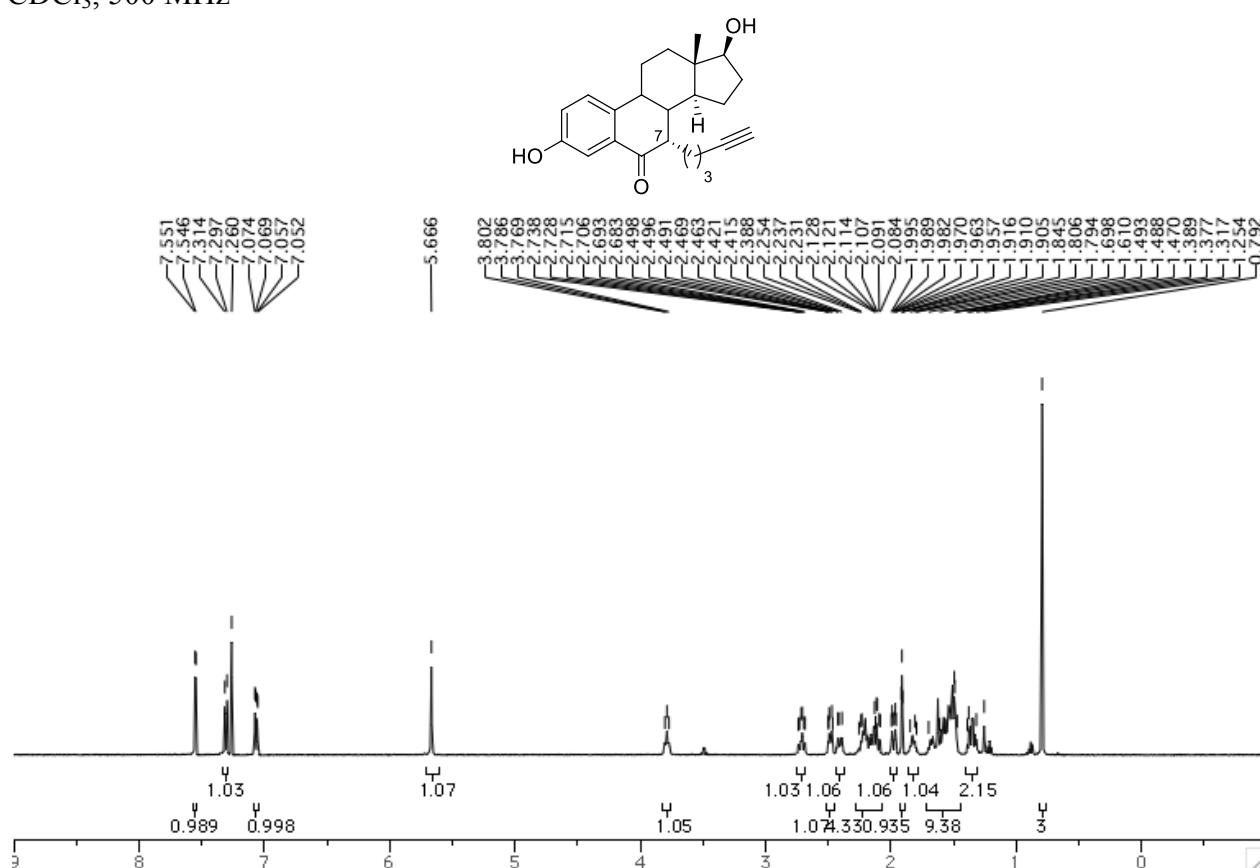
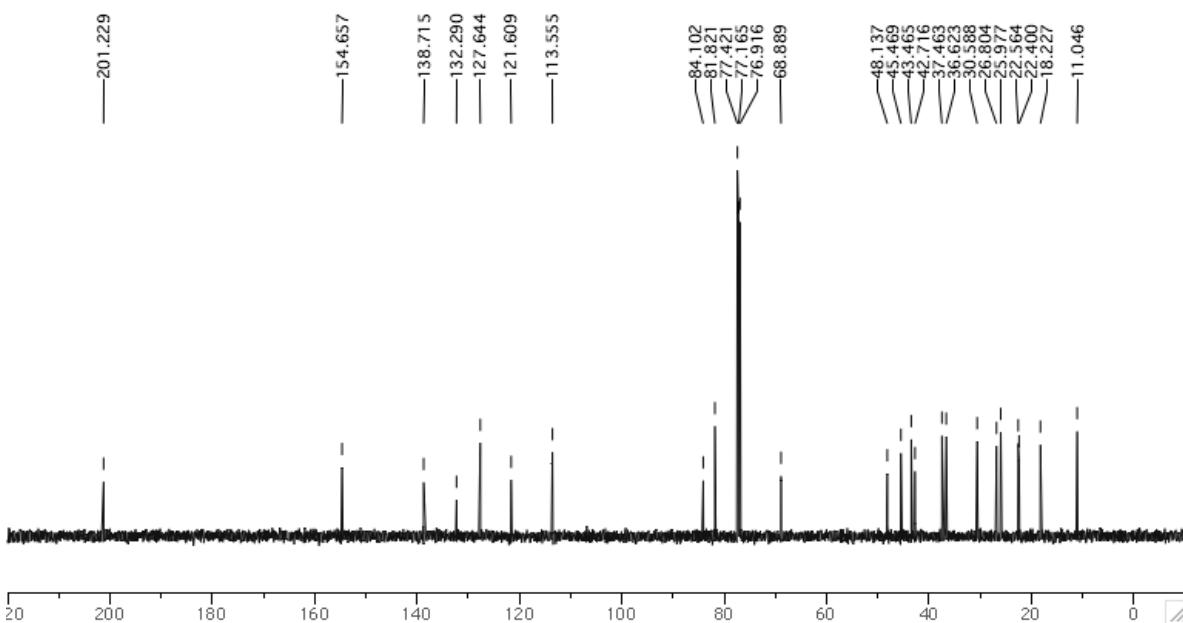


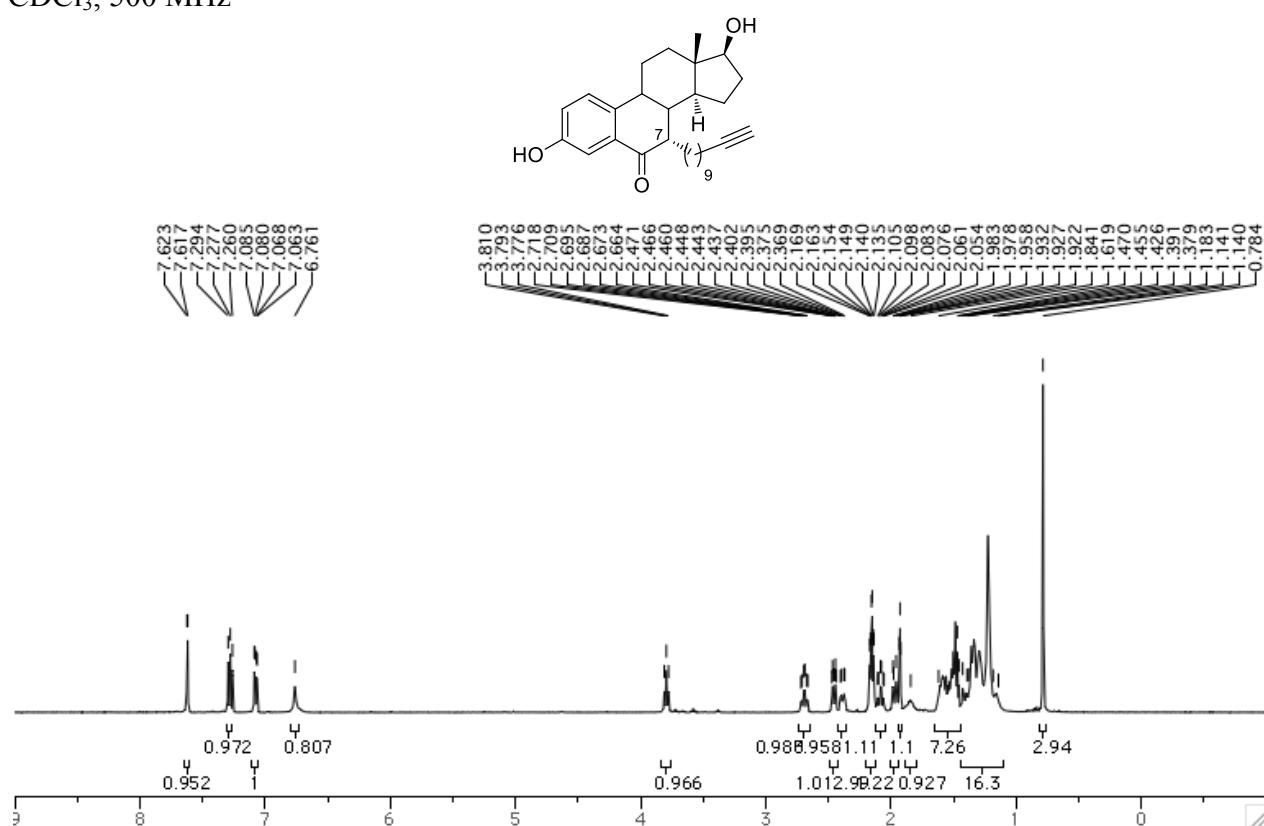
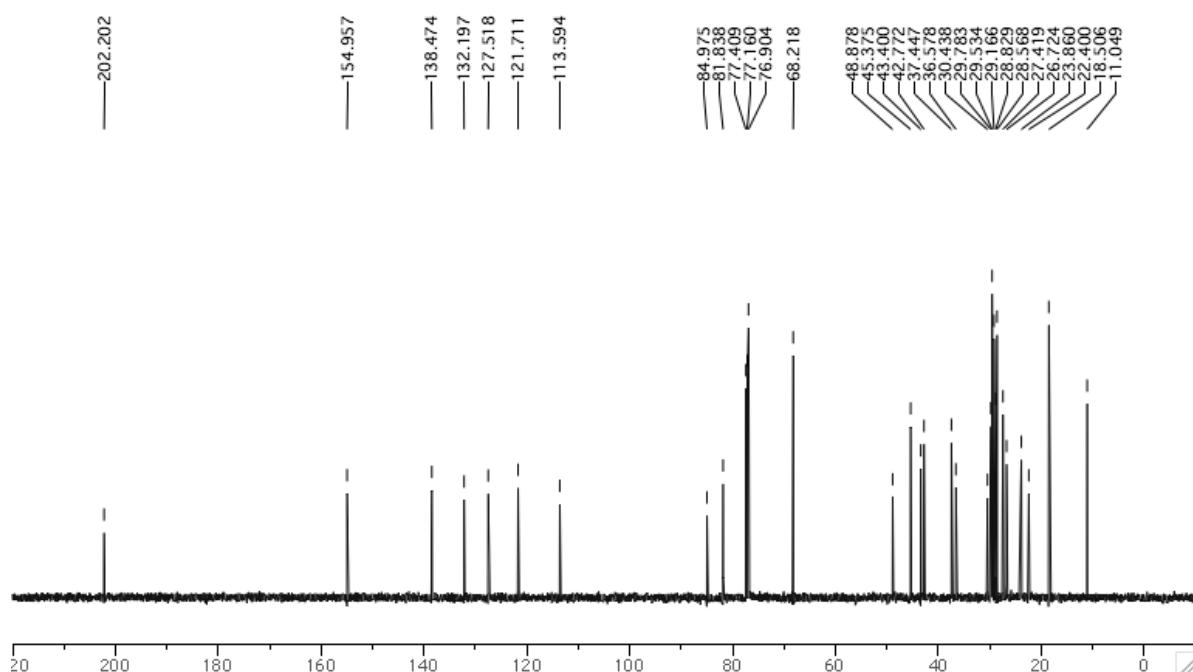
¹³C spectrum for 30a

