

## Supporting Information

### A regioselective facile synthesis of furo[3,4-*b*]carbazolones; application to the synthesis of mafaicheenamine E and claulansine D

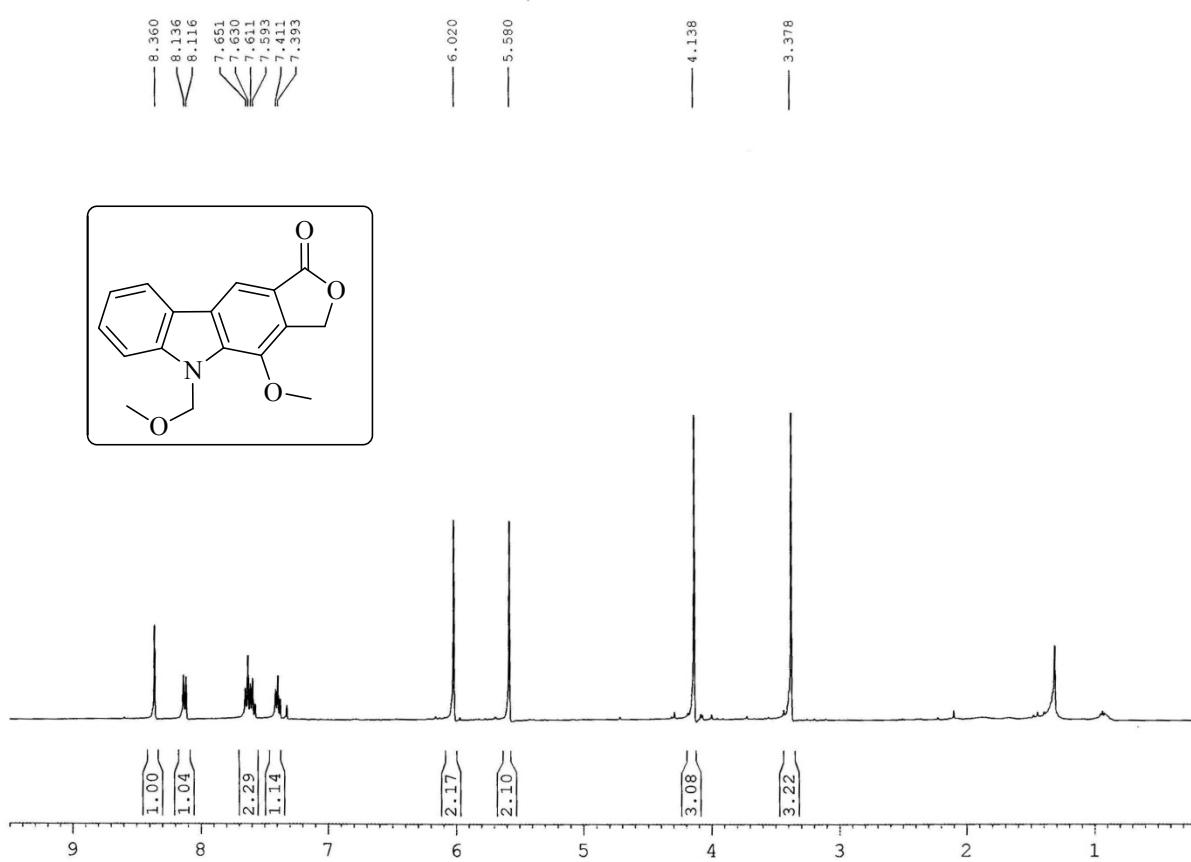
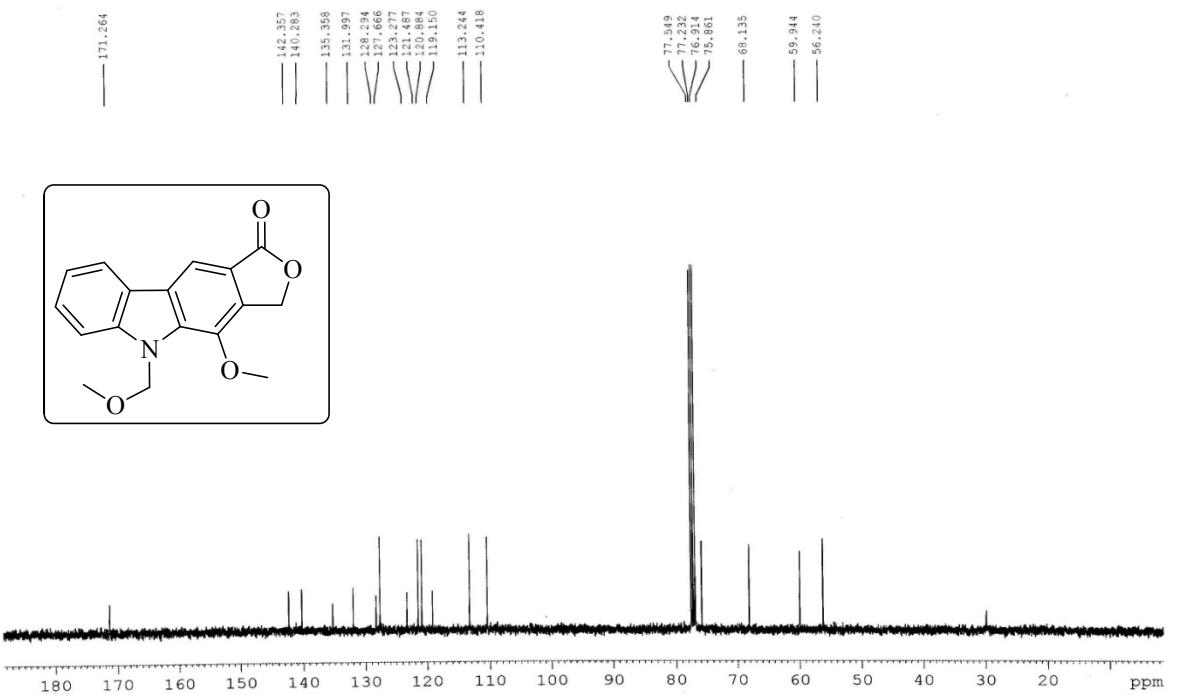
Dipakranjan Mal\* and Joyeeta Roy

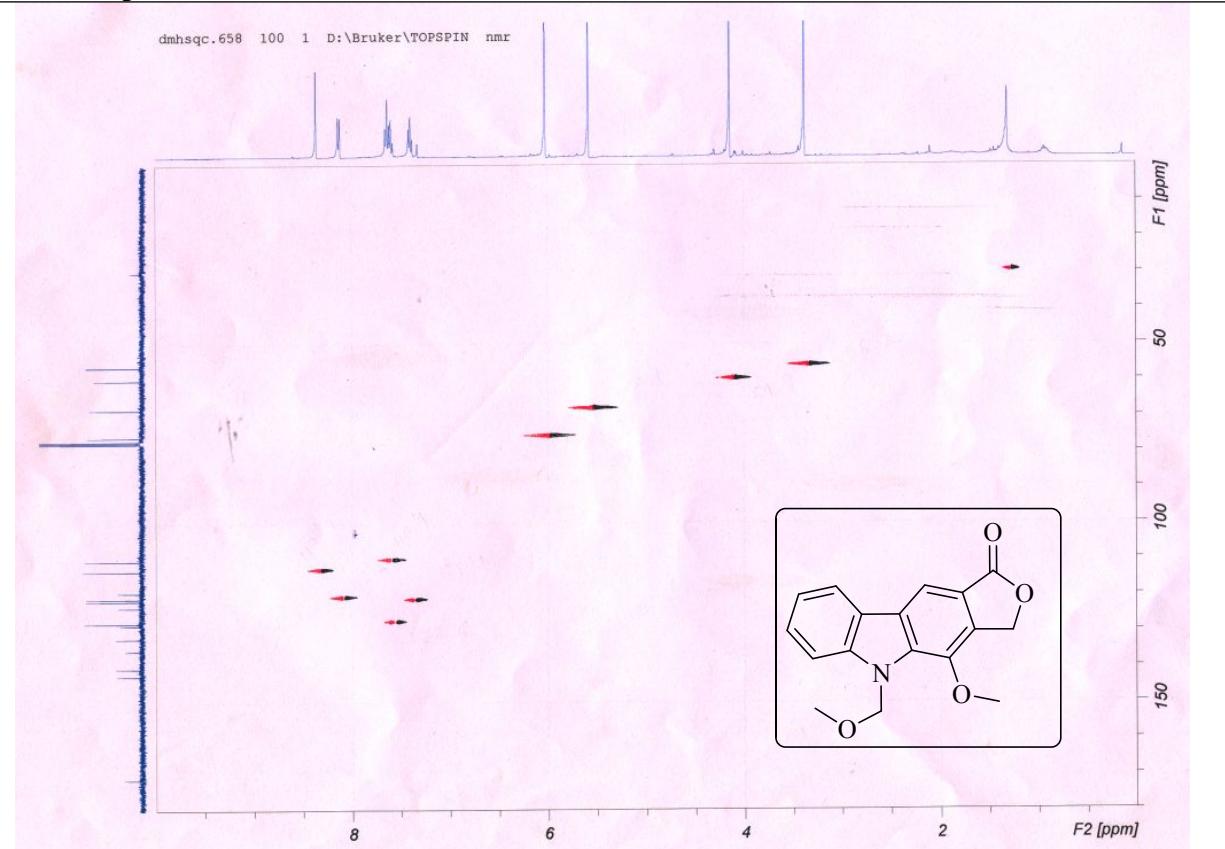
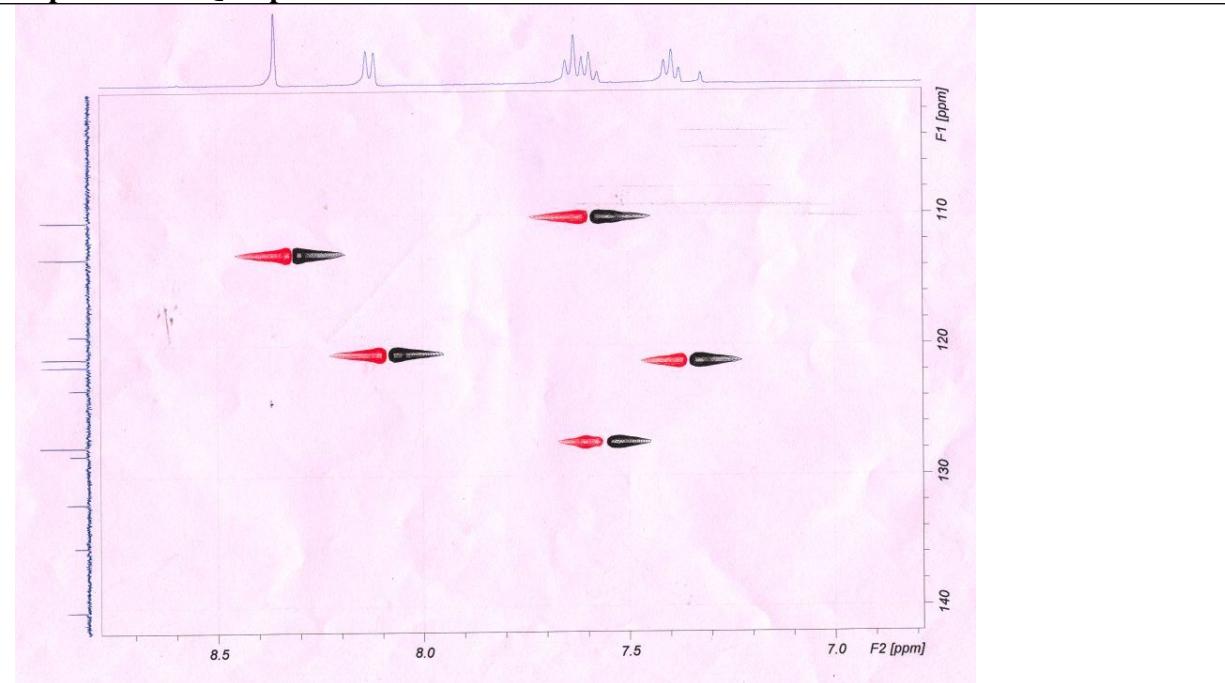
*Department of Chemistry, Indian Institute of Technology, Kharagpur- 721302, India*

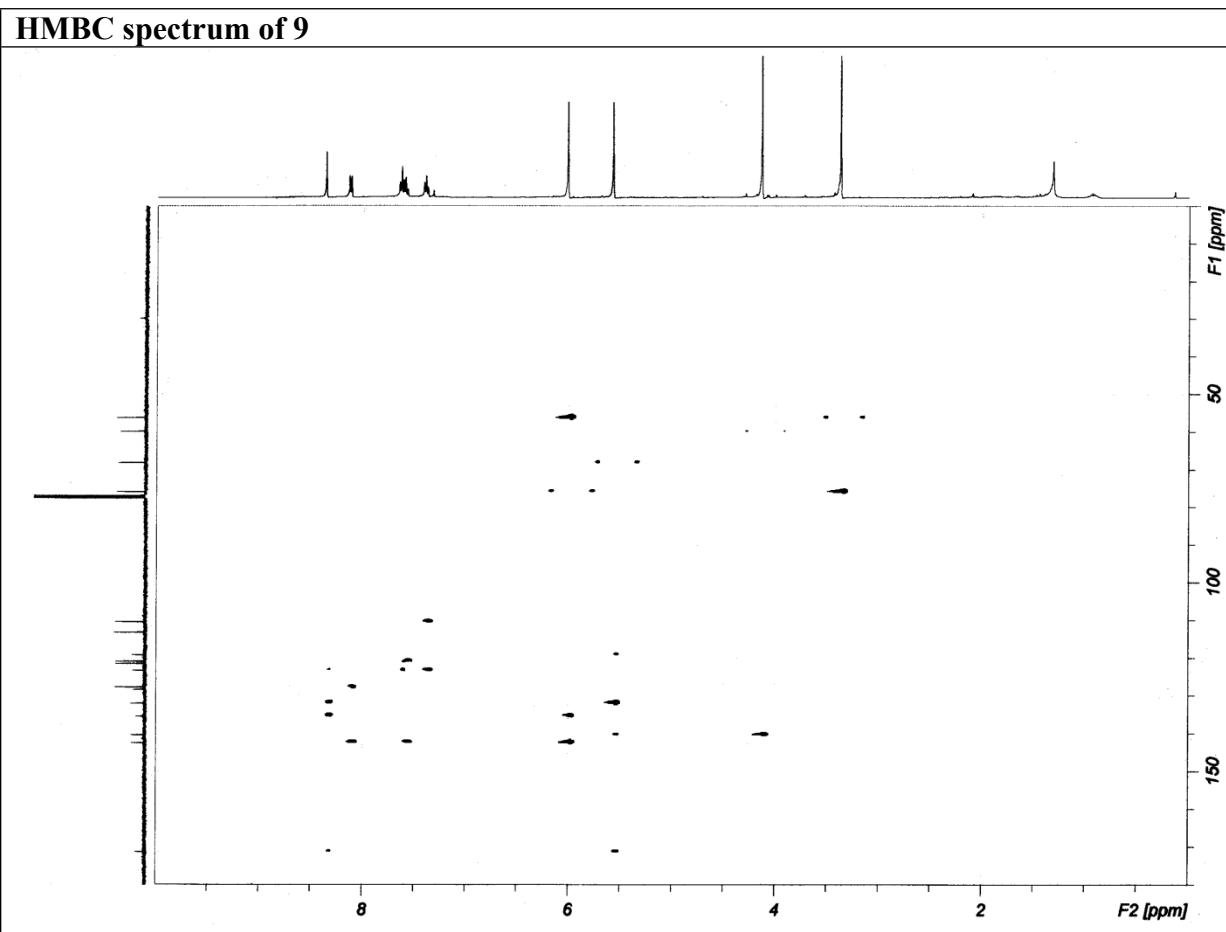
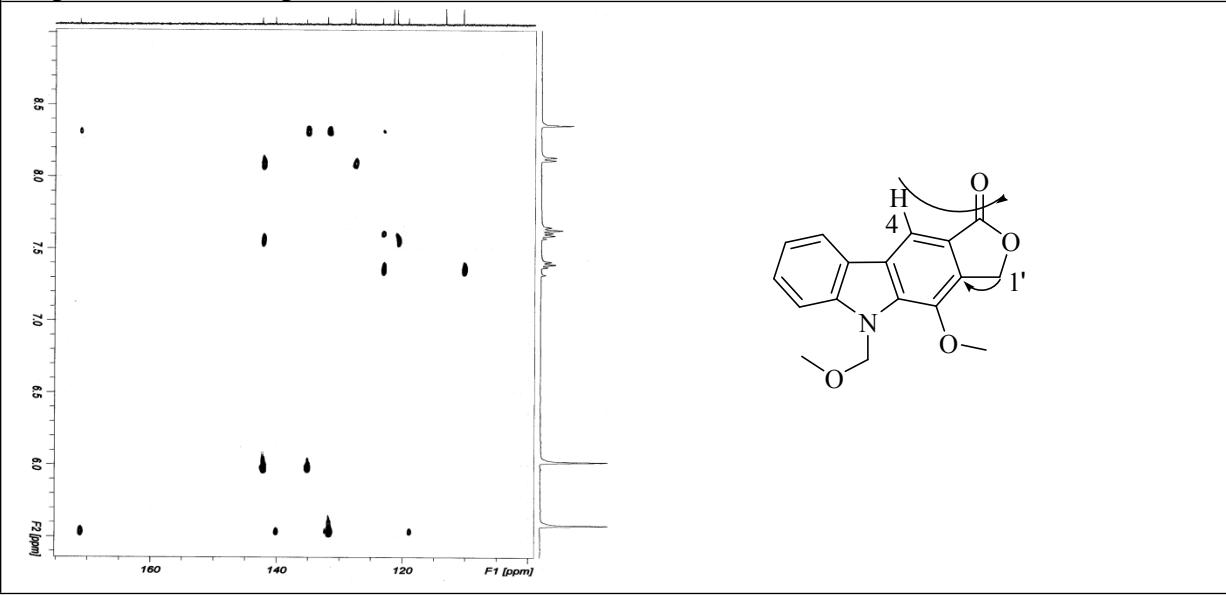
*email: dmal@chem.iitkgp.ernet.in*