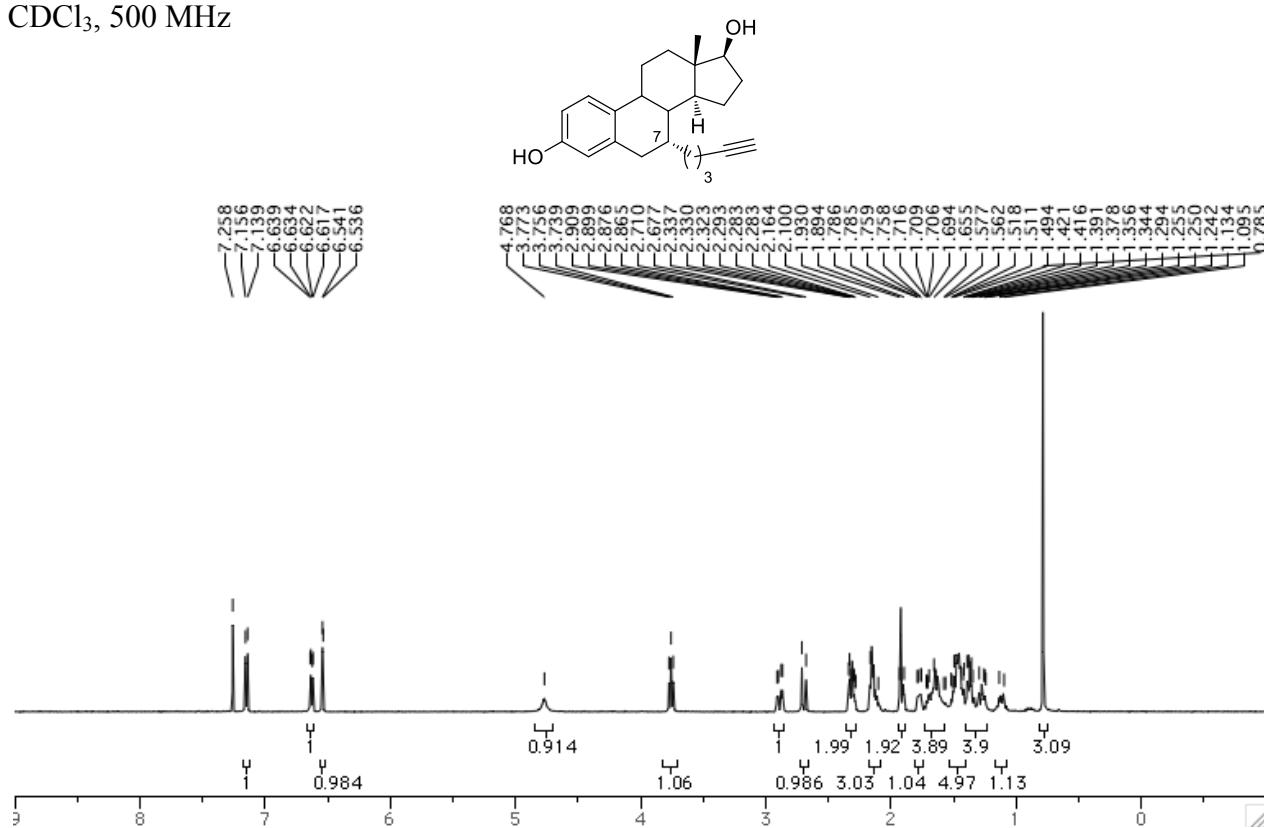
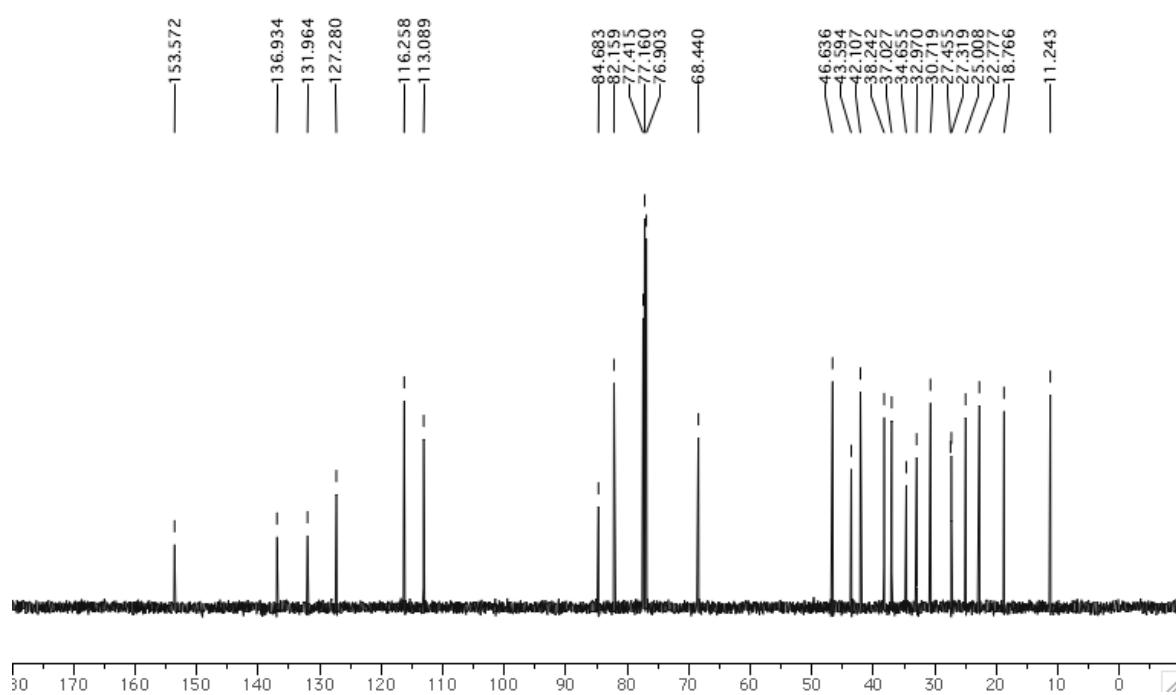
δ (ppm) 13.0

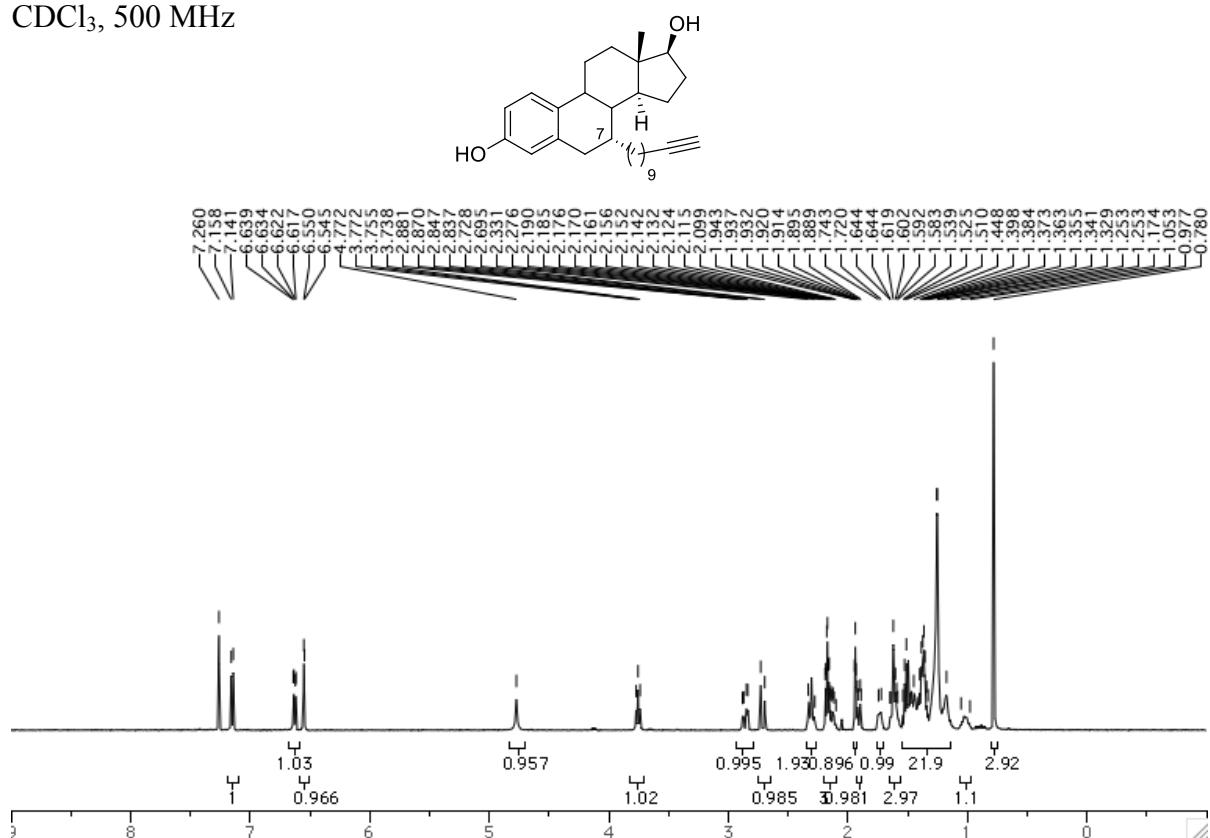
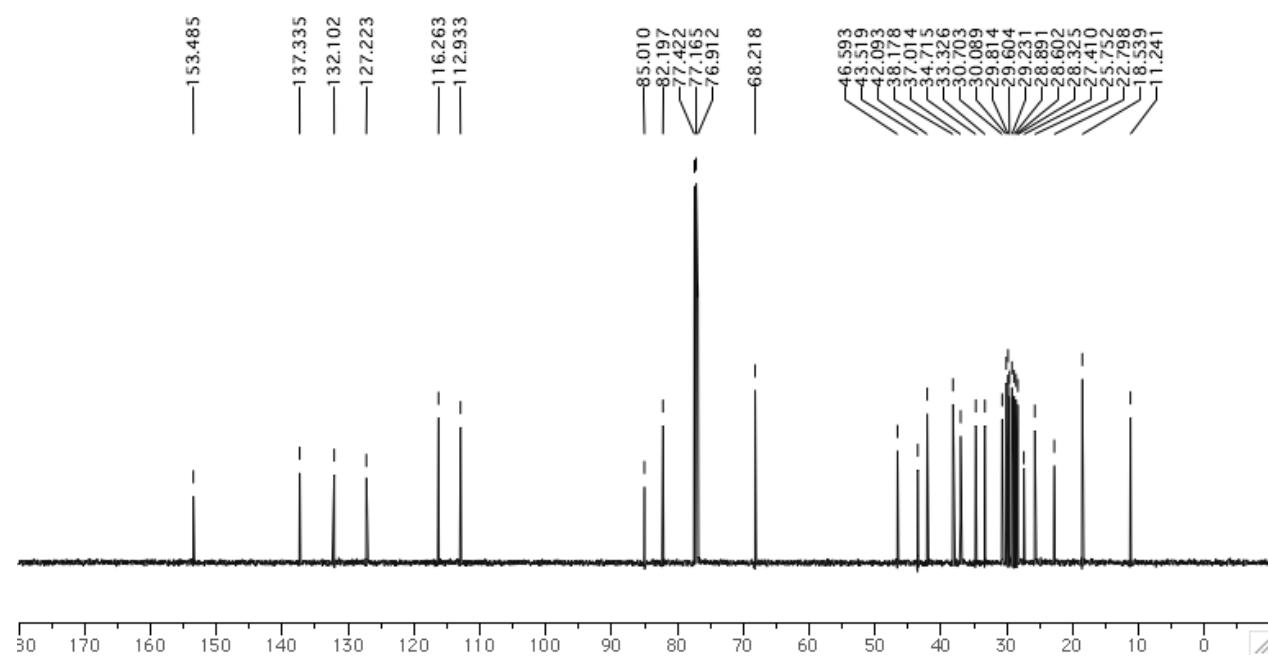


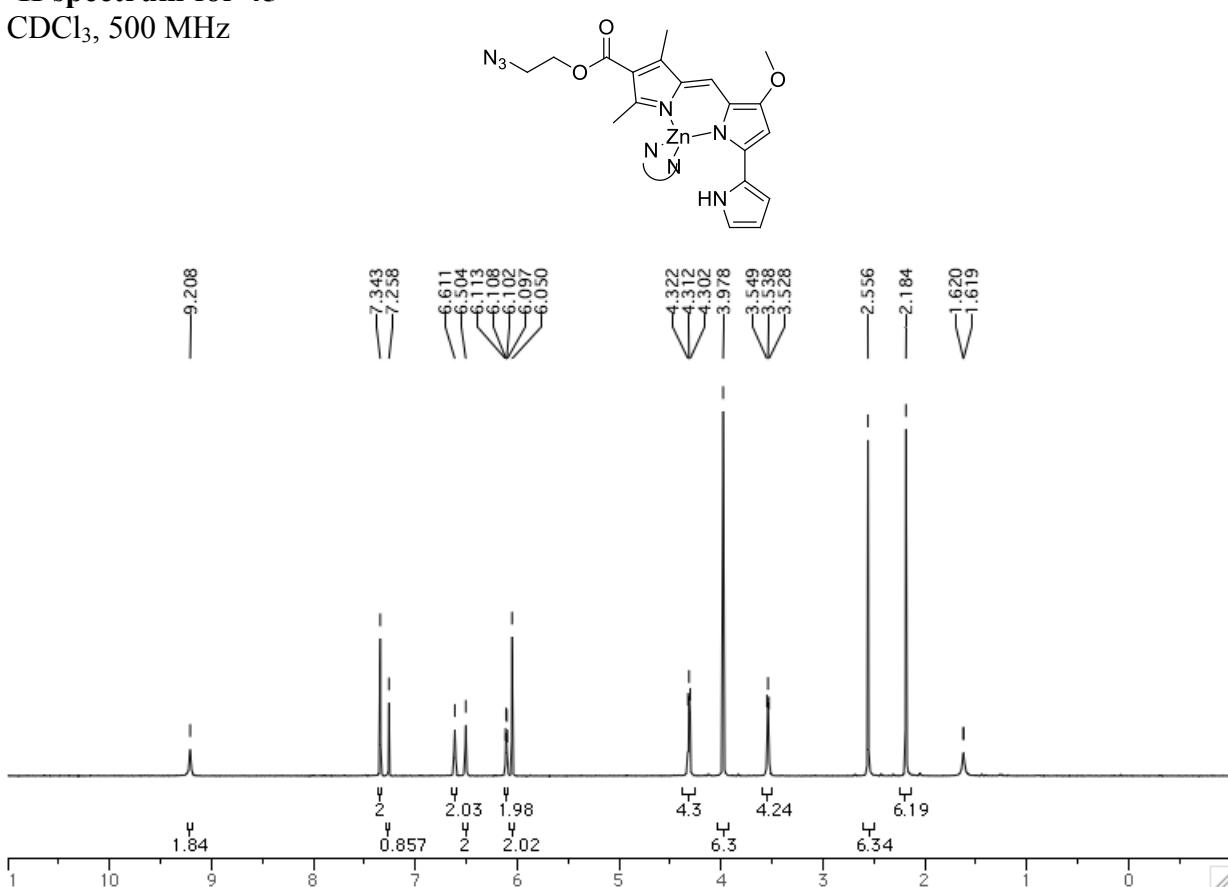
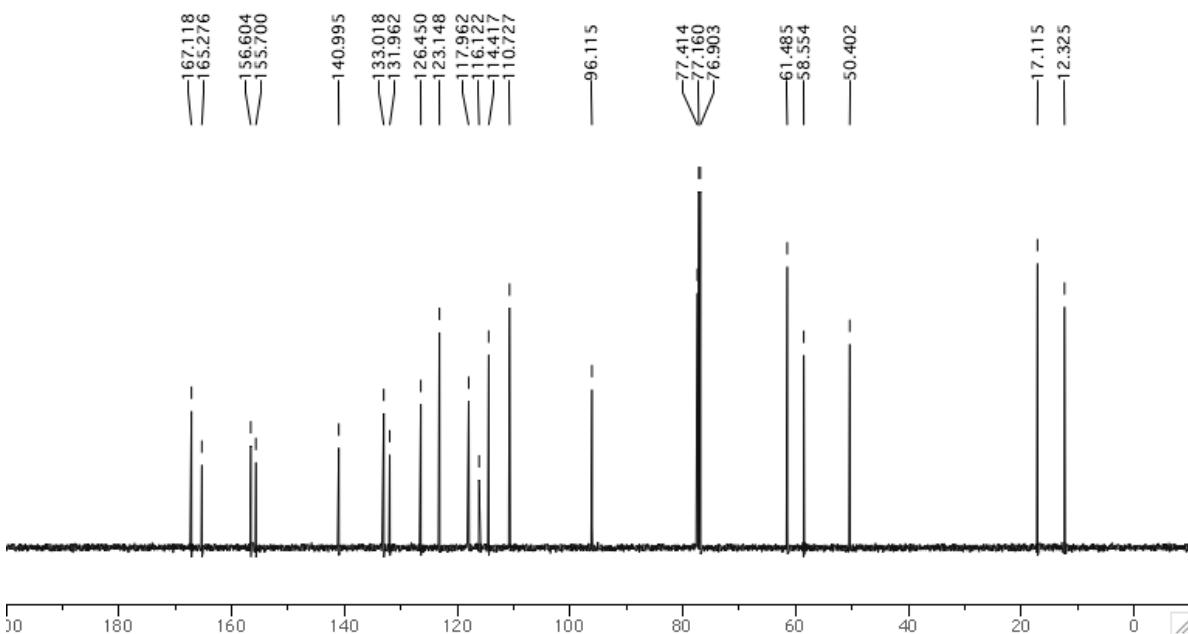
¹H spectrum for 30bCDCl₃, 500 MHzCDCl₃, 125 MHz