#### Content

	Page No.
<sup>1</sup> H NMR and <sup>13</sup> C NMR of compounds	2-20

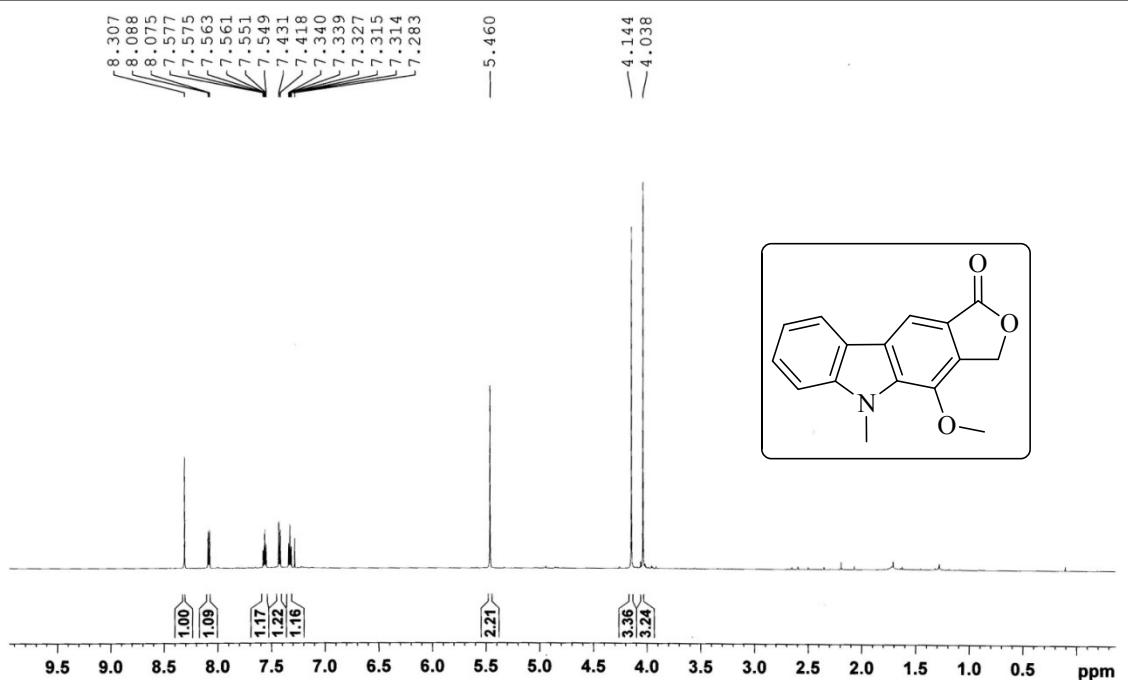
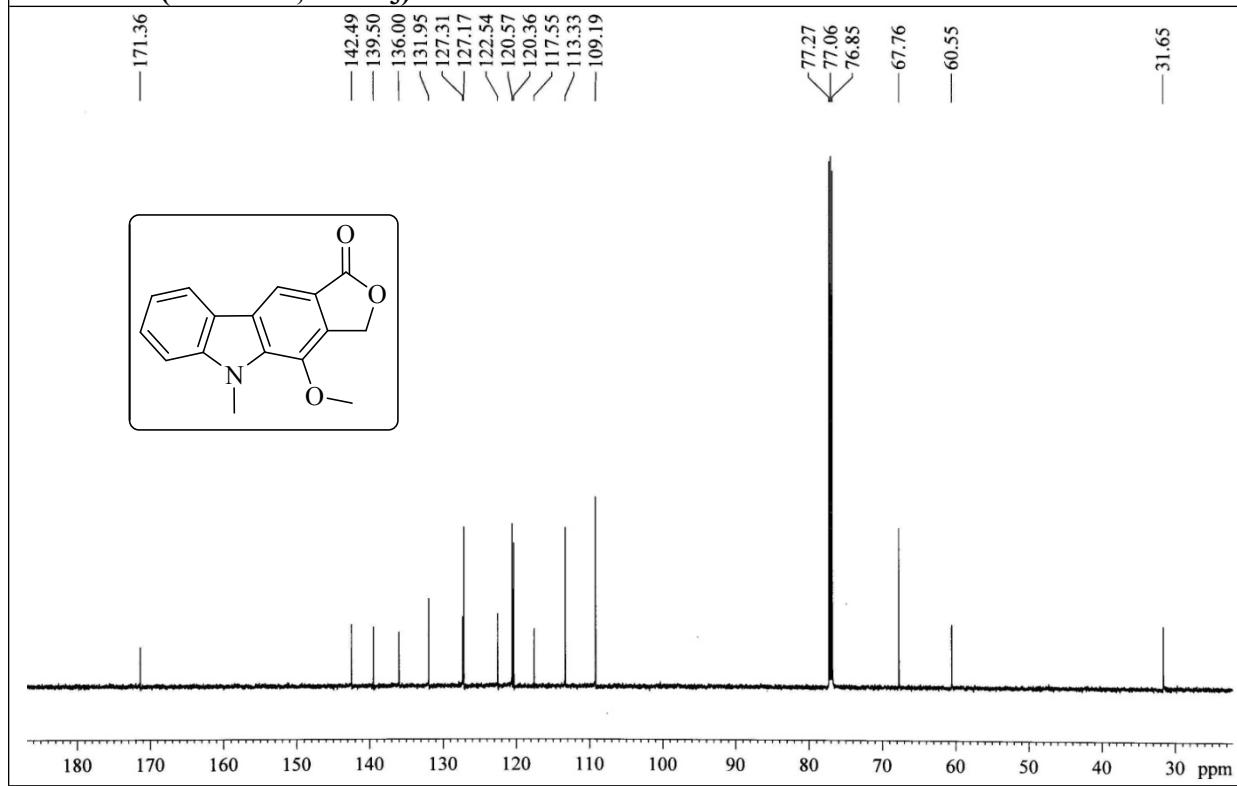
<sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of 9<sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of 9

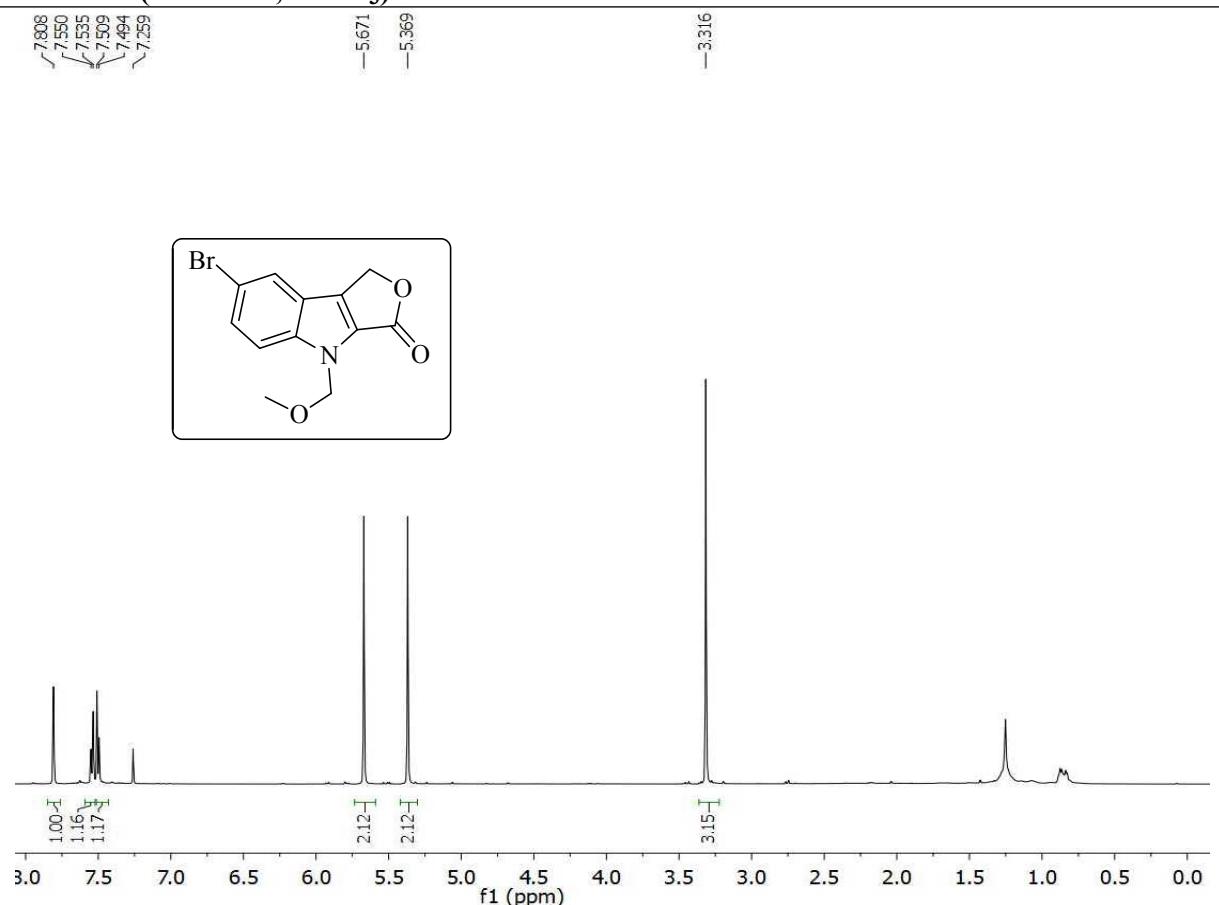
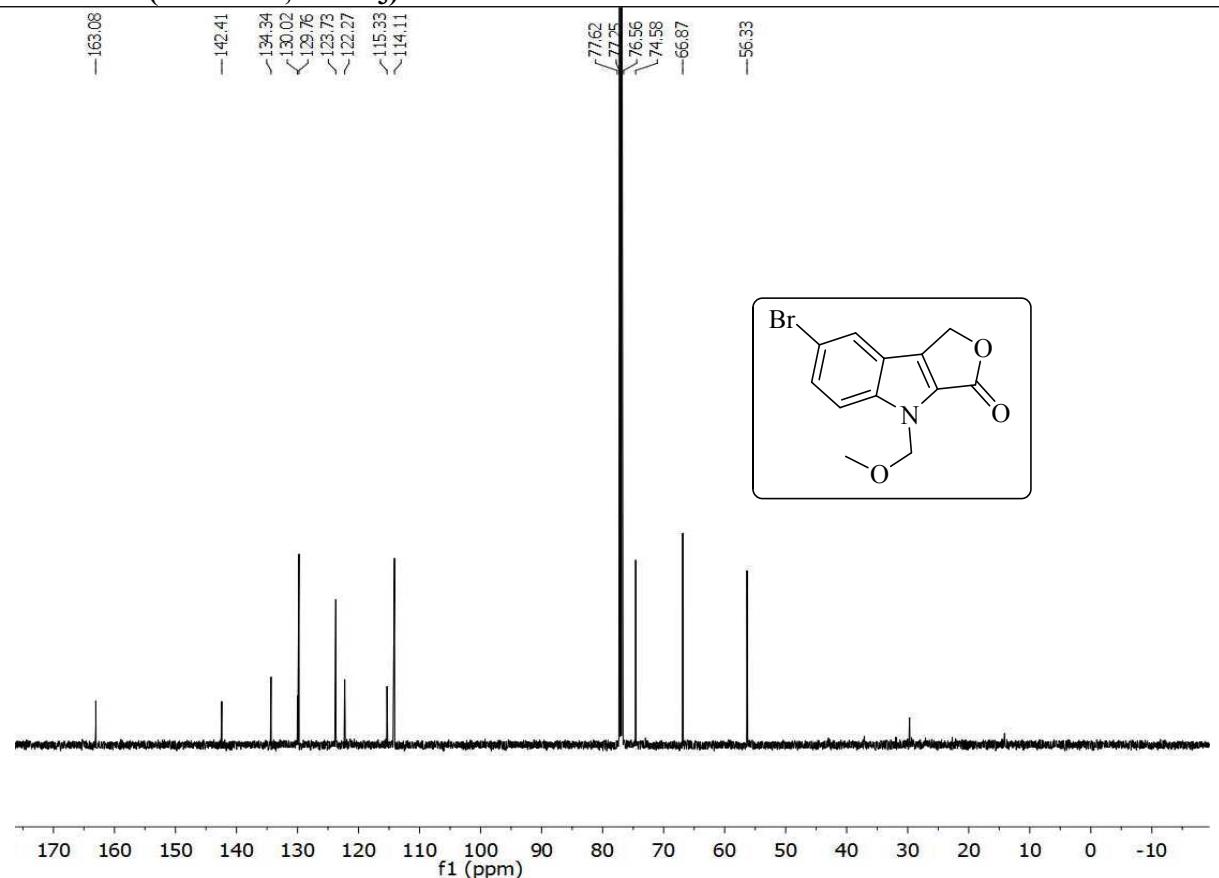
**HSQC spectrum of 9****Expanded HSQC spectrum of 9**

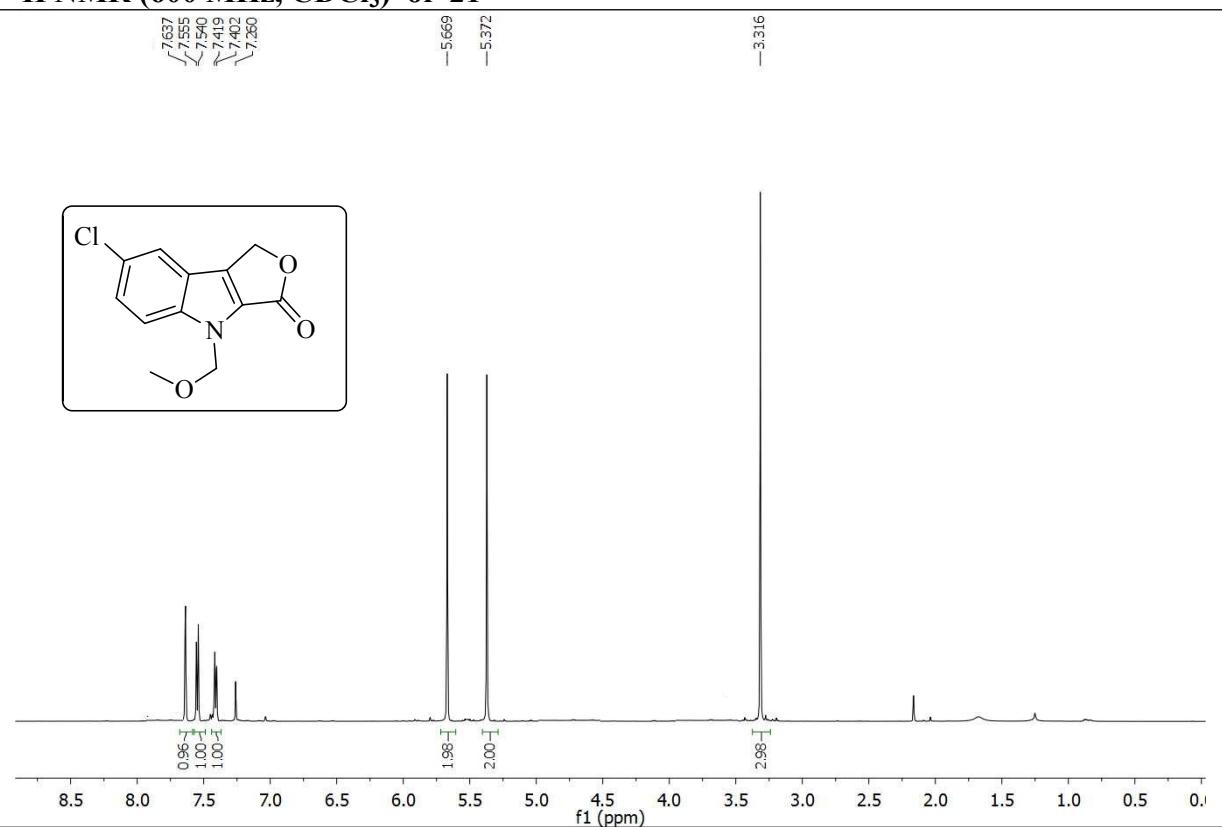
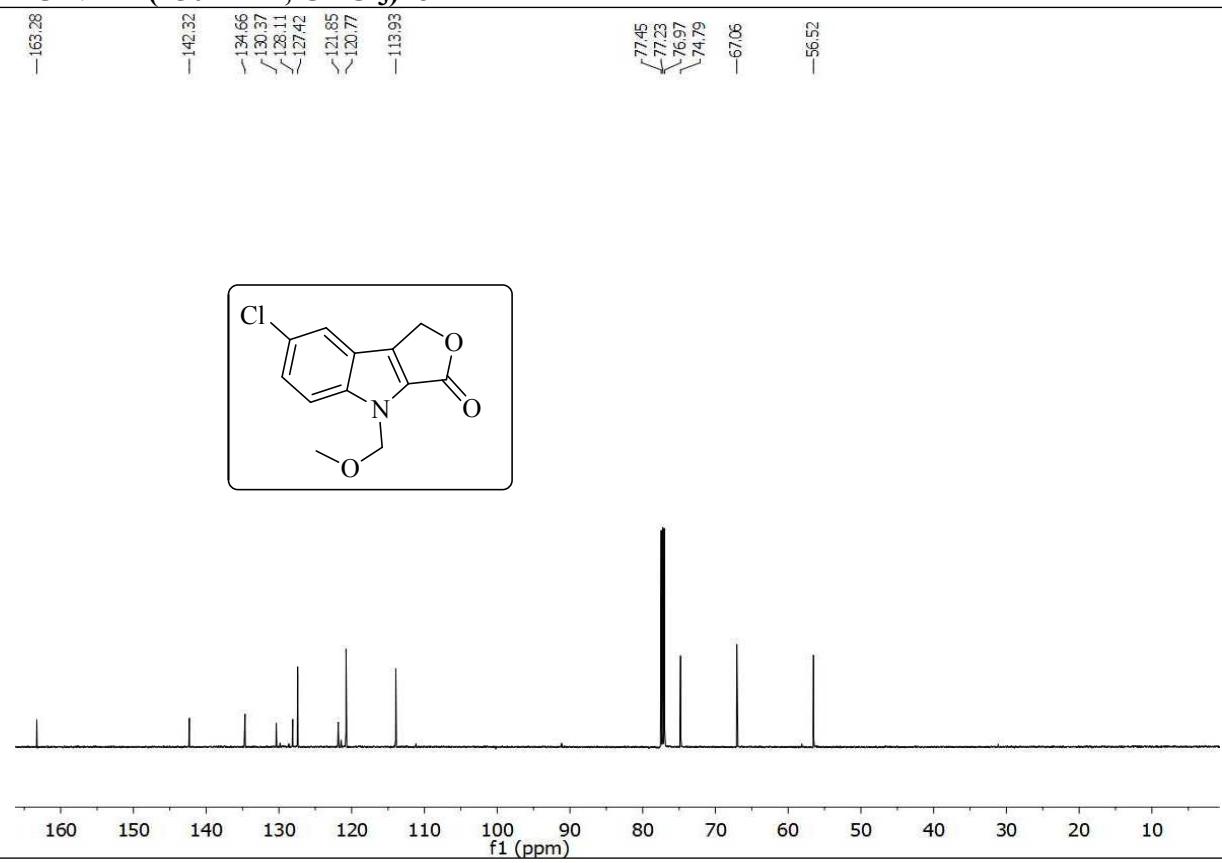
**HMBC spectrum of 9****Expanded HMBC spectrum of 9**

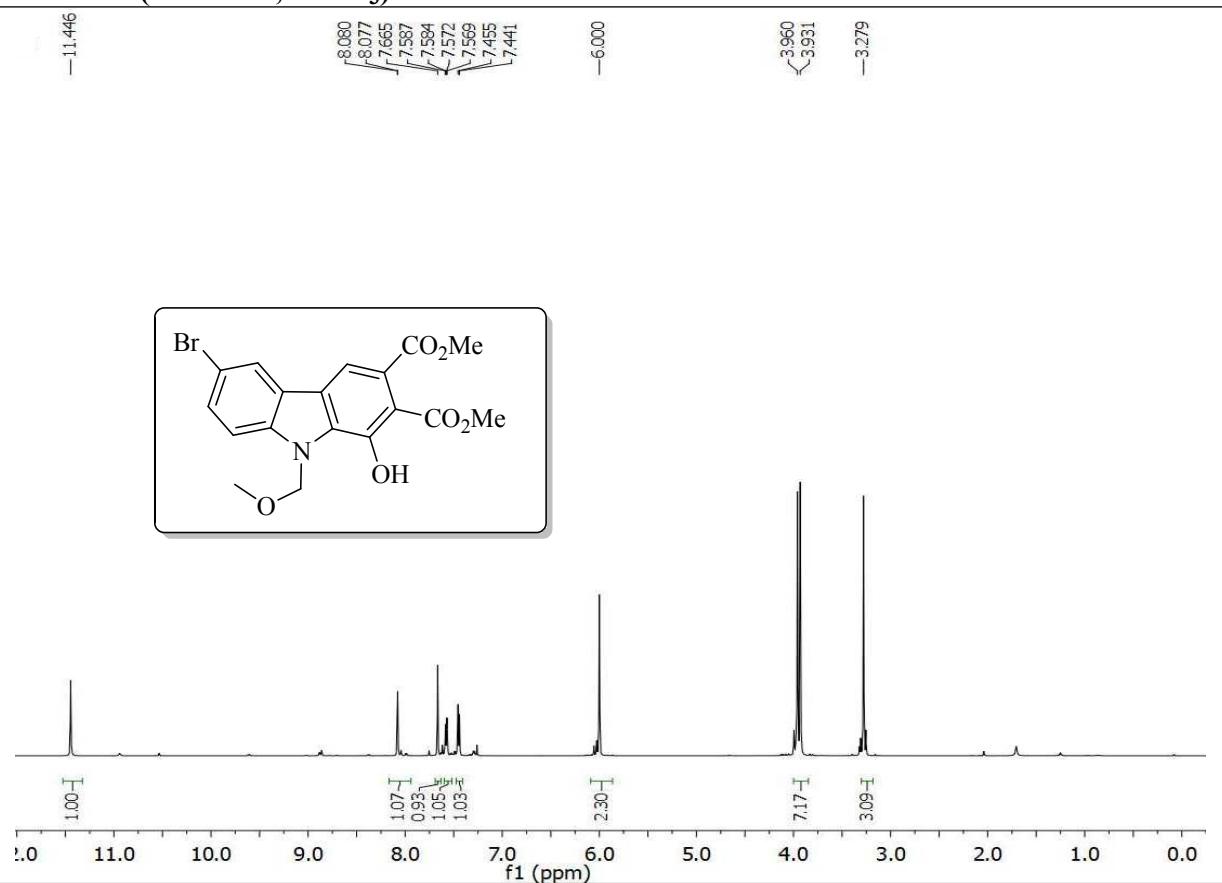
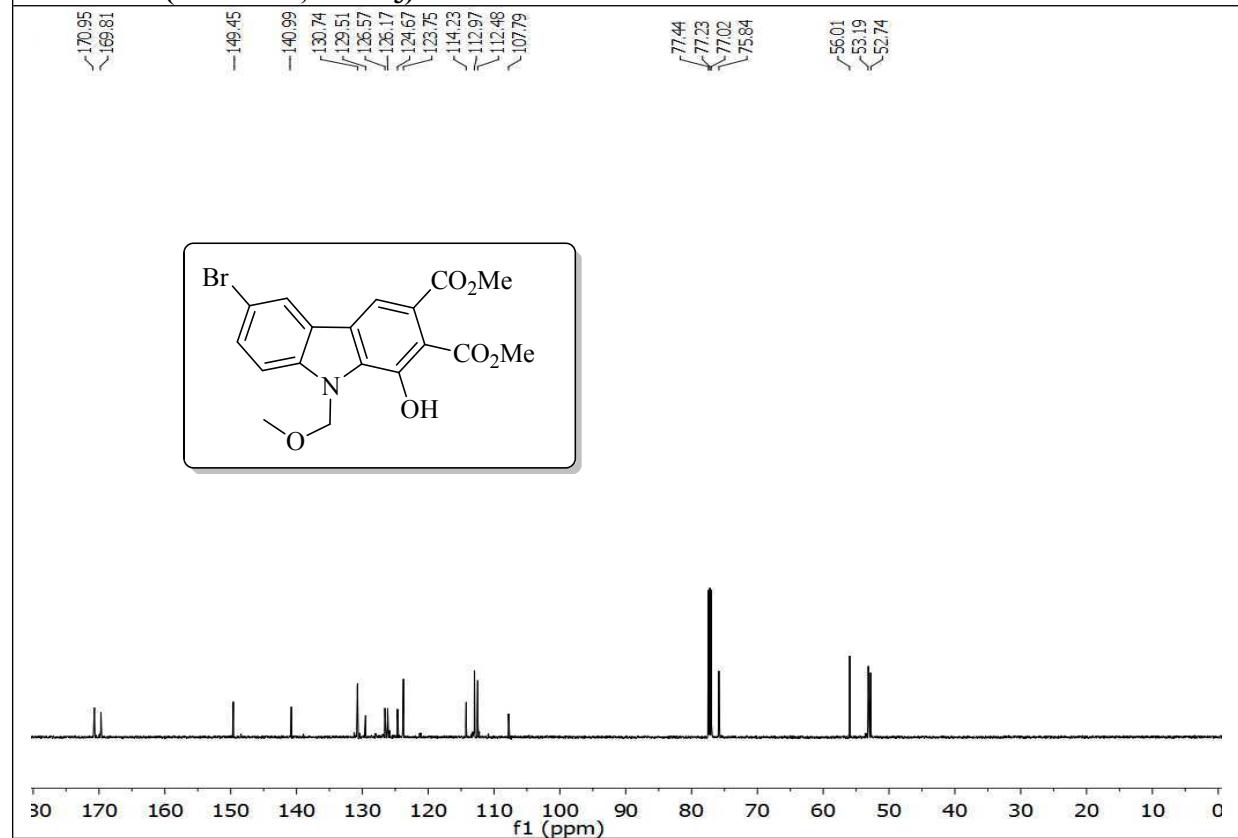
The singlet at  $\delta$  8.36 corresponding to C4-H showed correlation with the signal at  $\delta$  171.2.

The CH<sub>2</sub> (1' H) at  $\delta$  5.58 showed correlation with the signal at  $\delta$  131.9 (C2).

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 19<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 19

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 20<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 20

**<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 21****<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 21**

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 22<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 22

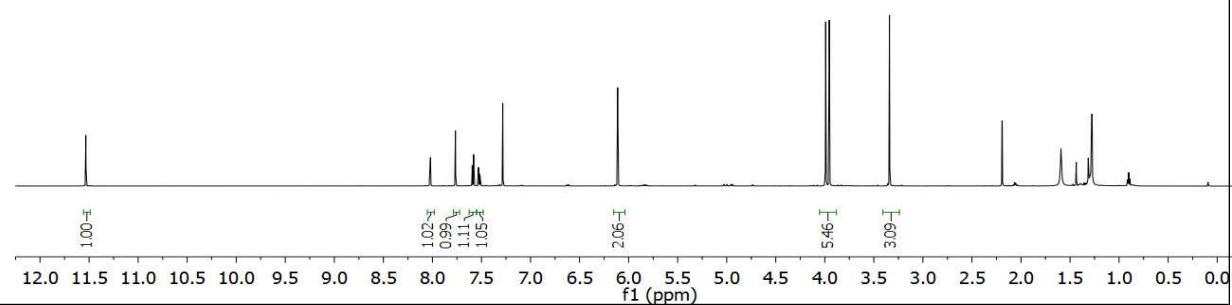
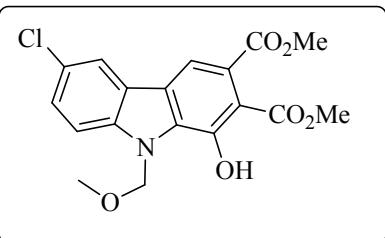
**<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 23**

D Mal  
dm / jr <sup>133</sup>C  
- 1779 - 1h

8.023  
7.765  
7.595  
7.590  
7.531  
7.513  
7.283

-6.112

3.991  
3.955  
-3.341

**<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 23**

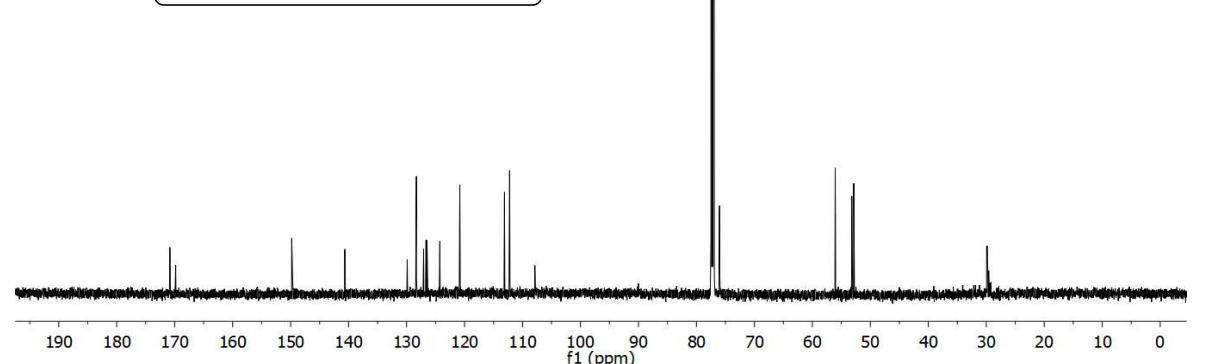
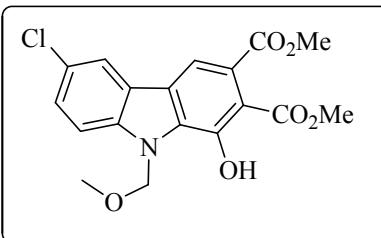
170.78  
169.94