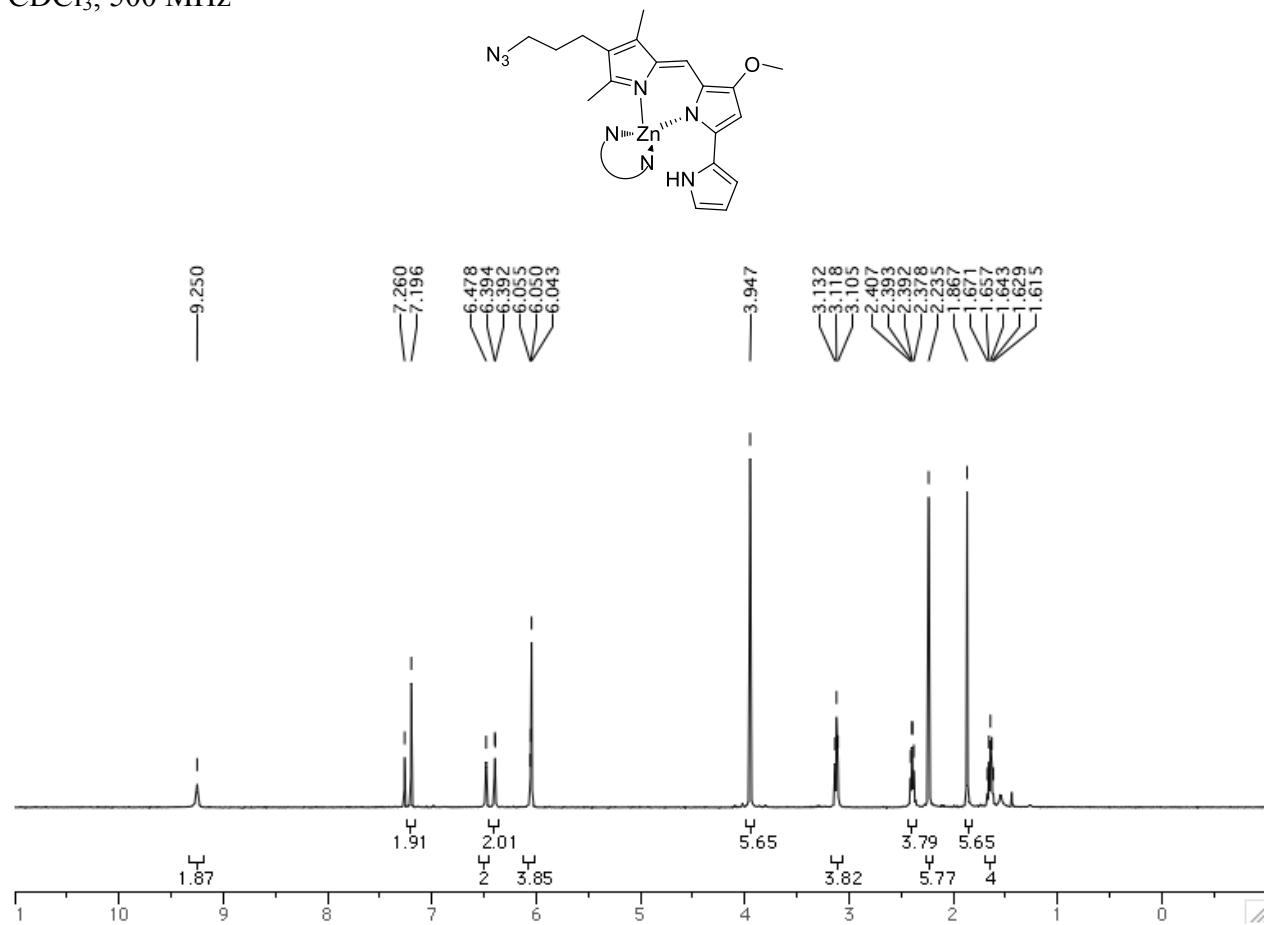
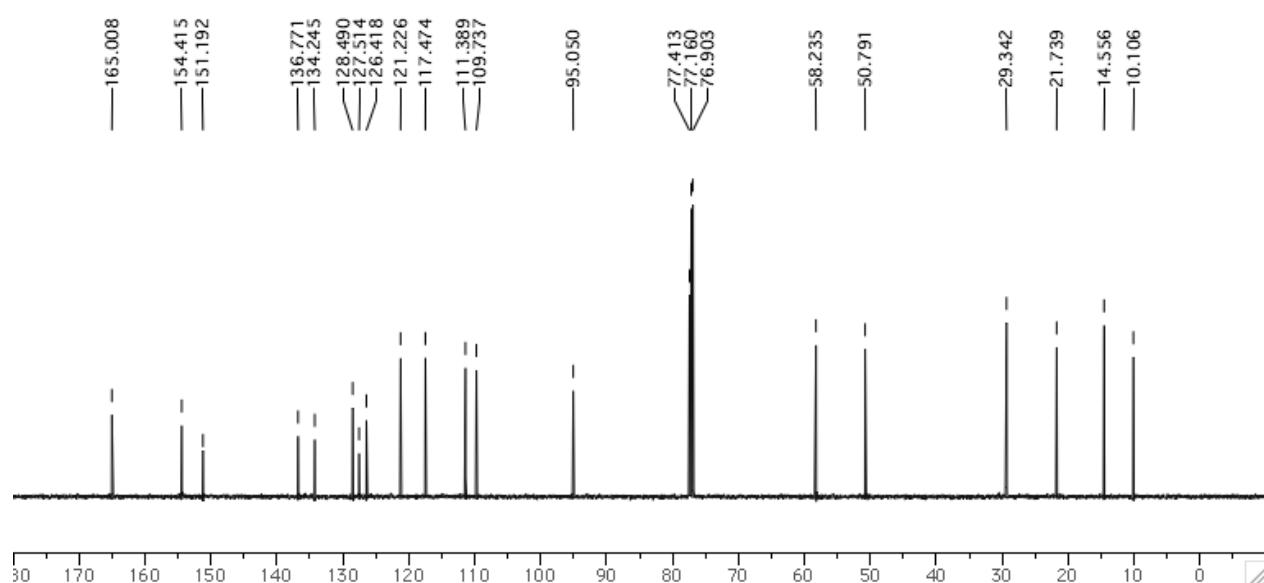
¹H spectrum for 31aCDCl₃, 500 MHz¹³C spectrum for 31aCDCl₃, 125 MHz

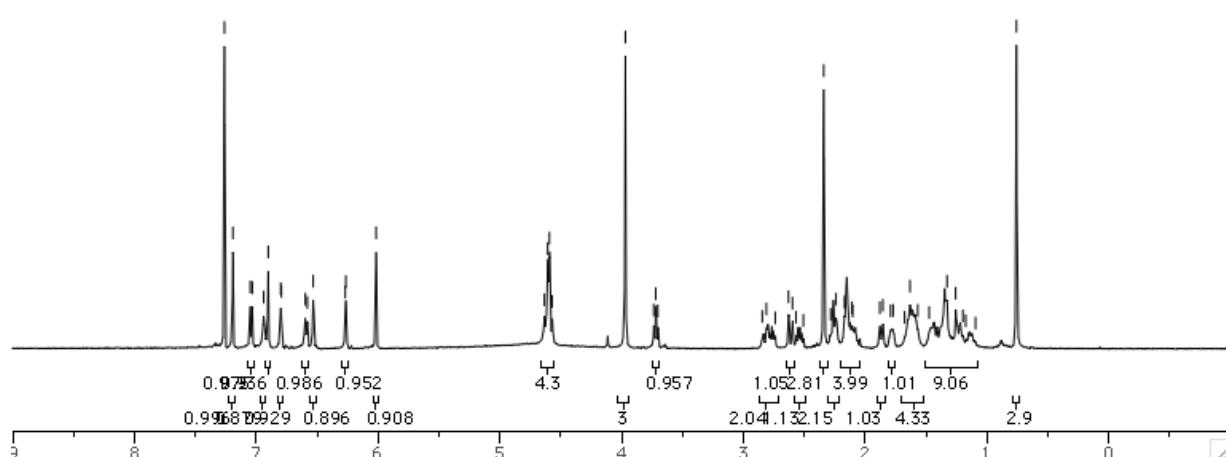
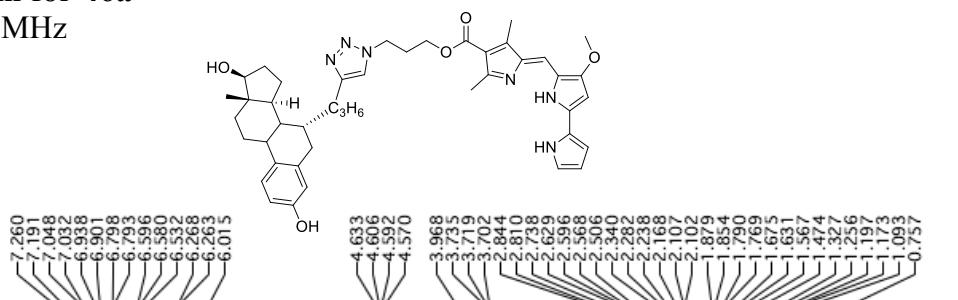
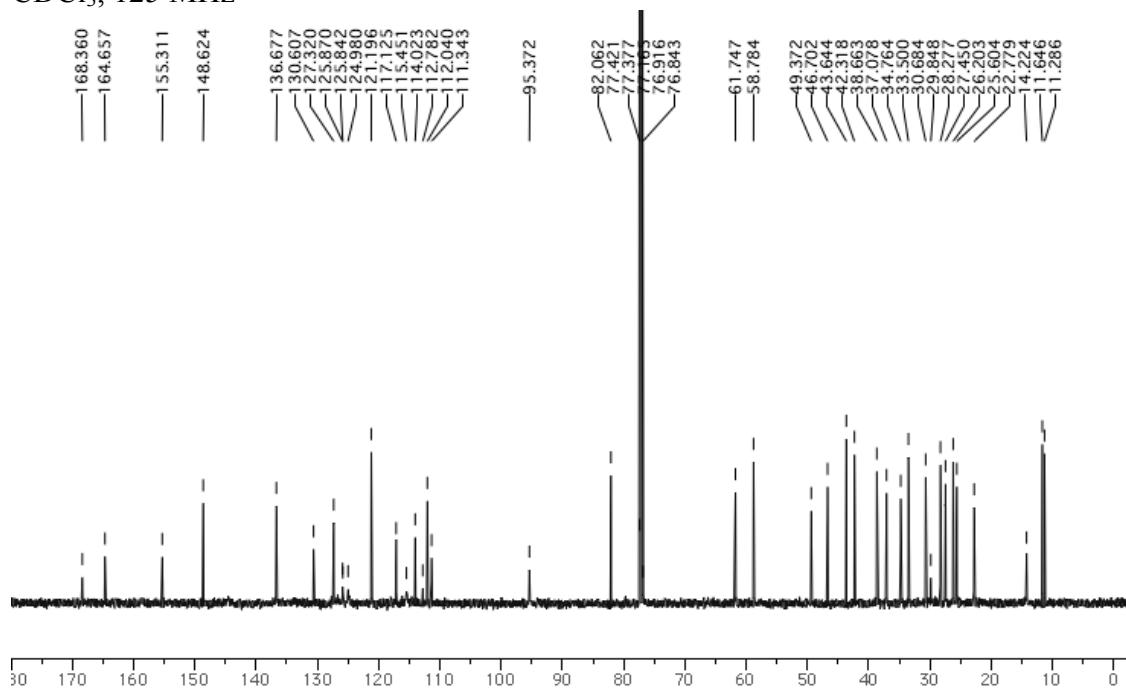
¹H spectrum for 31bCDCl₃, 500 MHz¹³C spectrum for 31bCDCl₃, 125 MHz