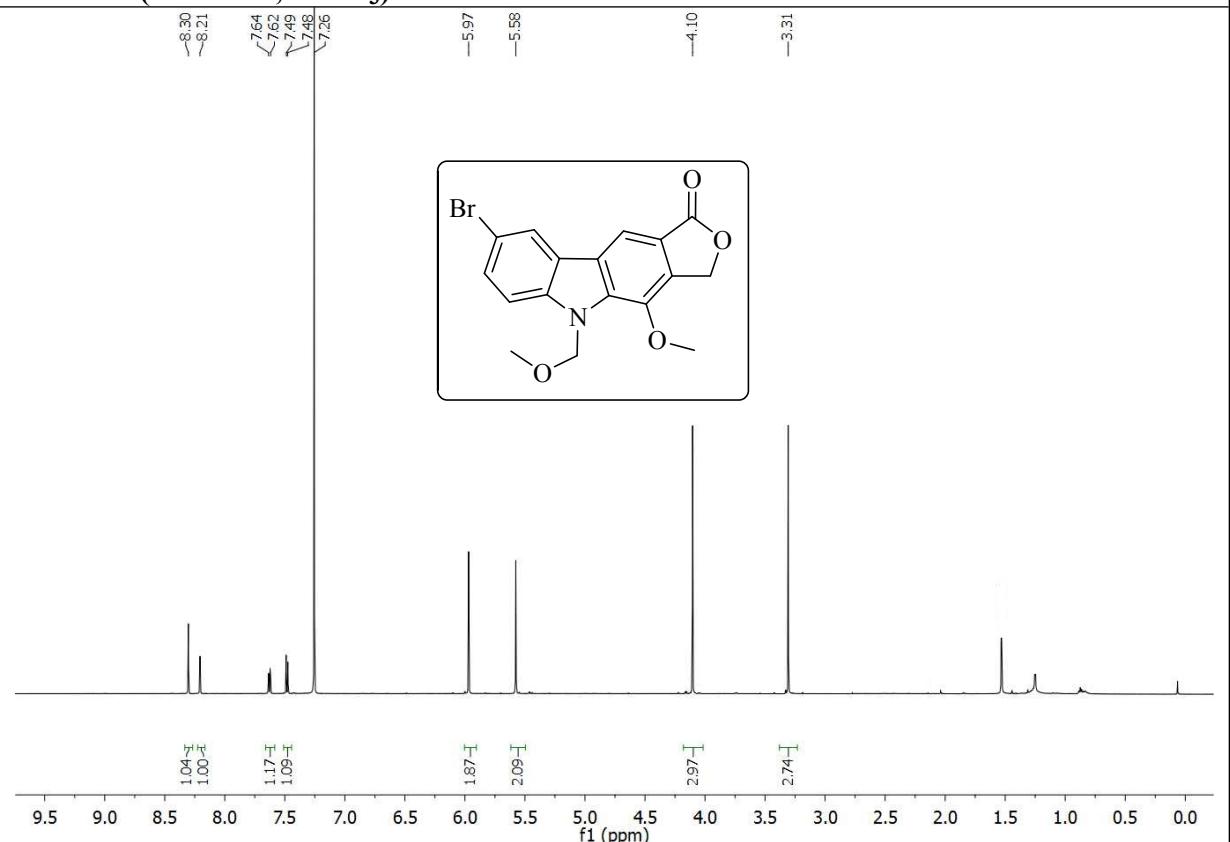
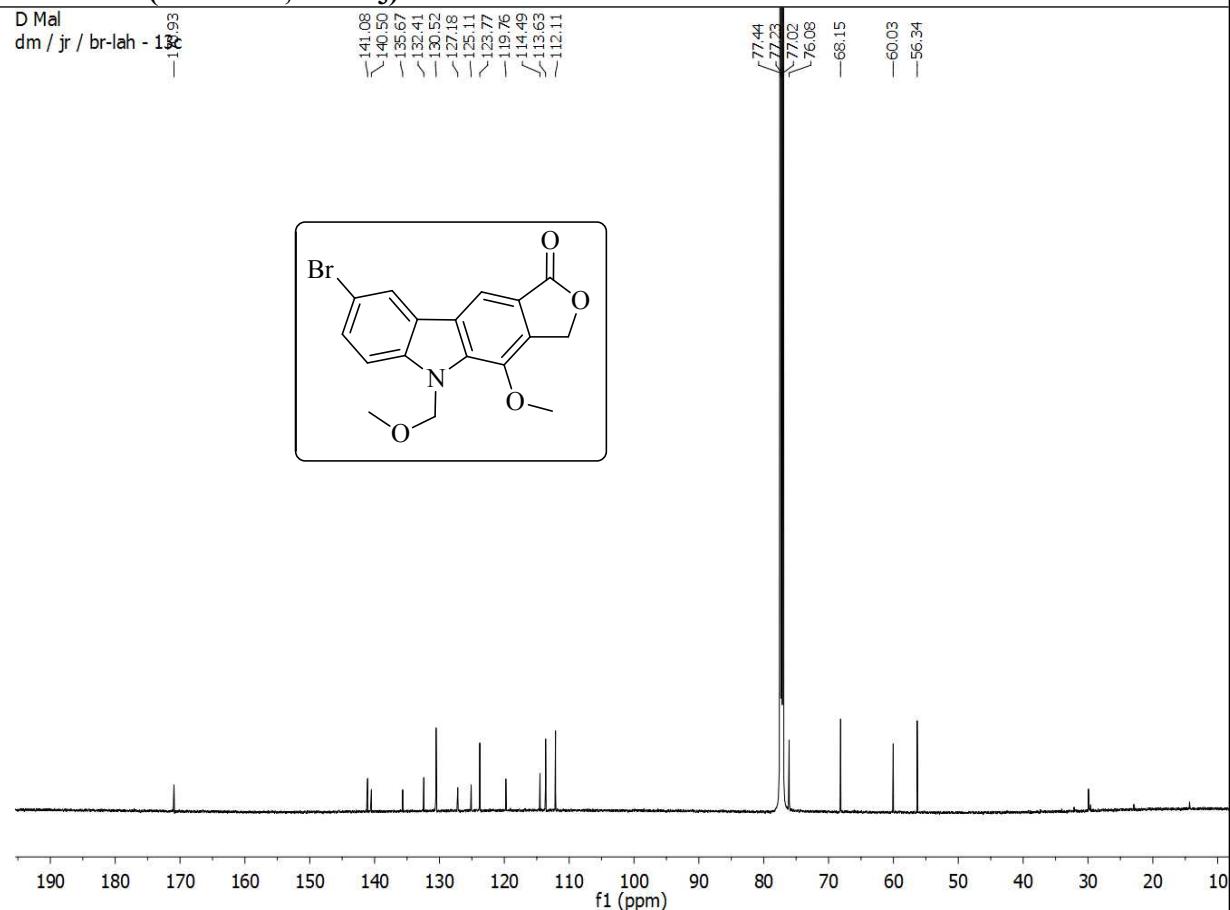
149.96  
140.72

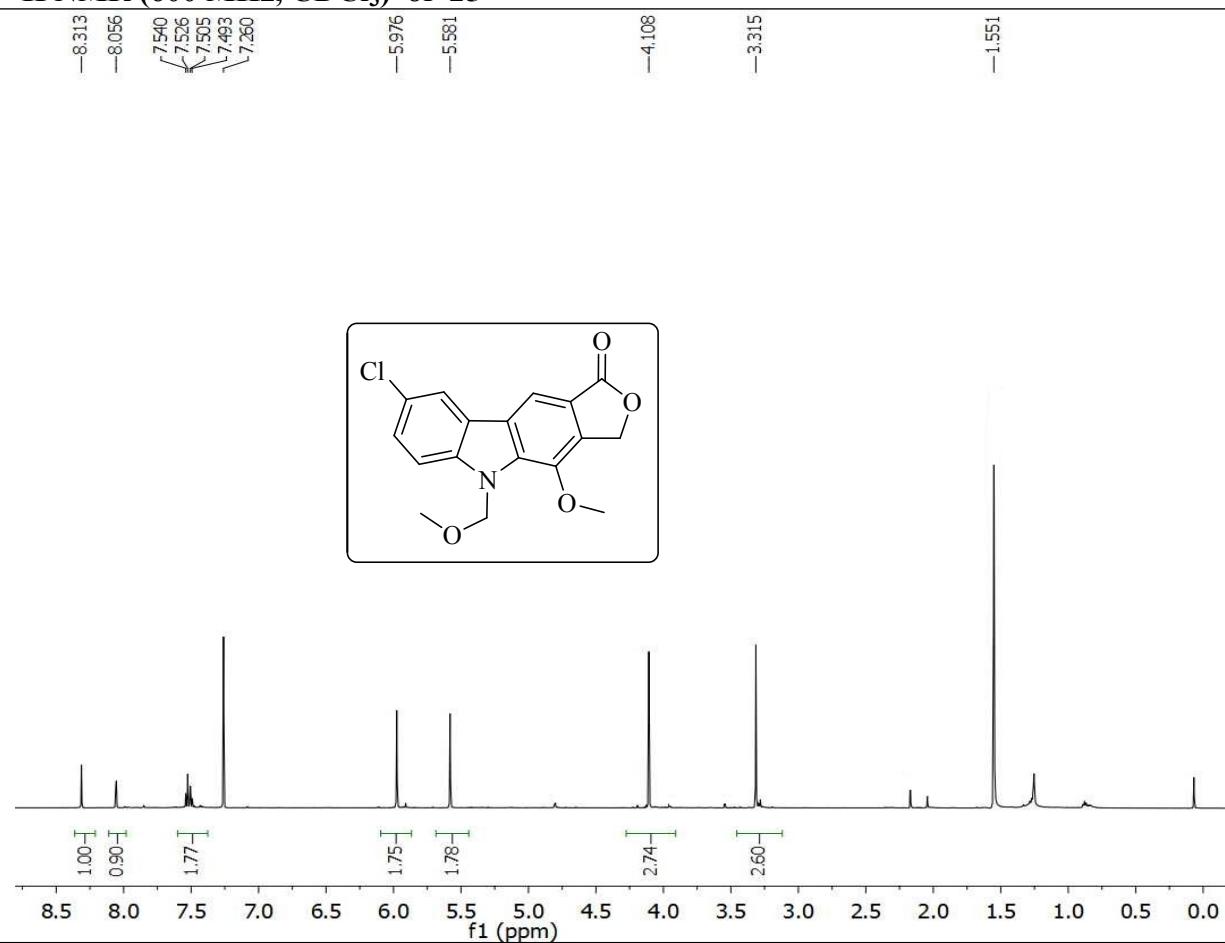
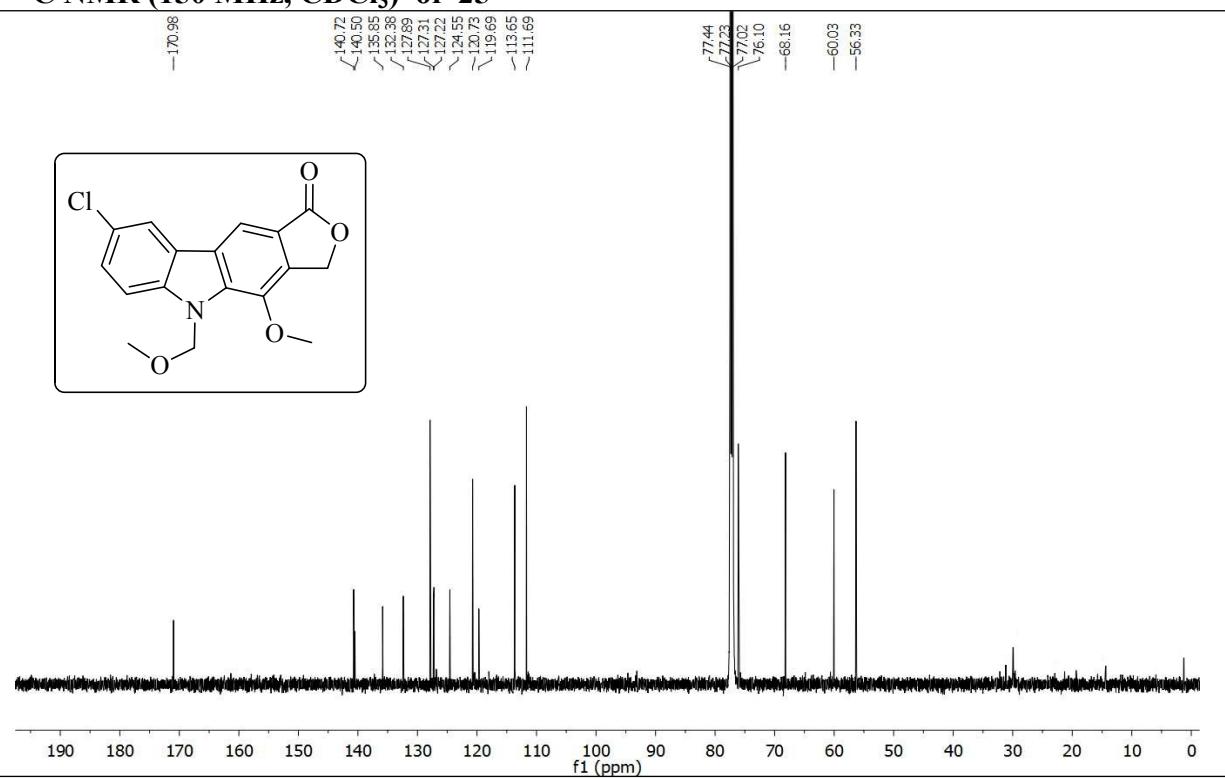
129.79  
128.32  
127.69  
126.48  
124.23  
120.78  
113.04  
112.22  
107.87

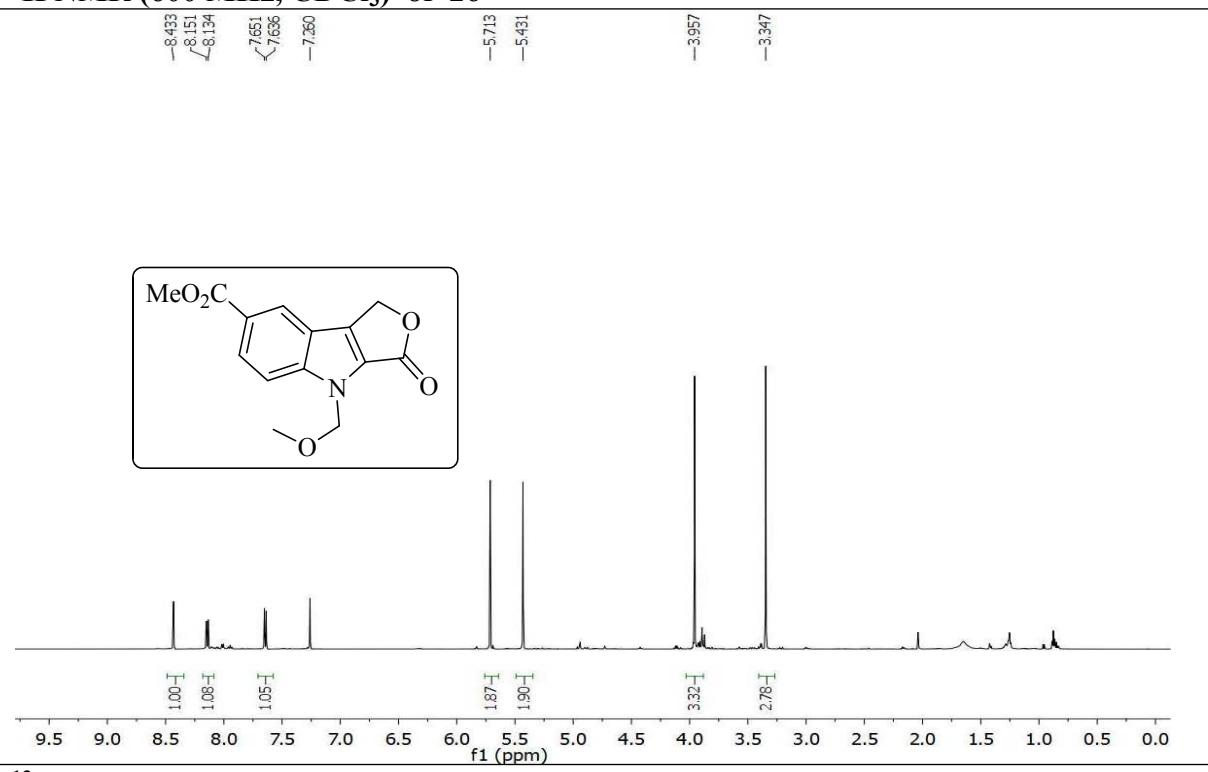
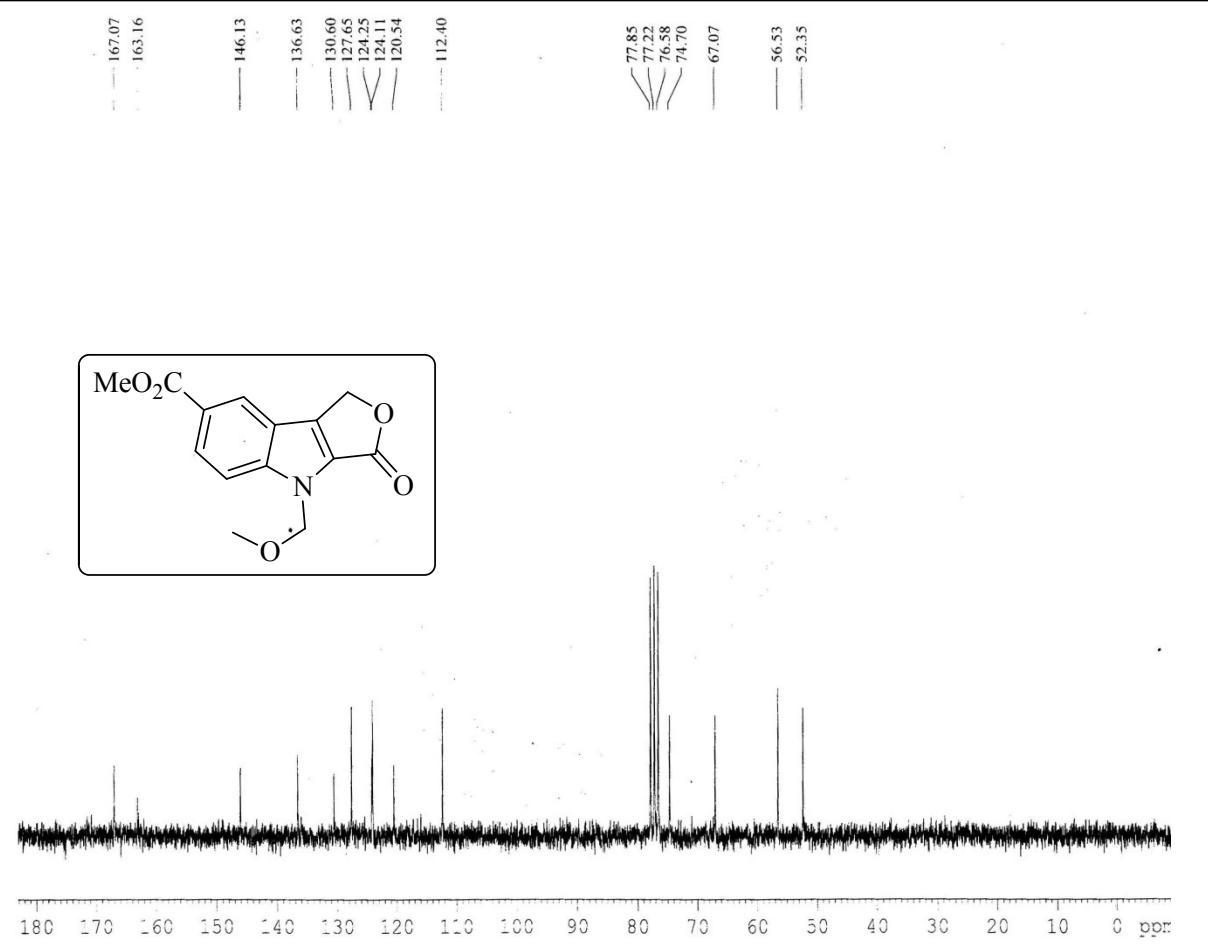
77.44  
77.23  
77.02  
76.02

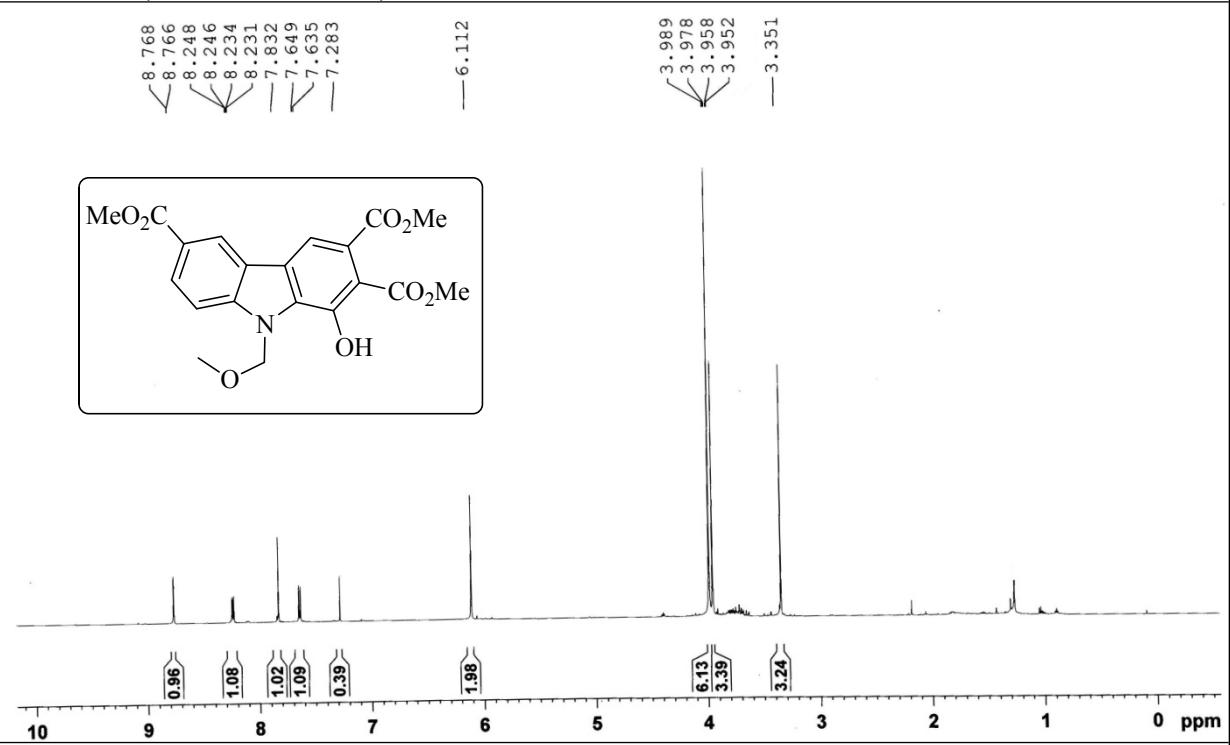
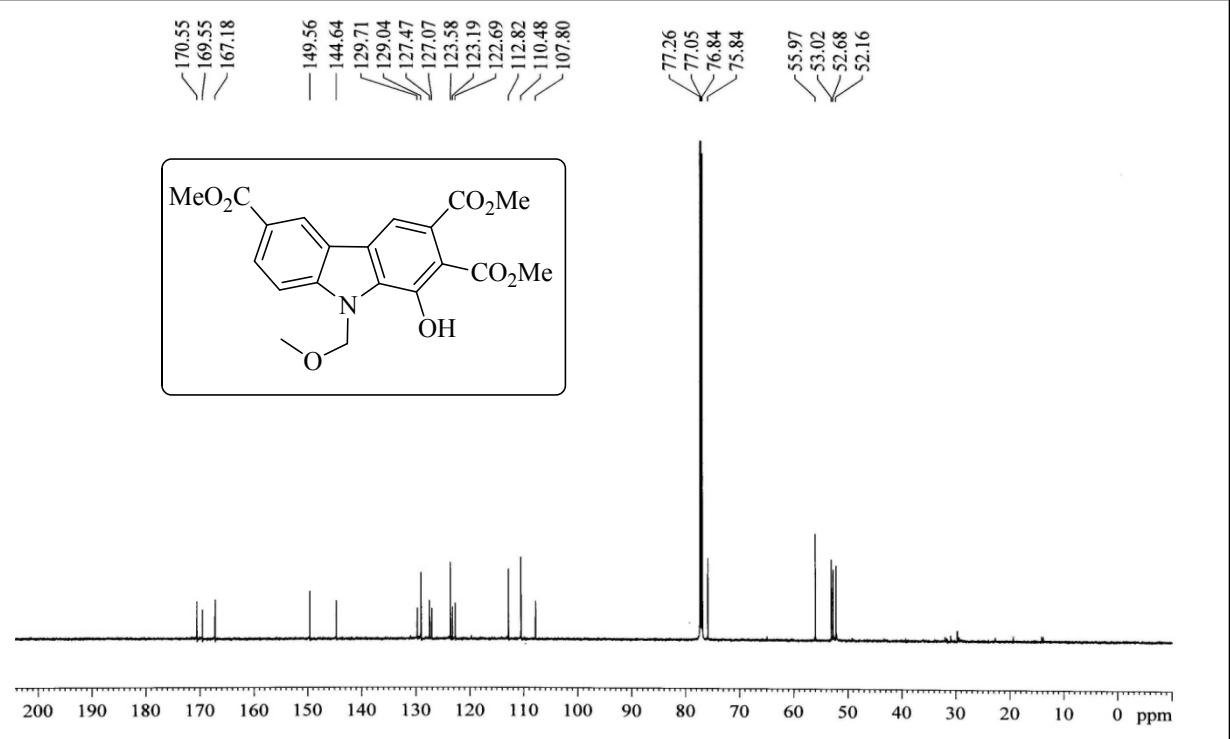
56.06  
53.20  
52.86

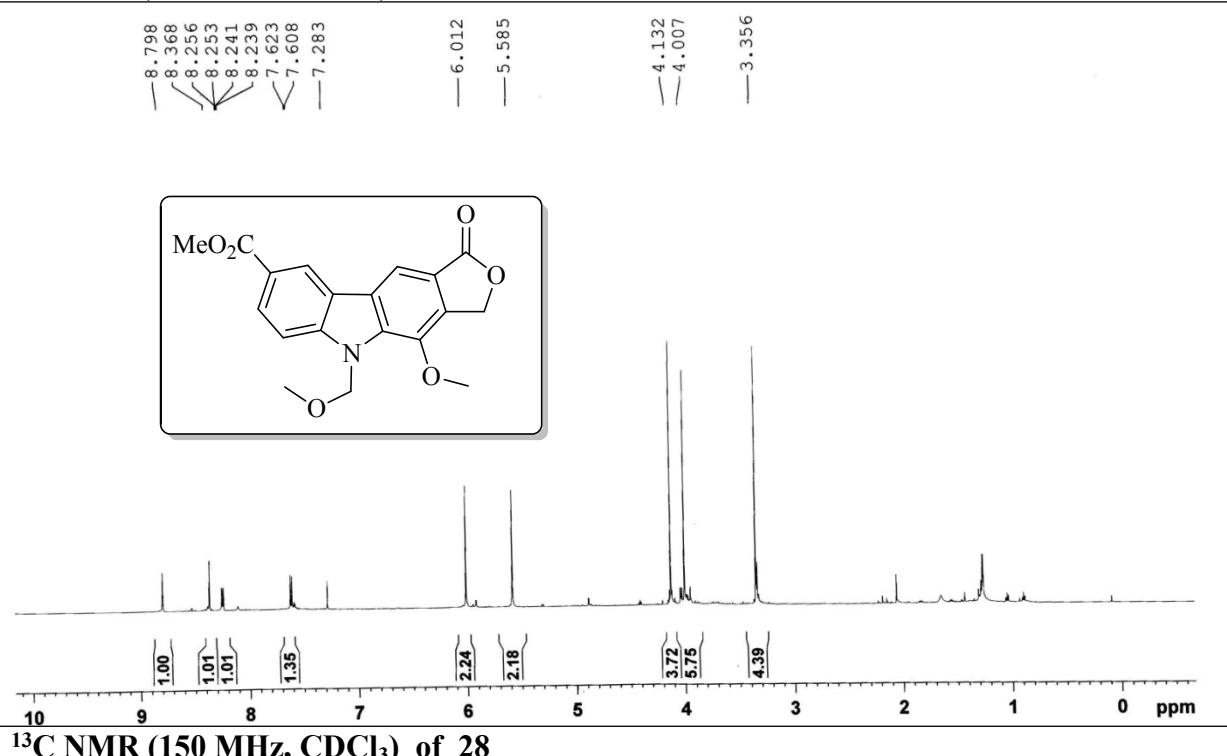
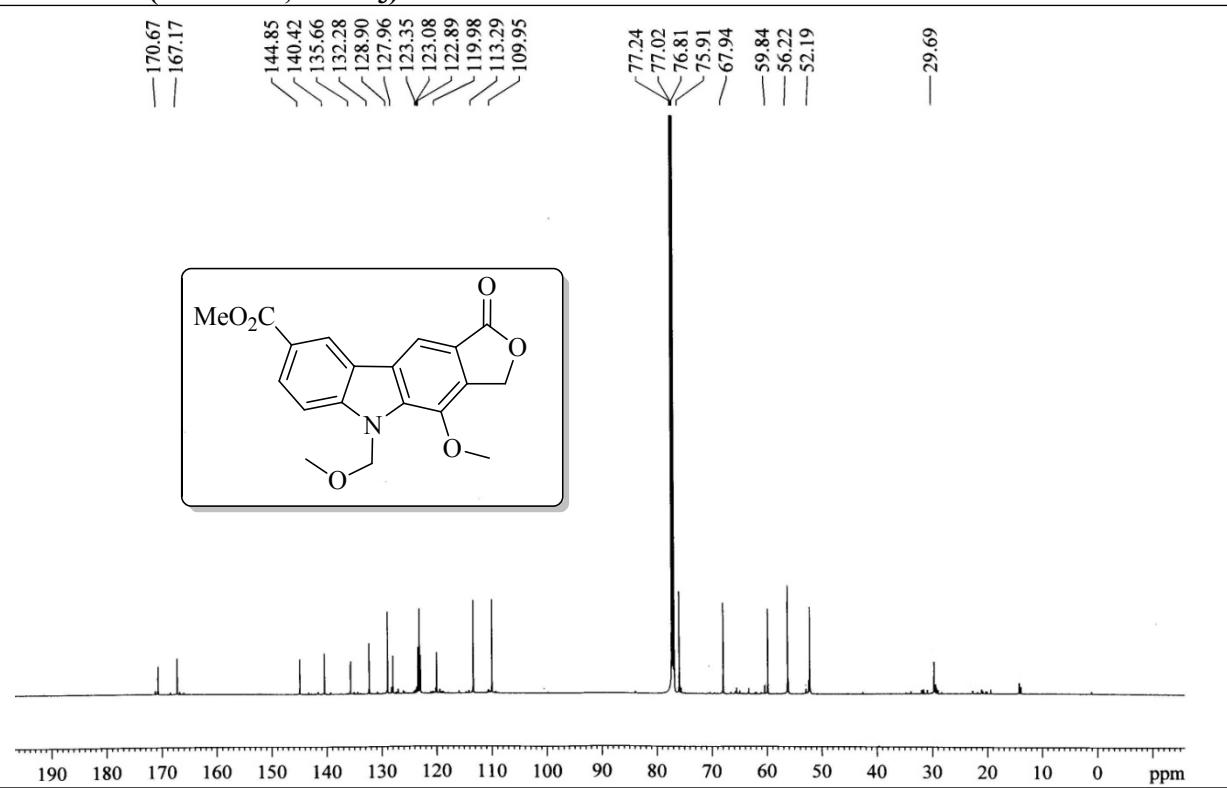