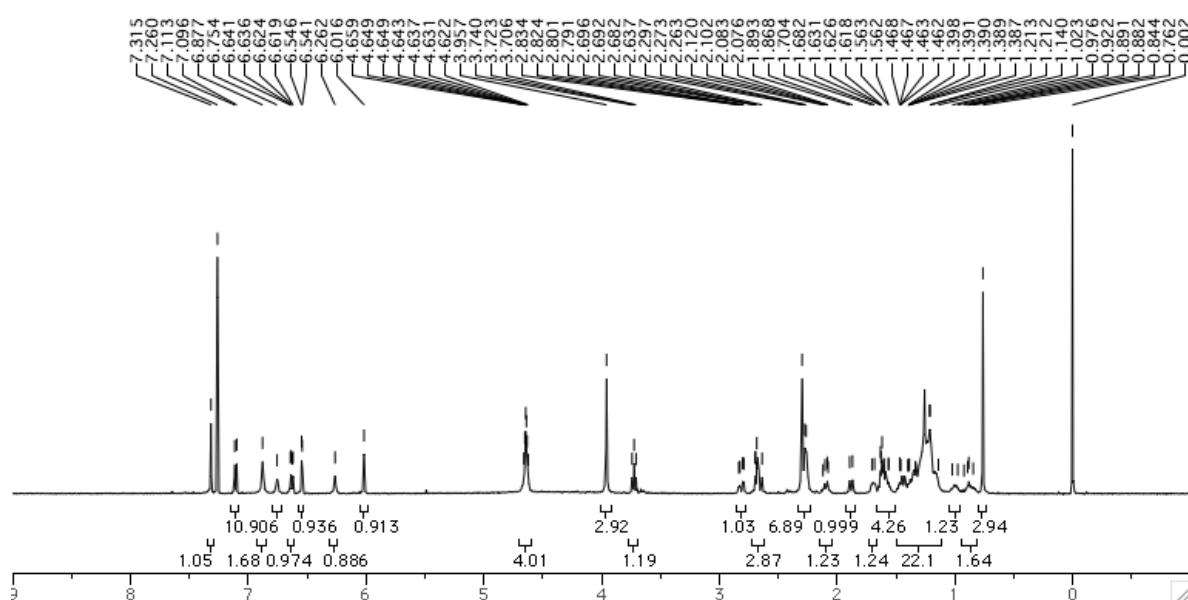
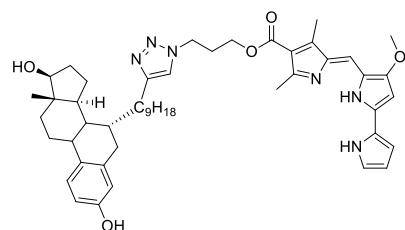
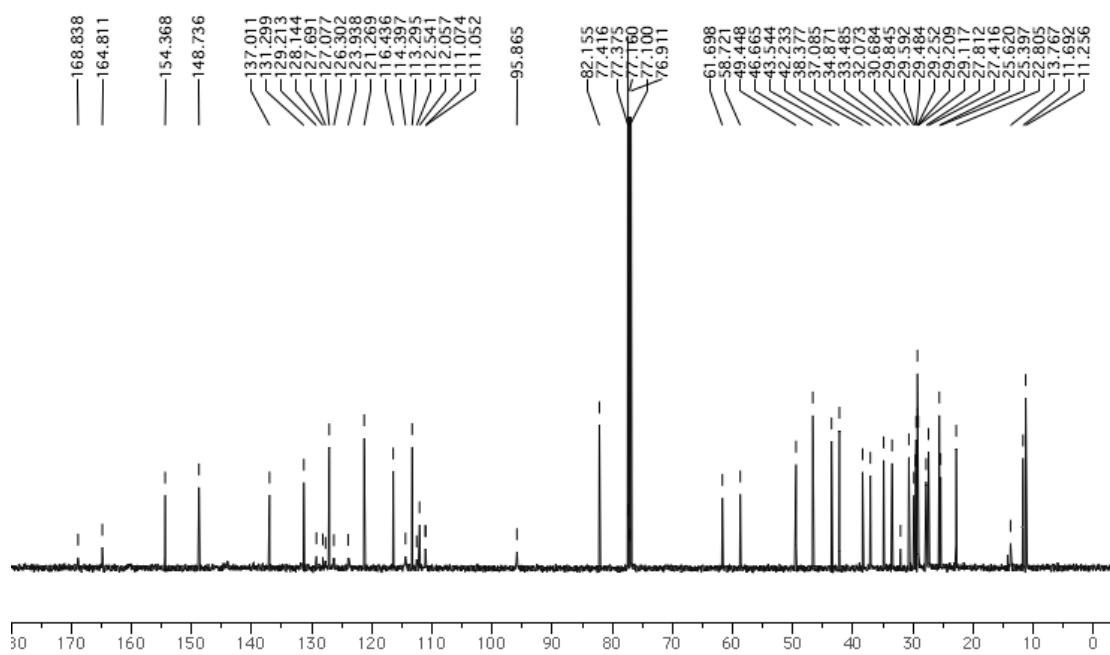
¹H spectrum for 25aCDCl₃, 500 MHz¹³C spectrum for 25aCDCl₃, 125 MHz

¹H spectrum for 25bCDCl₃, 500 MHz¹³C spectrum for 25bCDCl₃, 125 MHz

¹H spectrum for 45CDCl₃, 500 MHz¹³C spectrum for 45CDCl₃, 125 MHz

¹H spectrum for 47CDCl₃, 500 MHz¹³C spectrum for 47CDCl₃, 125 MHz

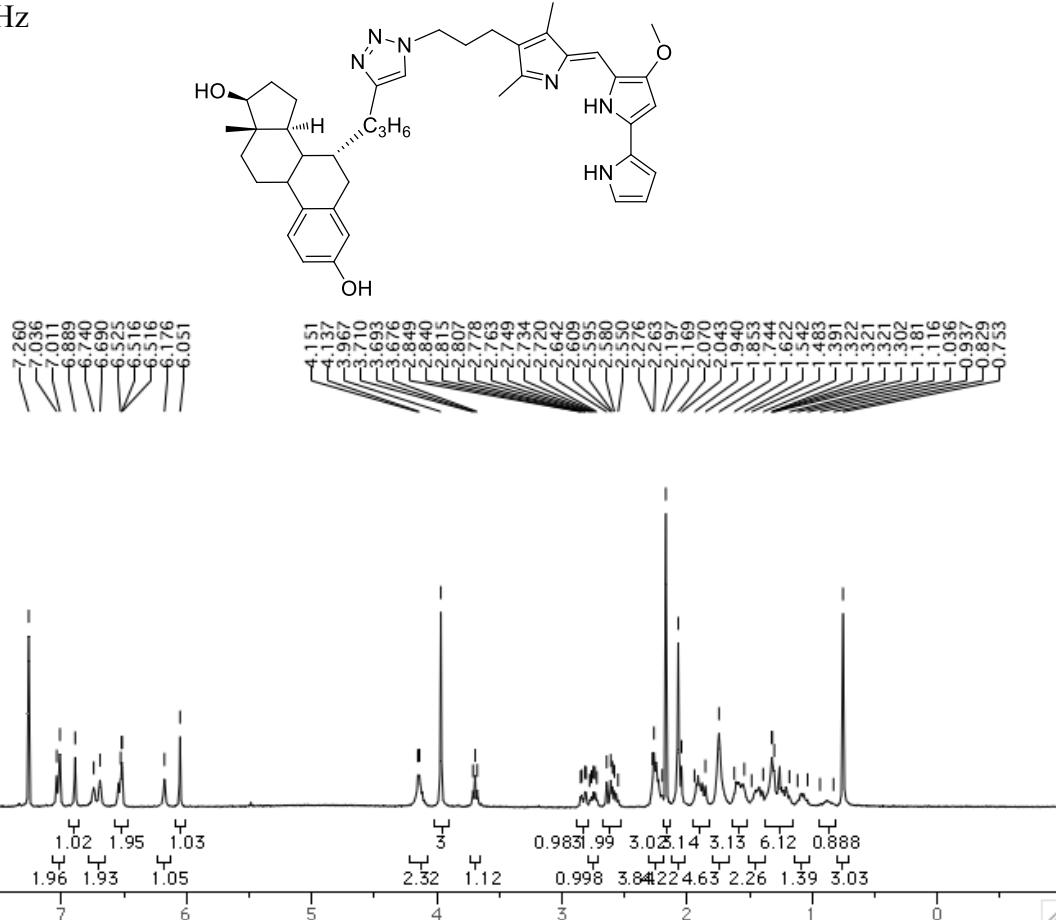
¹H spectrum for 46aCDCl₃, 500 MHz¹³C spectrum for 46aCDCl₃, 125 MHz

¹H spectrum for 46bCDCl₃, 500 MHz¹³C spectrum for 46bCDCl₃, 125 MHz

¹H spectrum for 48a

δ Spectrum for

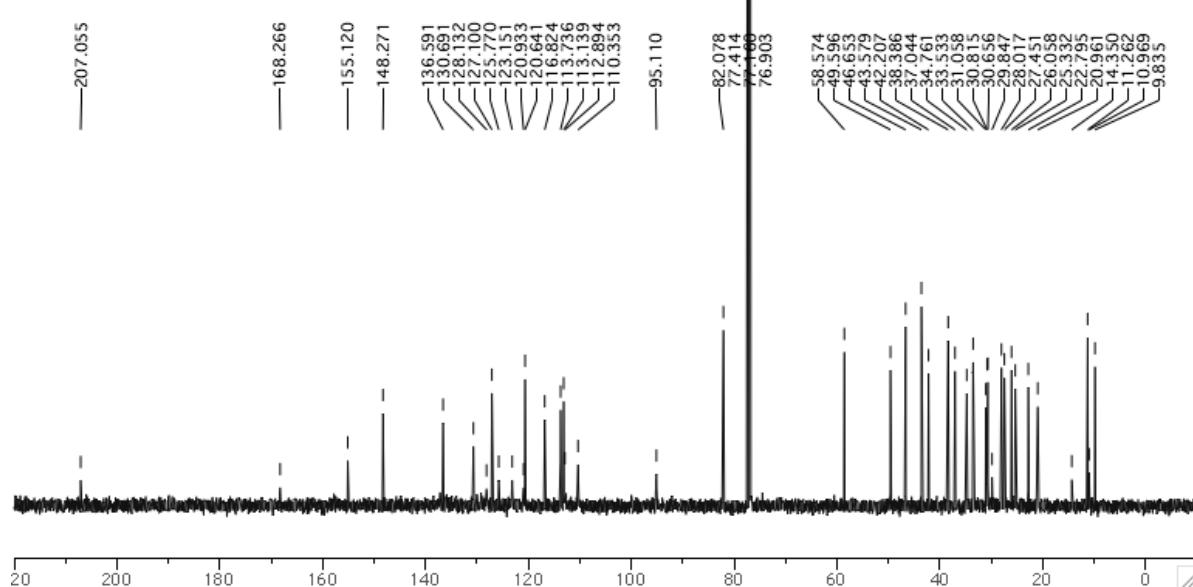
CDCl_3 , 500 MHz

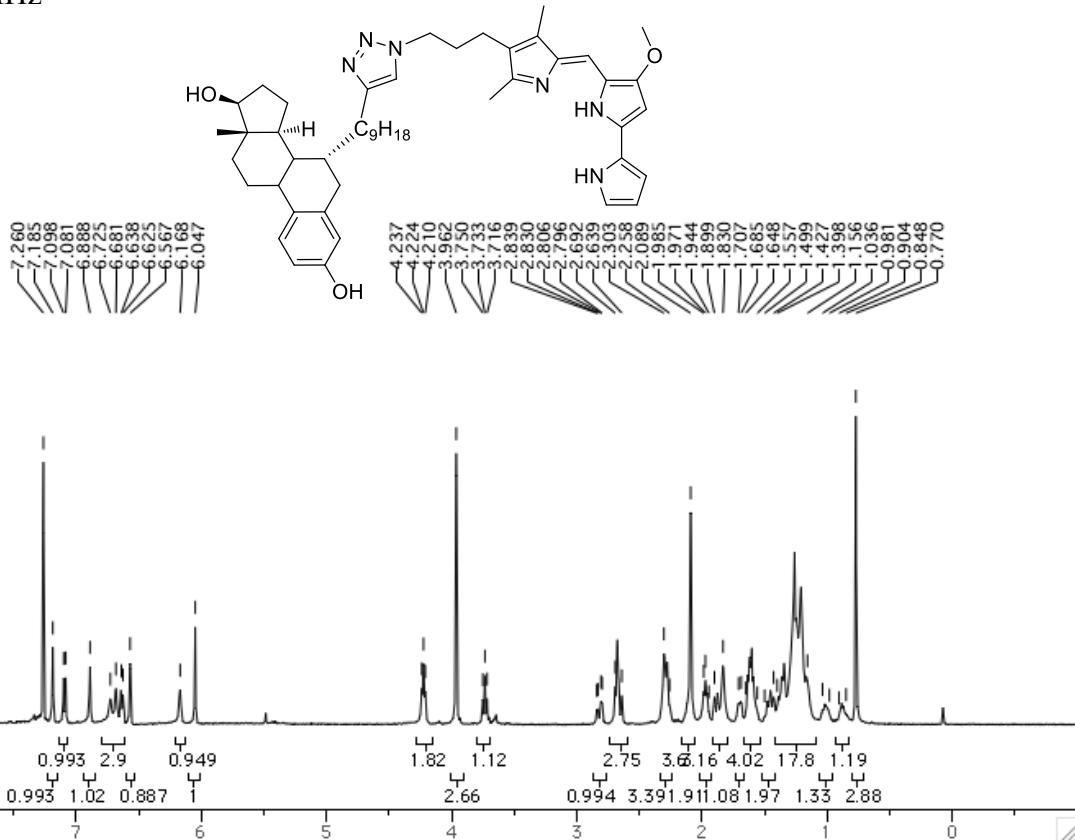
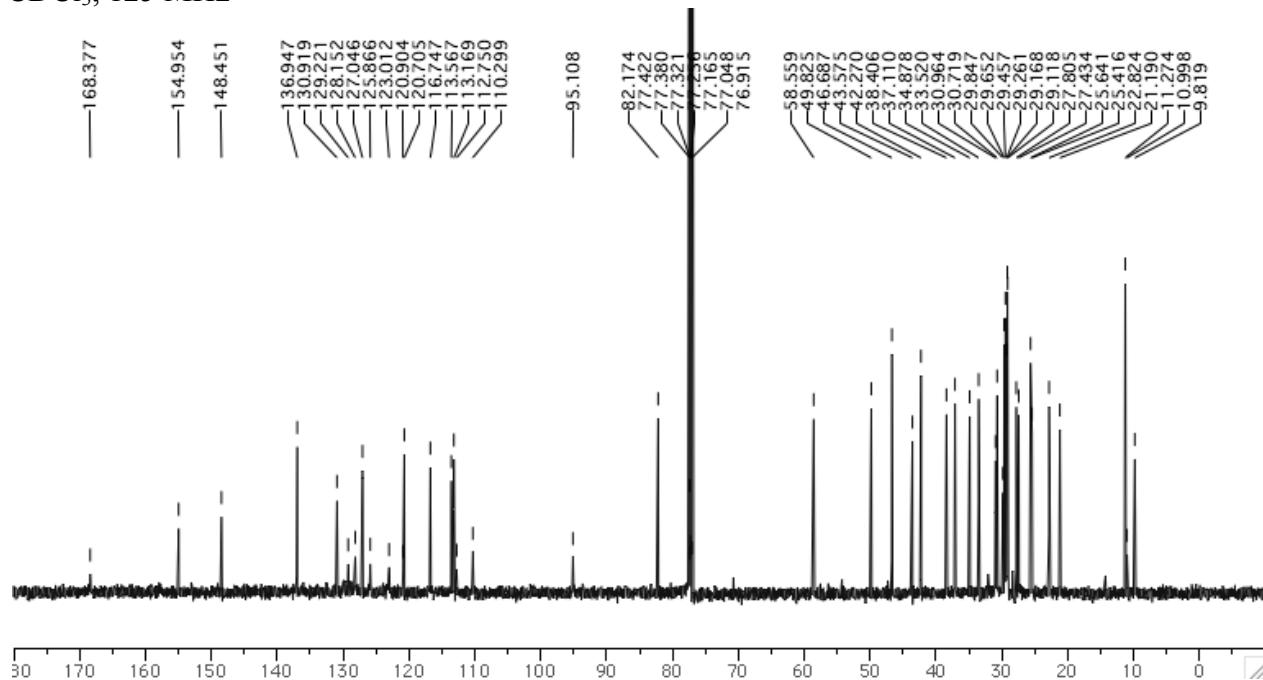