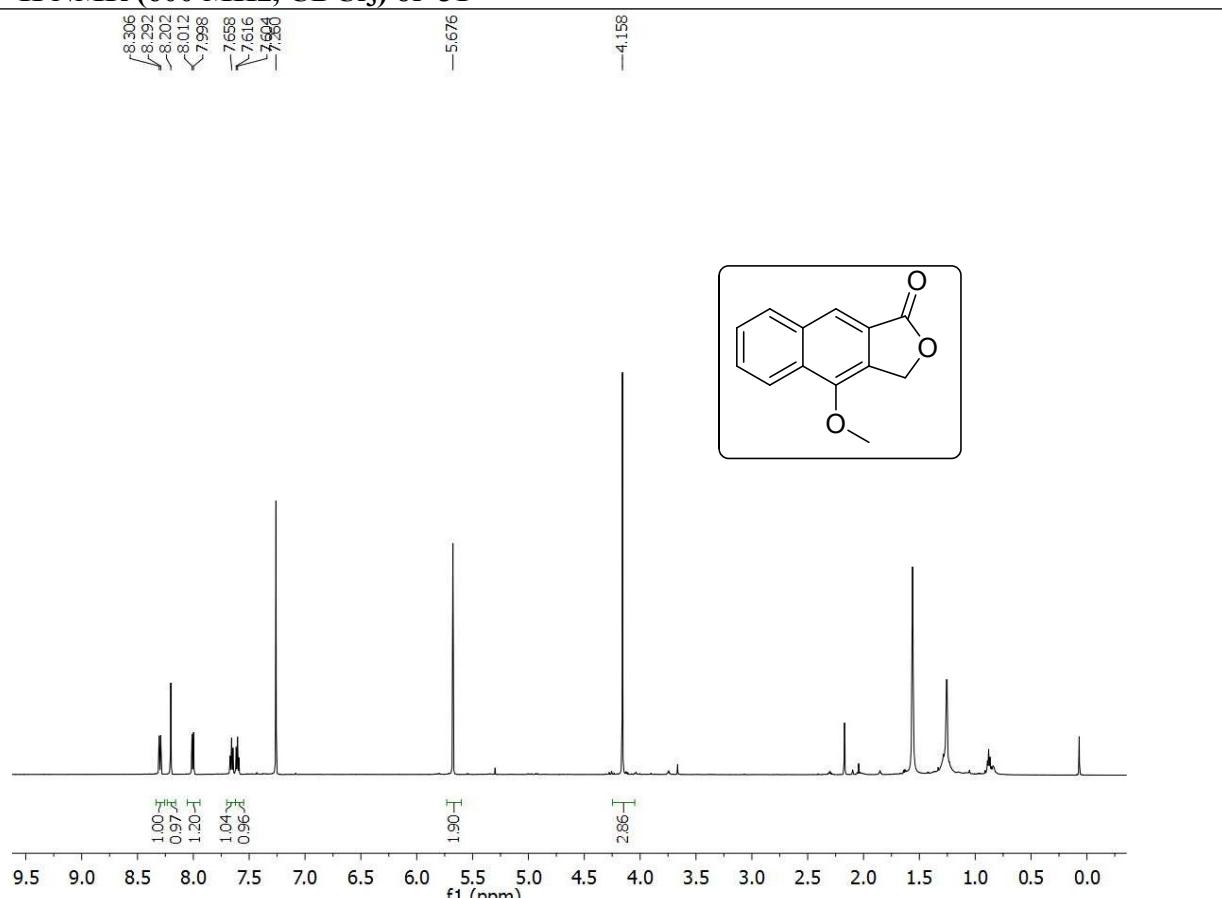
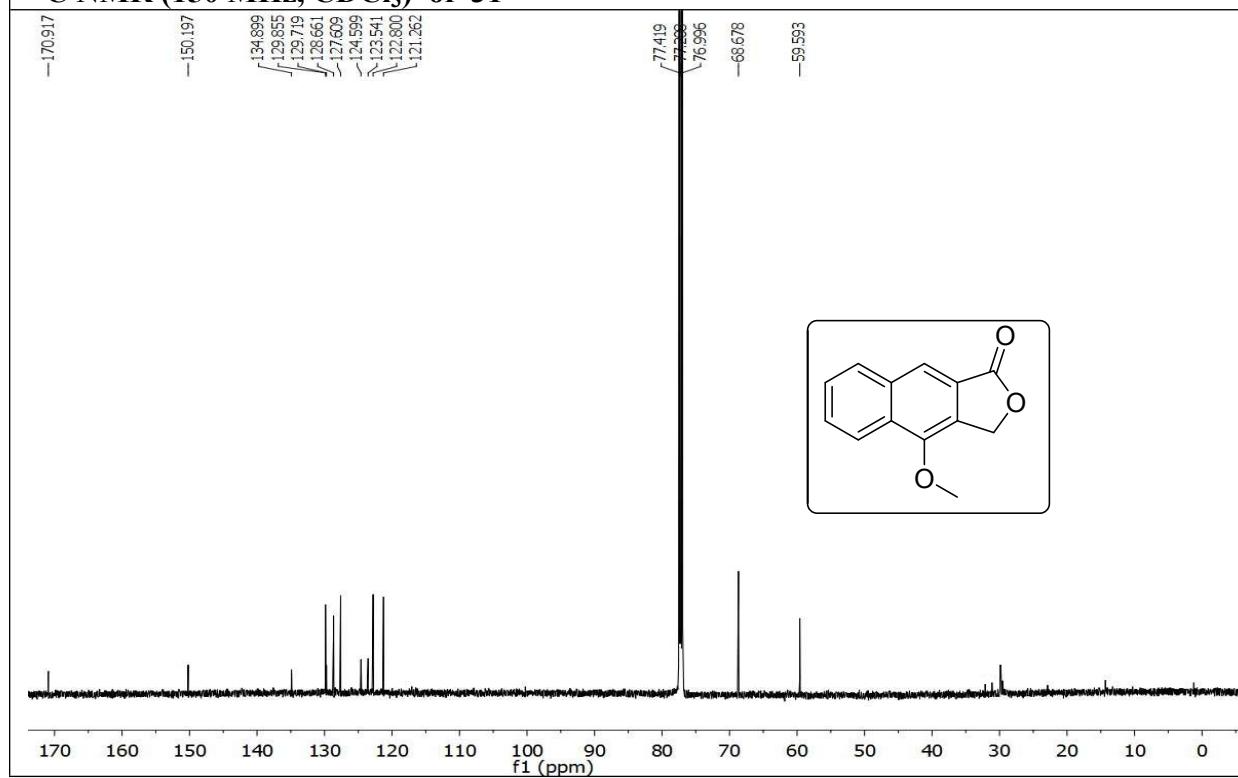
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 24<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 24

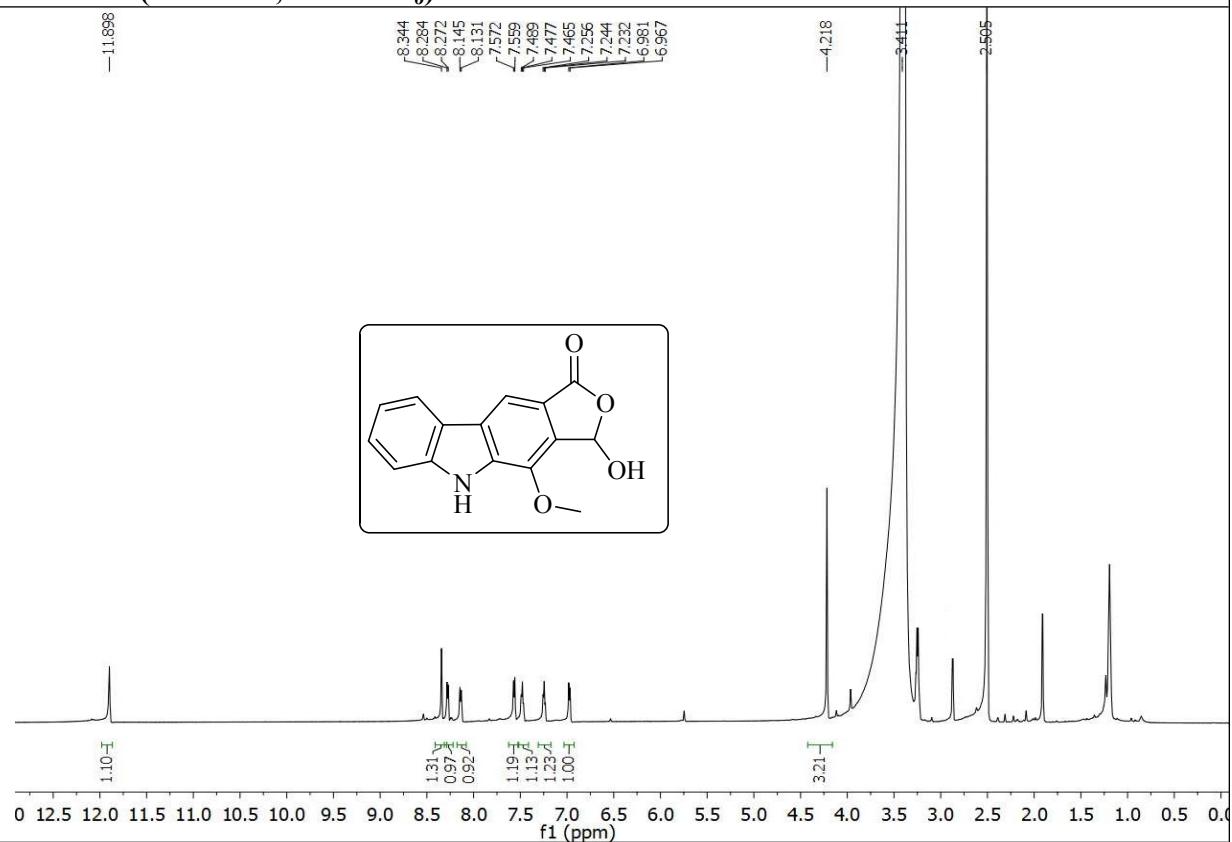
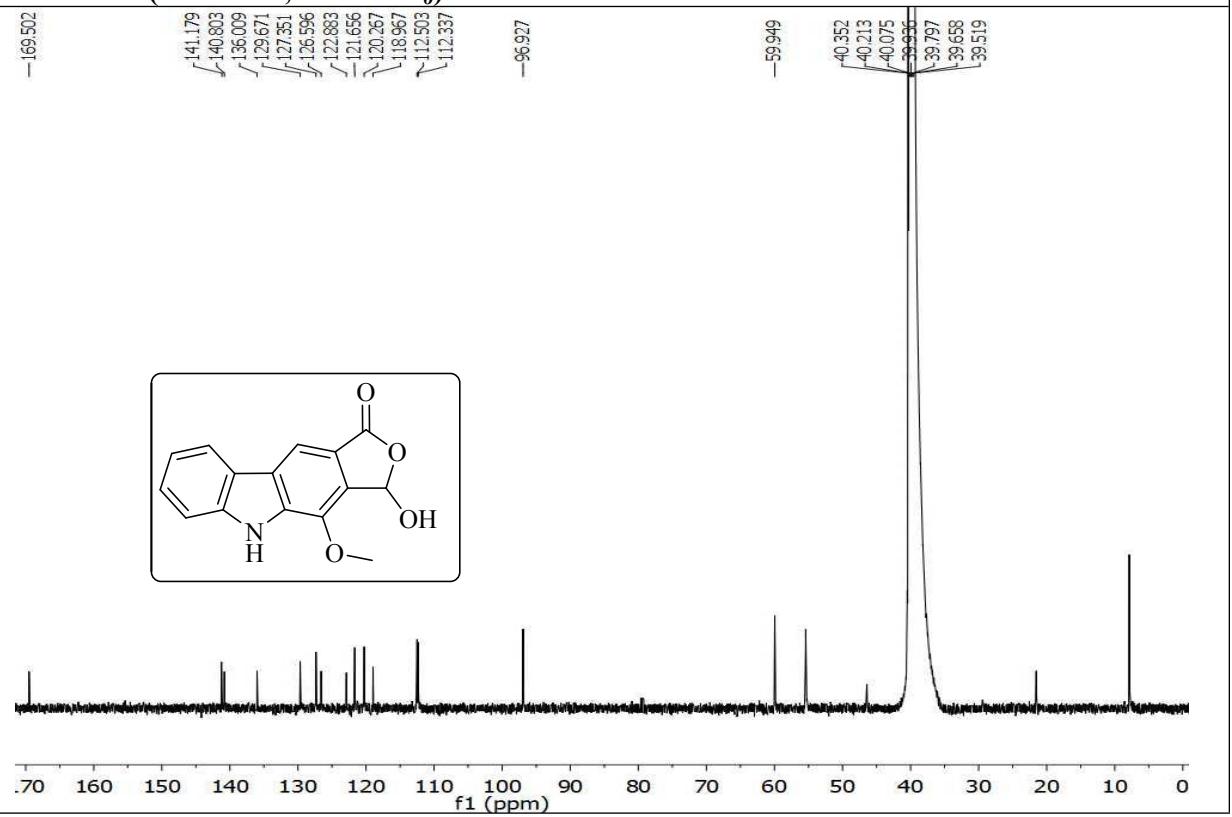
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 25<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 25