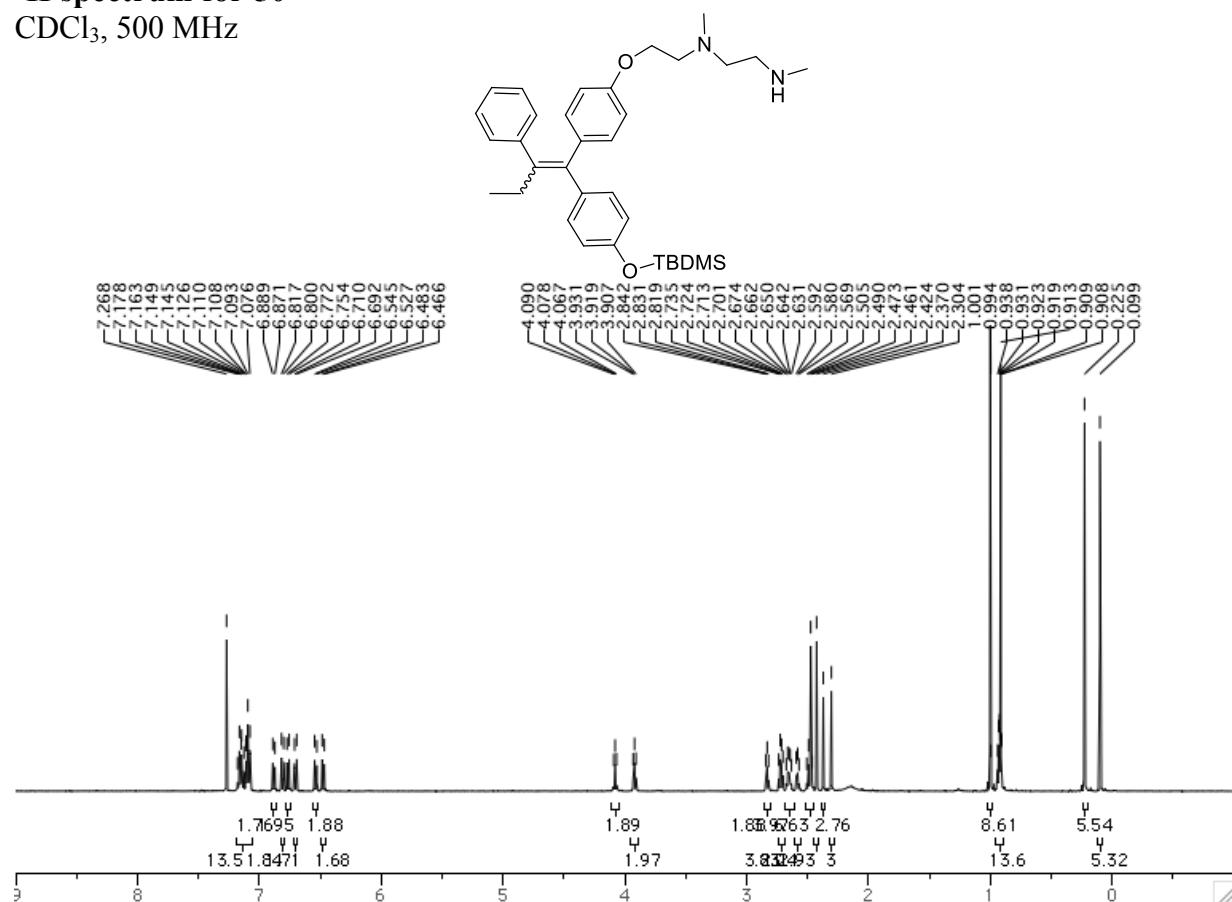
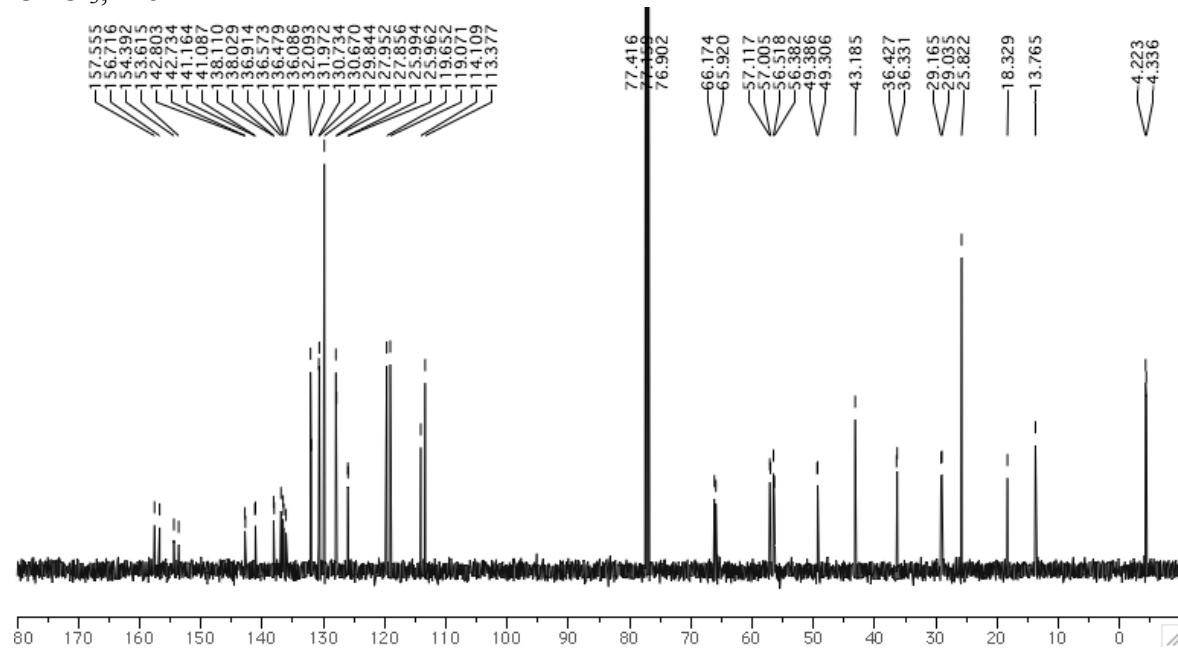
¹³C spectrum for 48a

¹³C spectrum in

CDCl₃, 125 MHz



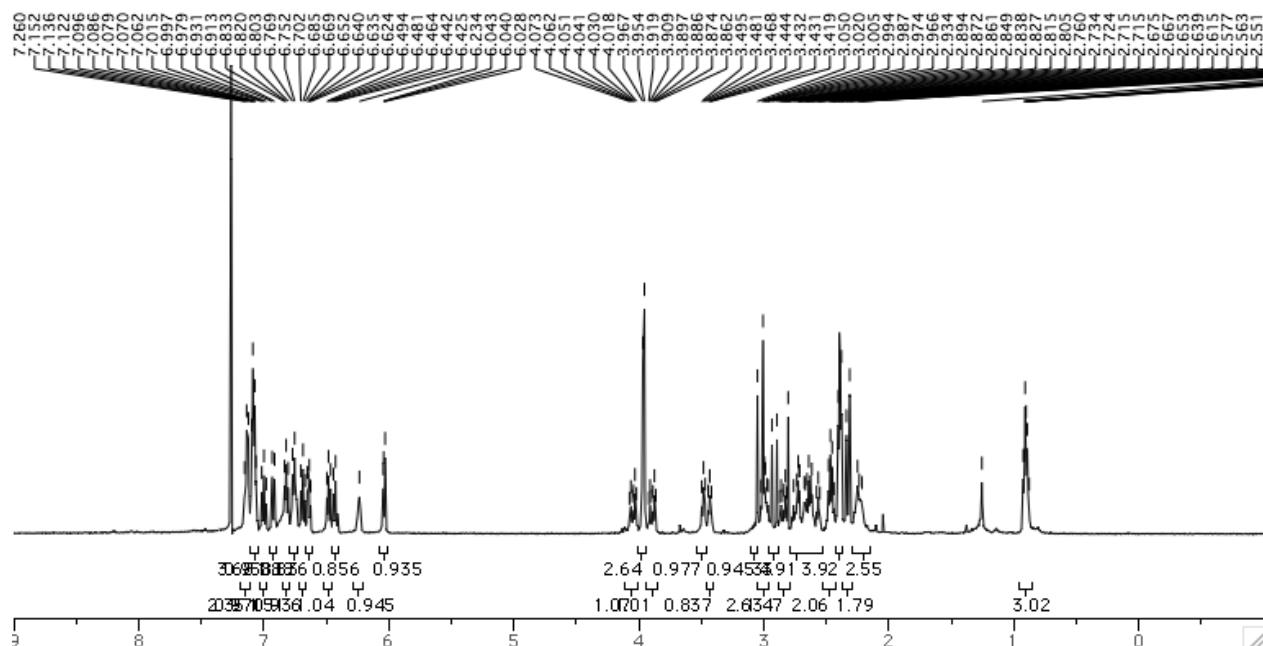
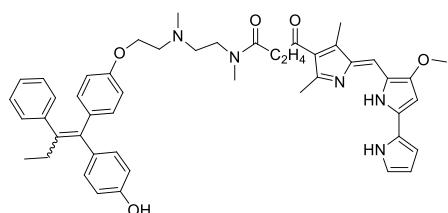
¹H spectrum for 48bCDCl₃, 500 MHz¹³C spectrum for 48bCDCl₃, 125 MHz