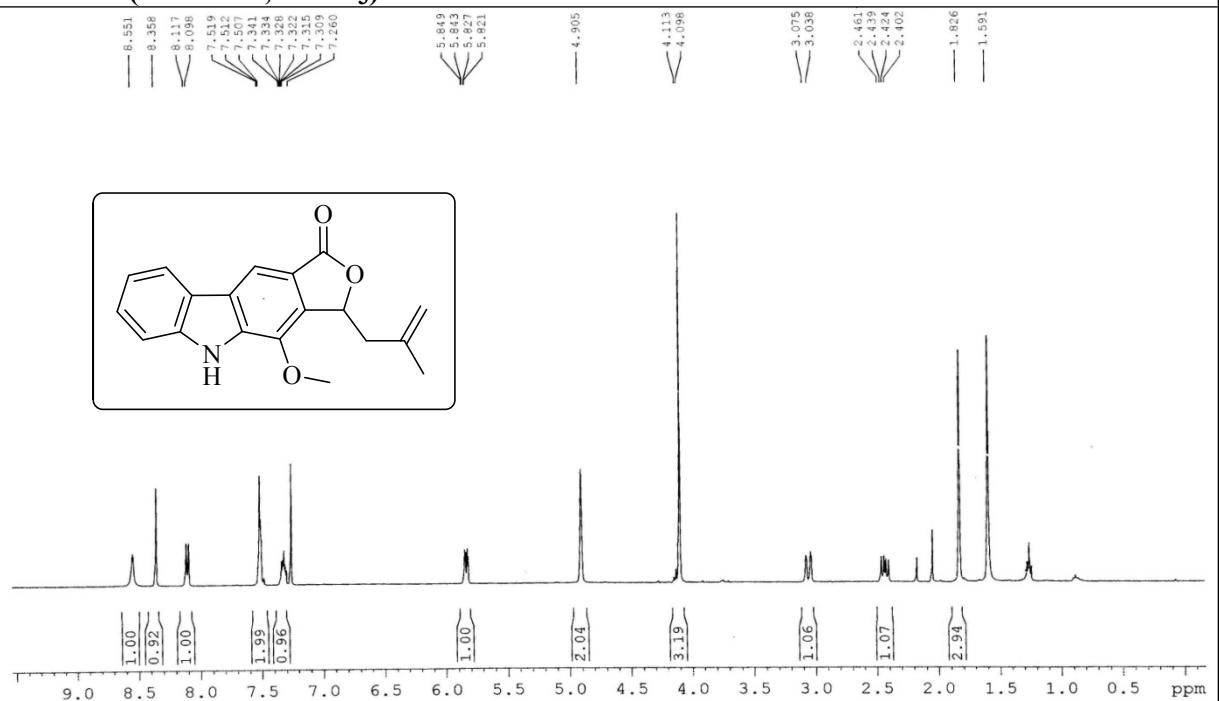
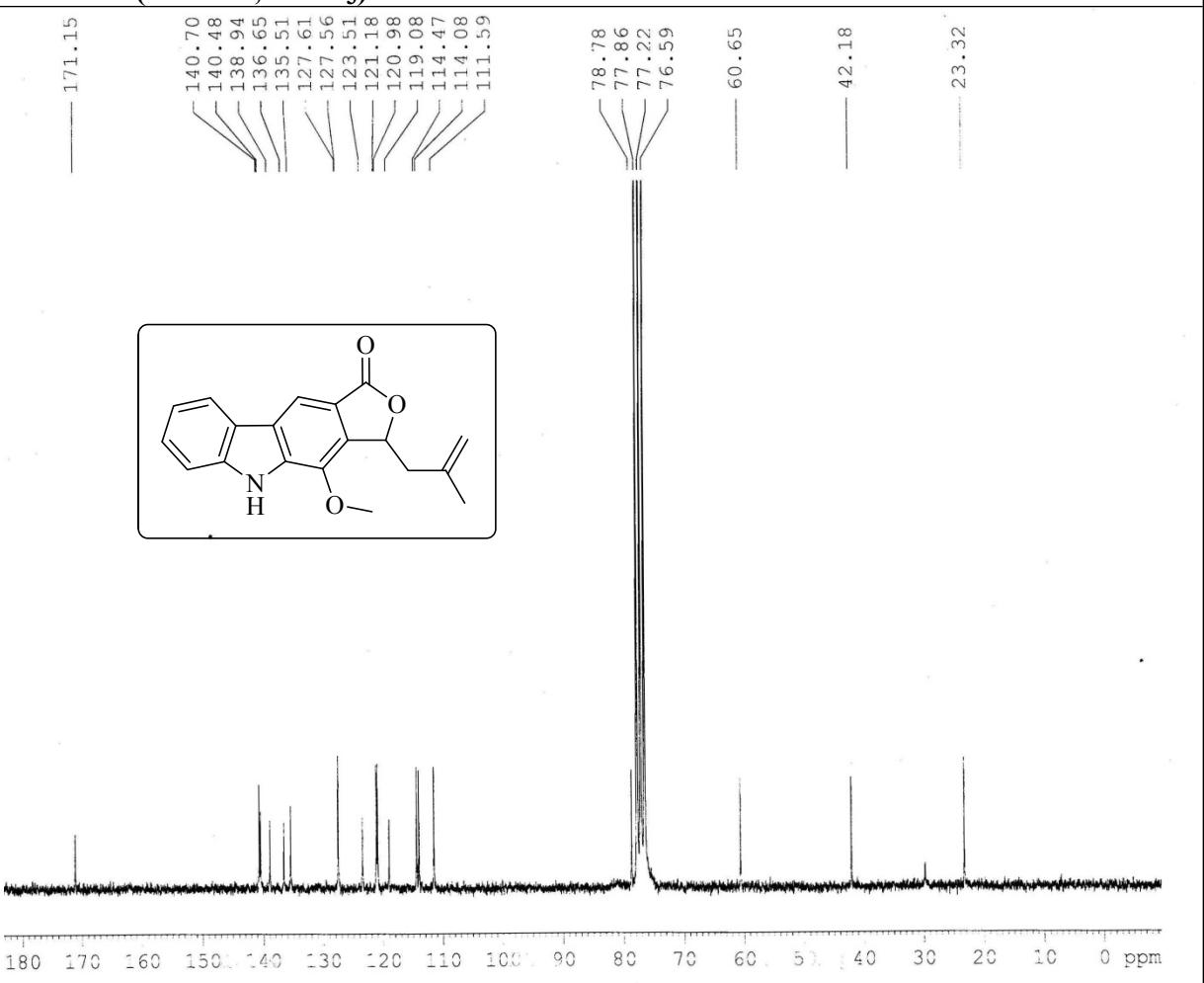
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 26<sup>13</sup>C NMR (50 MHz, CDCl<sub>3</sub>) of 26

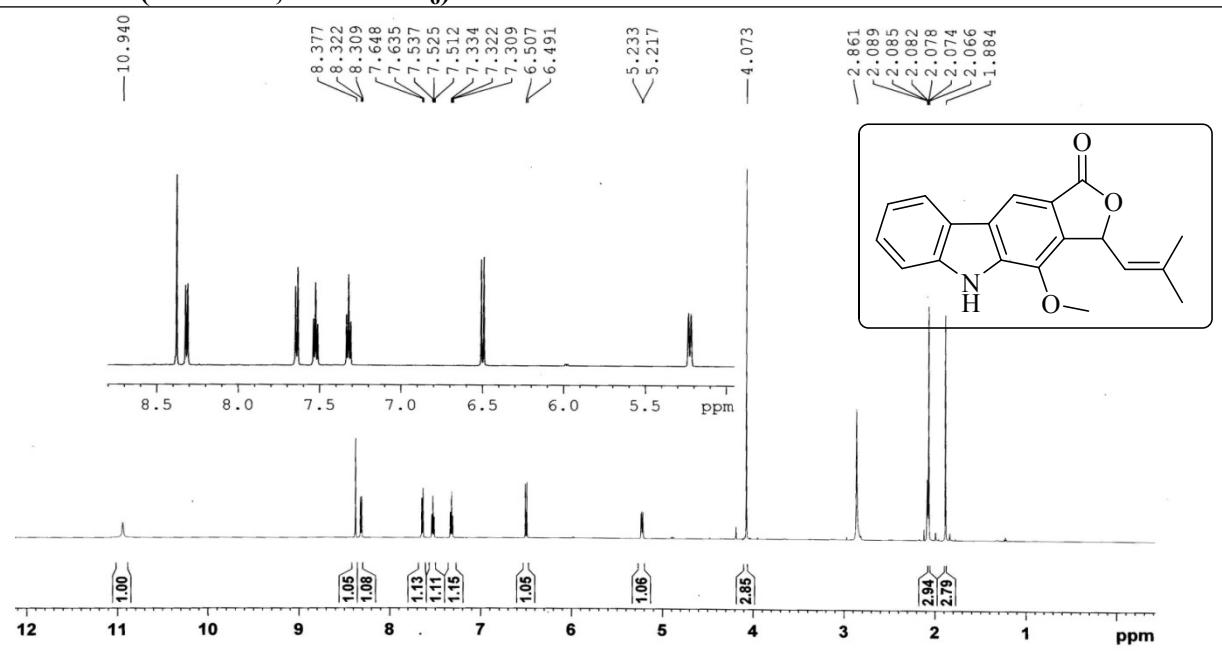
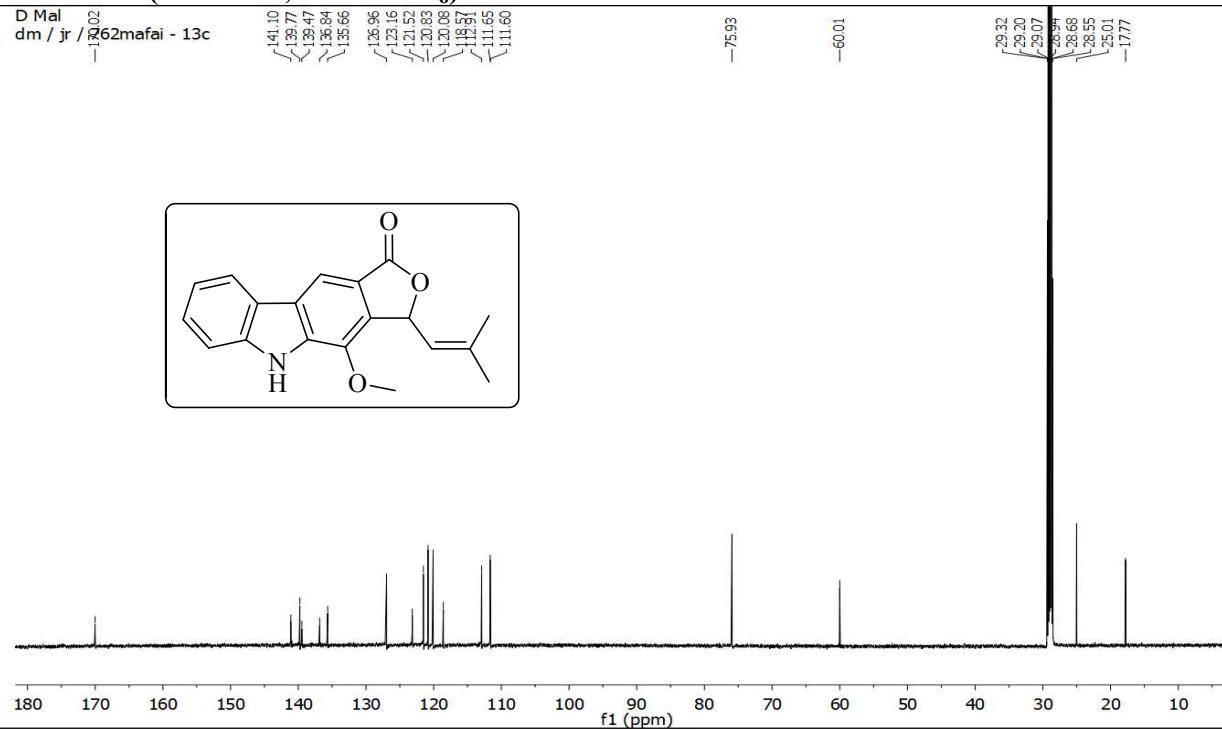
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 27<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 27

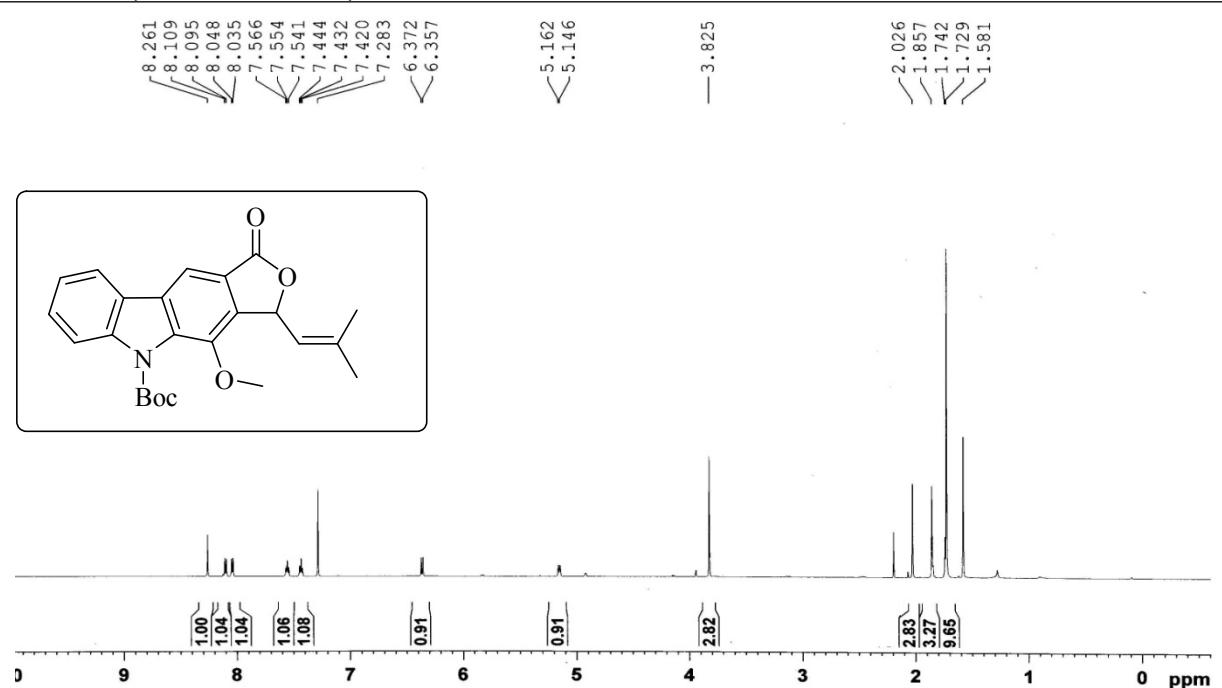
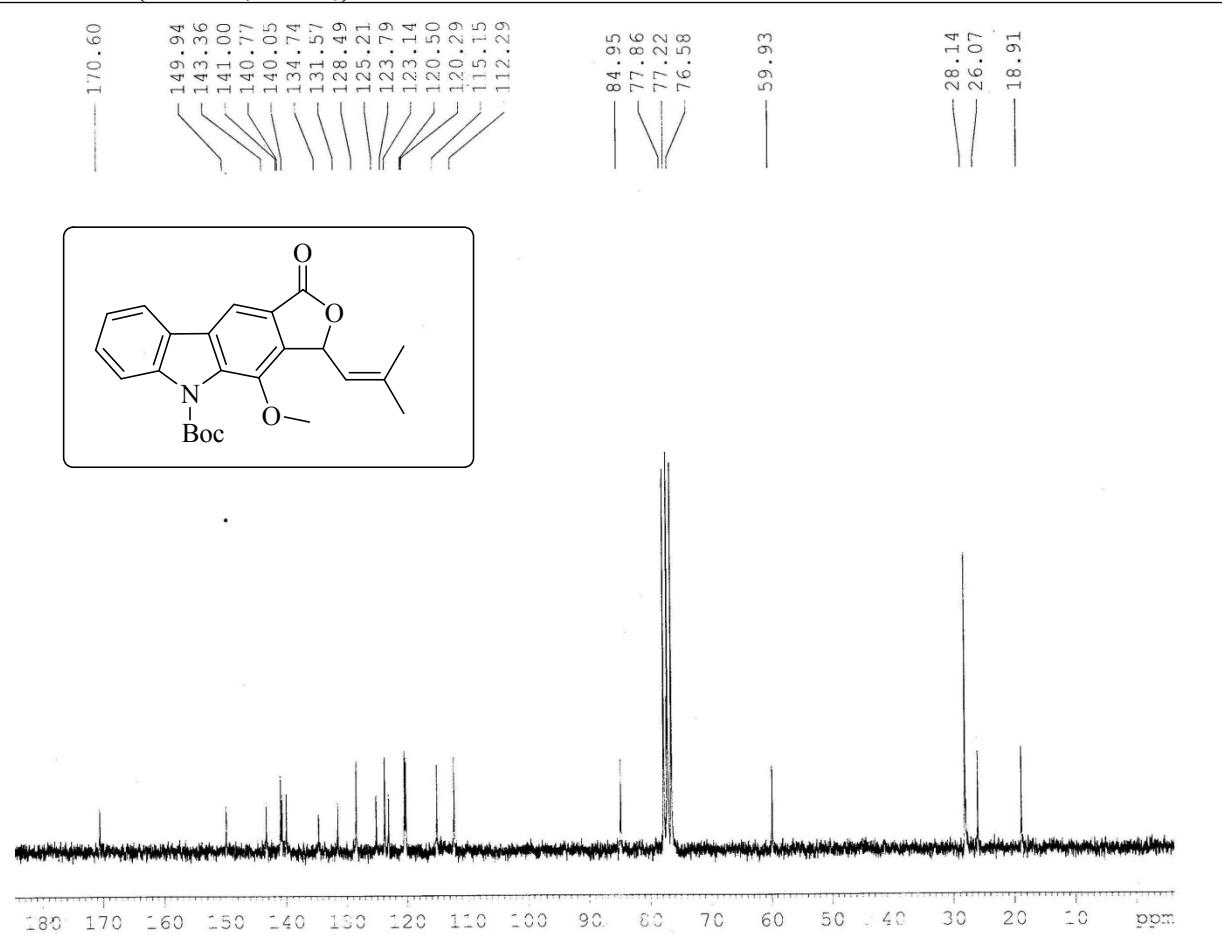
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 28<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 28