¹H spectrum for 50CDCl₃, 500 MHz¹³C spectrum for 50CDCl₃, 125 MHz

¹H spectrum for 51a

δ Spectrum for

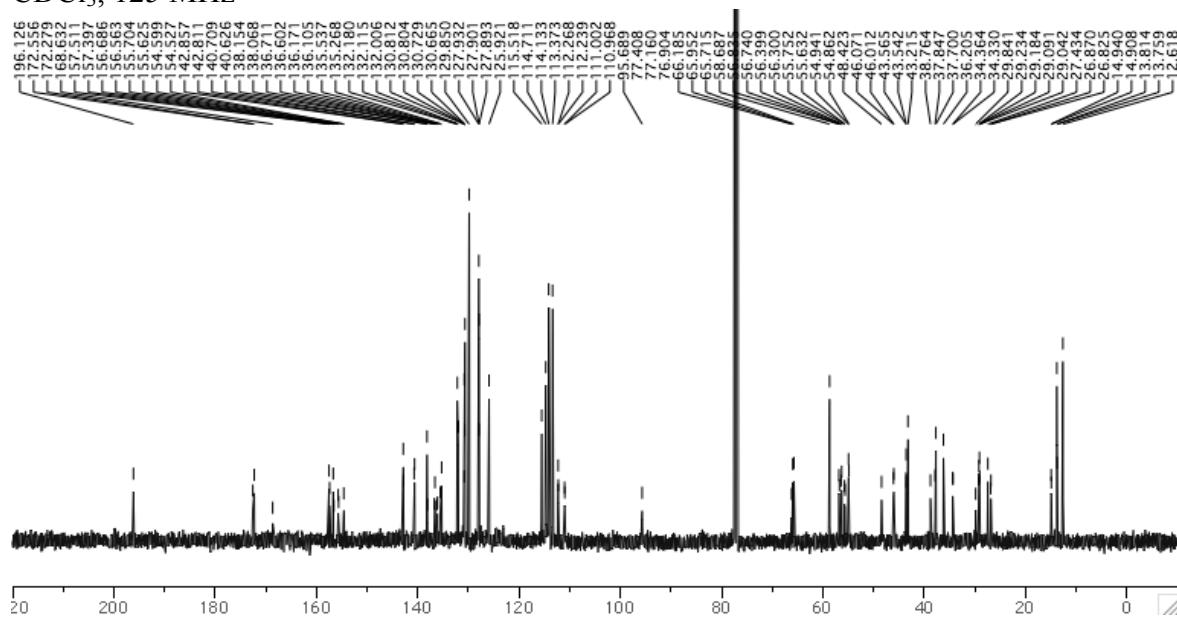
CDCl_3 , 500 MHz



¹³C spectrum for 51a

¹³C spectrum to

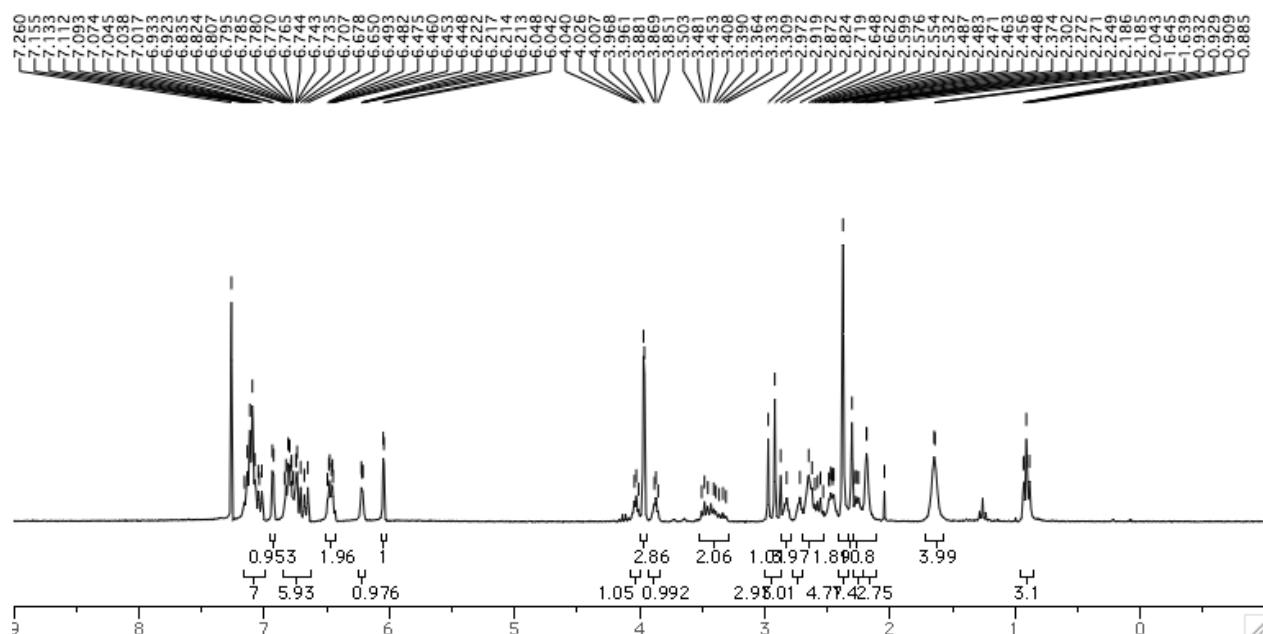
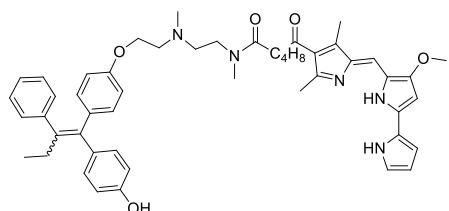
CDCl₃, 125 MHz



¹H spectrum for 51b

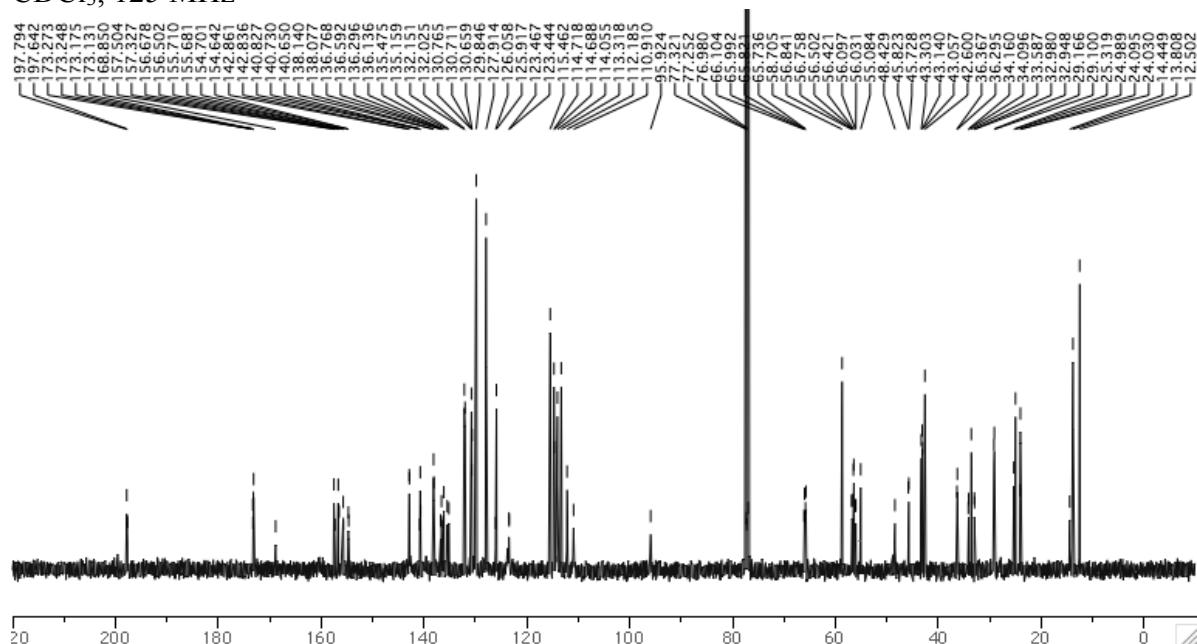
δ spectrum in

CDCl_3 , 500 MHz



¹³C spectrum for 51b

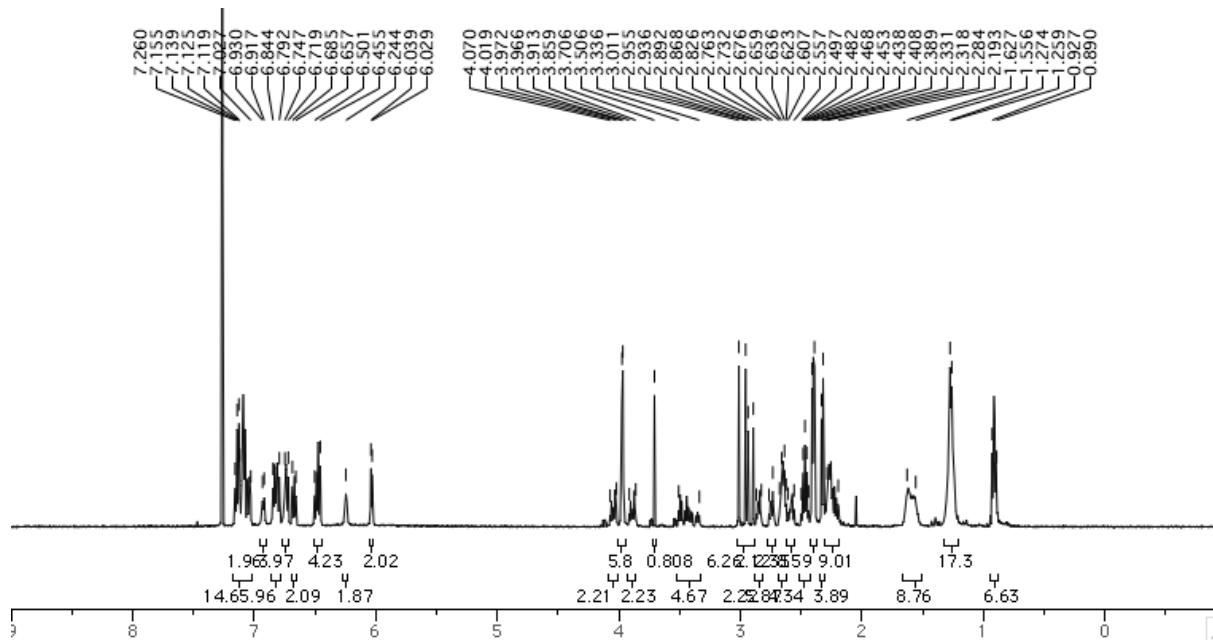
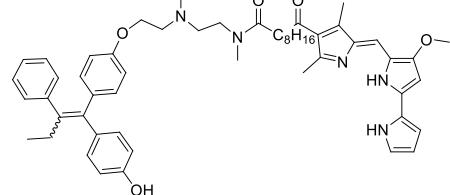
δ spectrum 103



¹H spectrum for 51c

¹H spectrum for

CDCl₃, 500 MHz



¹³C spectrum for 51c

CDCl_3 , 125 MHz