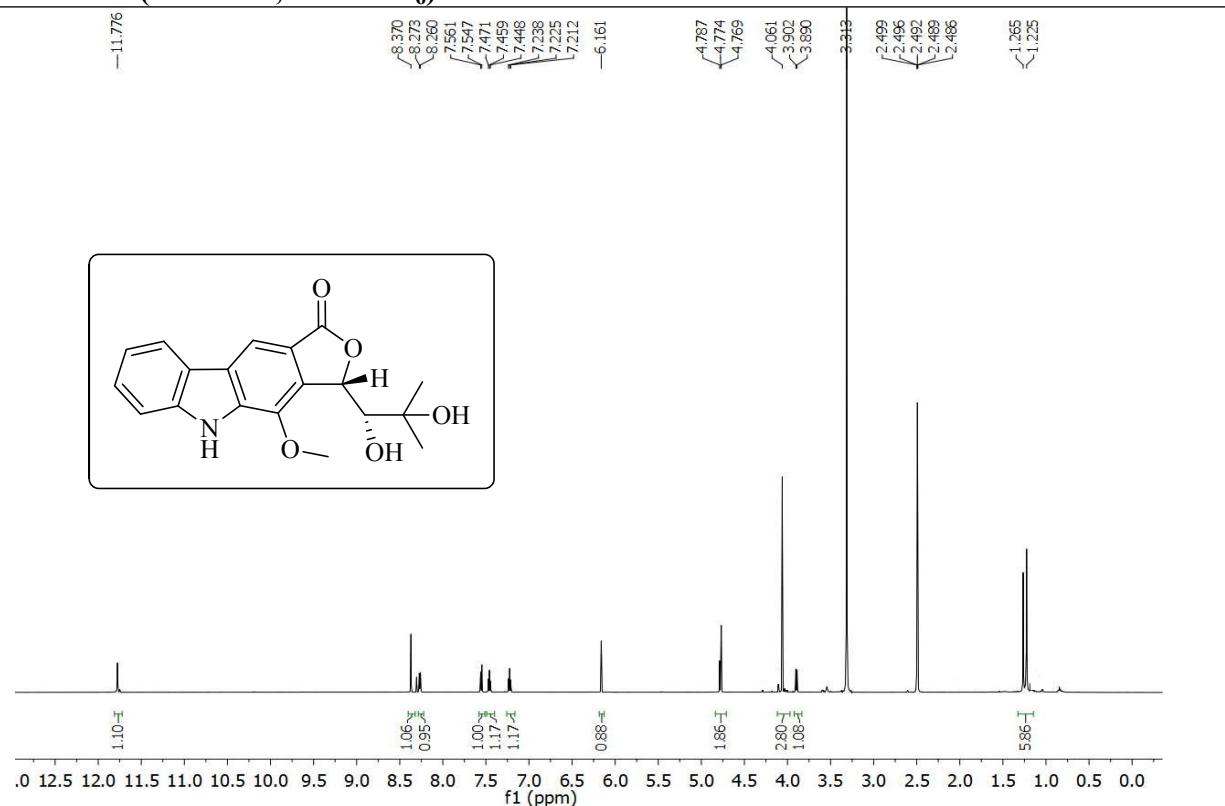
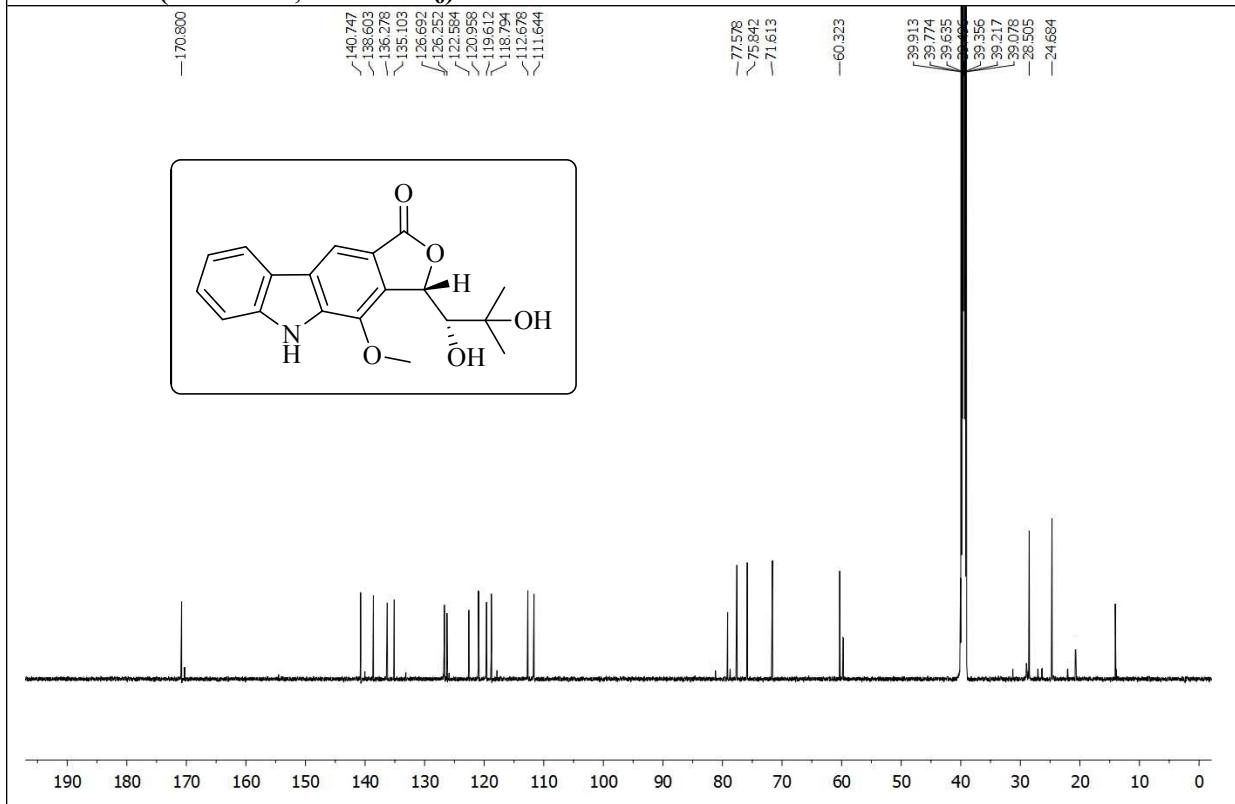
<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 31<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 31

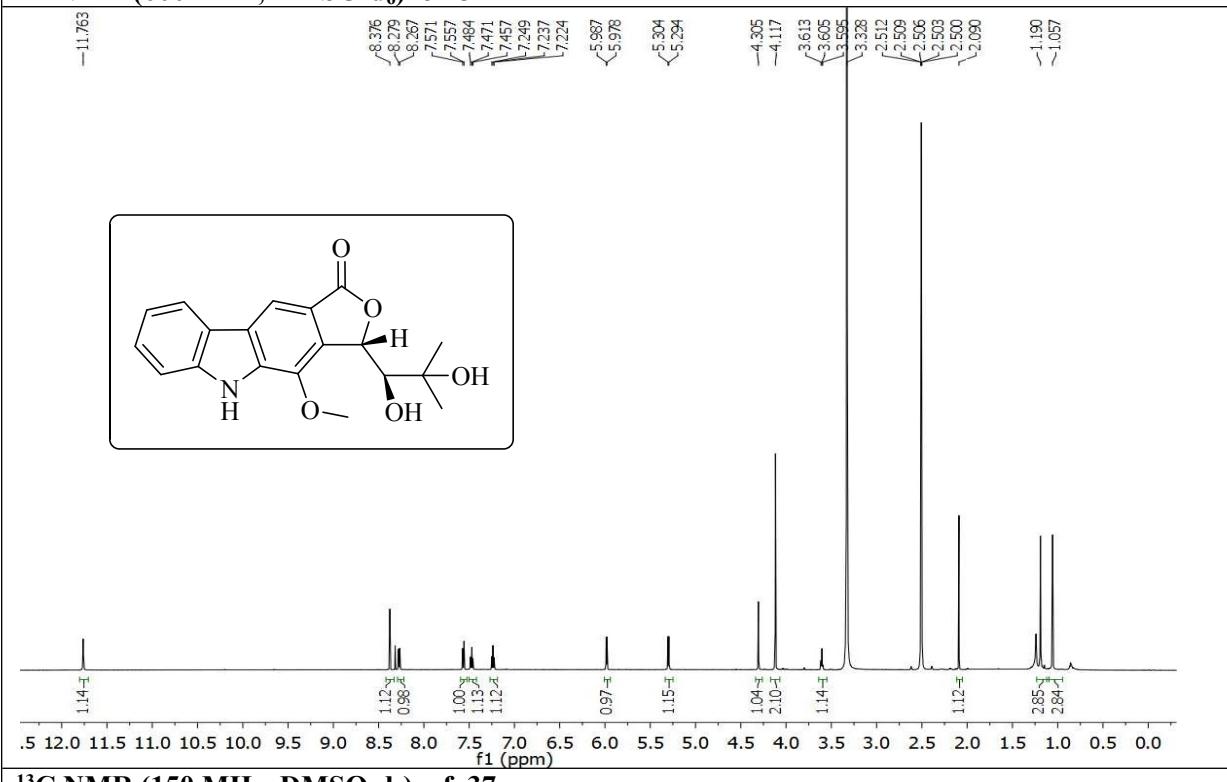
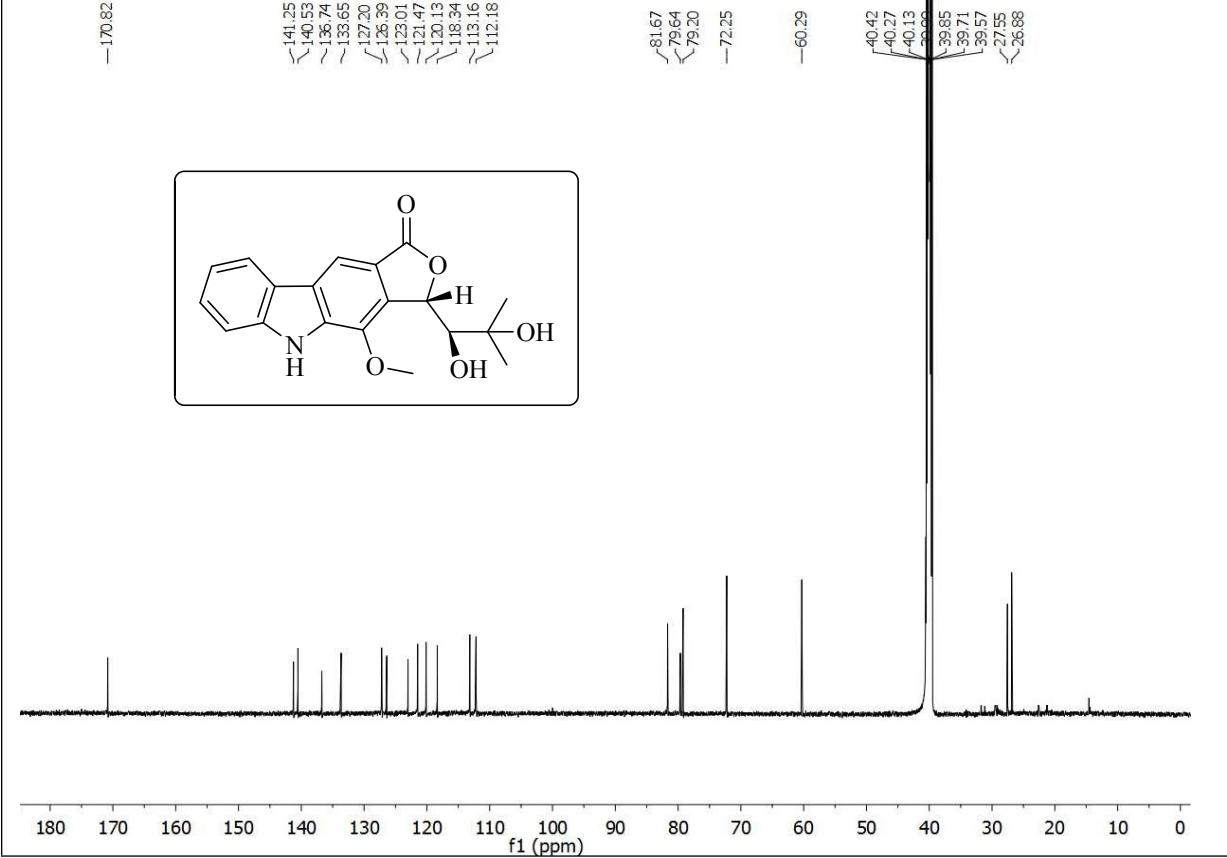
<sup>1</sup>H NMR (600 MHz, DMSO-d<sub>6</sub>) of 32<sup>13</sup>C NMR (150 MHz, DMSO-d<sub>6</sub>) of 32

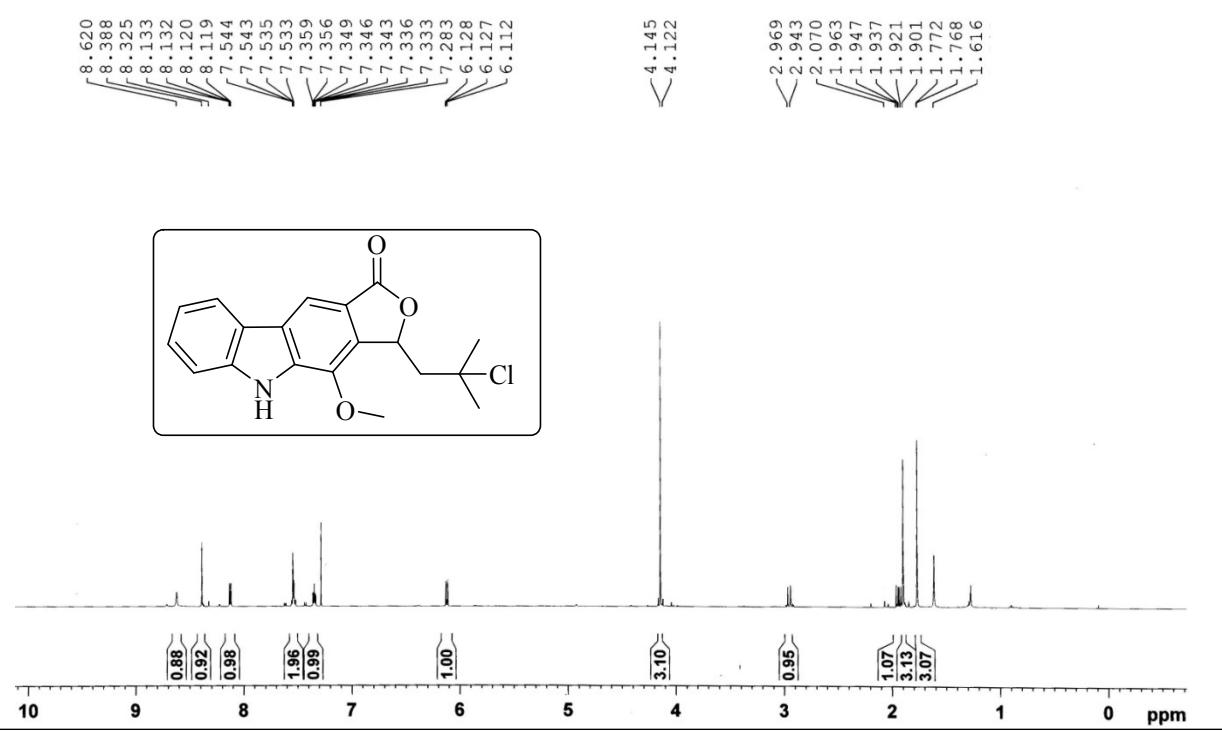
<sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of 34<sup>13</sup>C NMR (50 MHz, CDCl<sub>3</sub>) of 34

<sup>1</sup>H NMR (600 MHz, Acetone-d<sub>6</sub>) of 1<sup>13</sup>C NMR (150 MHz, Acetone-d<sub>6</sub>) of 1

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 35<sup>13</sup>C NMR (50 MHz, CDCl<sub>3</sub>) of 35

<sup>1</sup>H NMR (600 MHz, DMSO-d<sub>6</sub>) of 2<sup>13</sup>C NMR (150 MHz, DMSO-d<sub>6</sub>) of 2

**<sup>1</sup>H NMR (600 MHz, DMSO-d<sub>6</sub>) of 37****<sup>13</sup>C NMR (150 MHz, DMSO-d<sub>6</sub>) of 37**

<sup>1</sup>H NMR (600 MHz, CDCl<sub>3</sub>) of 38<sup>13</sup>C NMR (150 MHz, CDCl<sub>3</sub>) of 38