

## Supplementary material

### **Highly Diastereoselective Synthesis of Polycyclic Amines via-Redox Neutral C-H Functionalization**

#### **New Journal of Chemistry**

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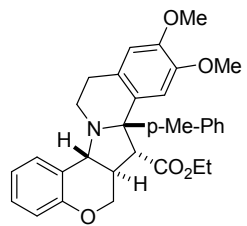
*<sup>#</sup>DOS in Chemistry, University of Mysore, Manasagangotri, Mysuru-06, India*

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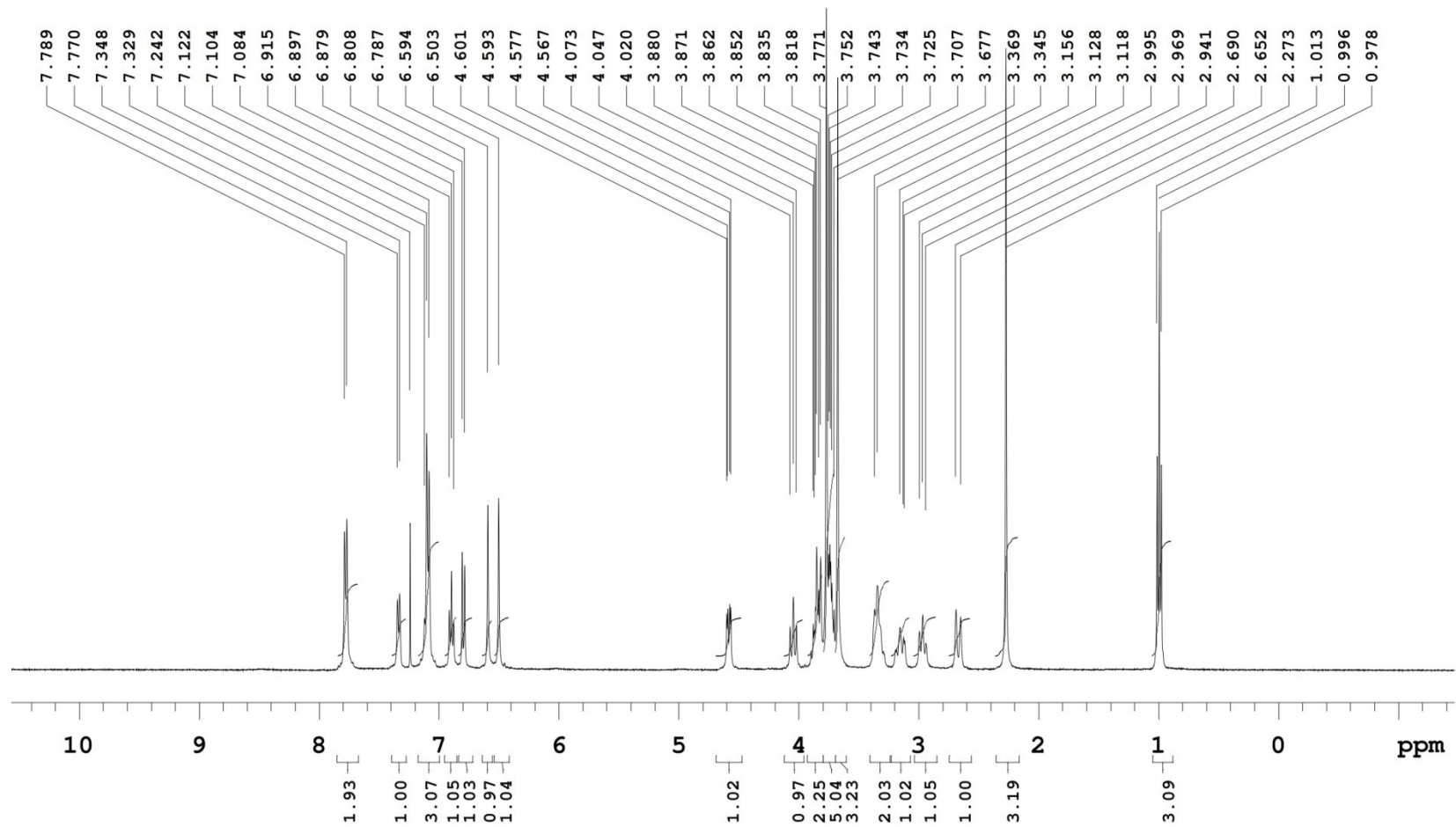
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|--|---------|
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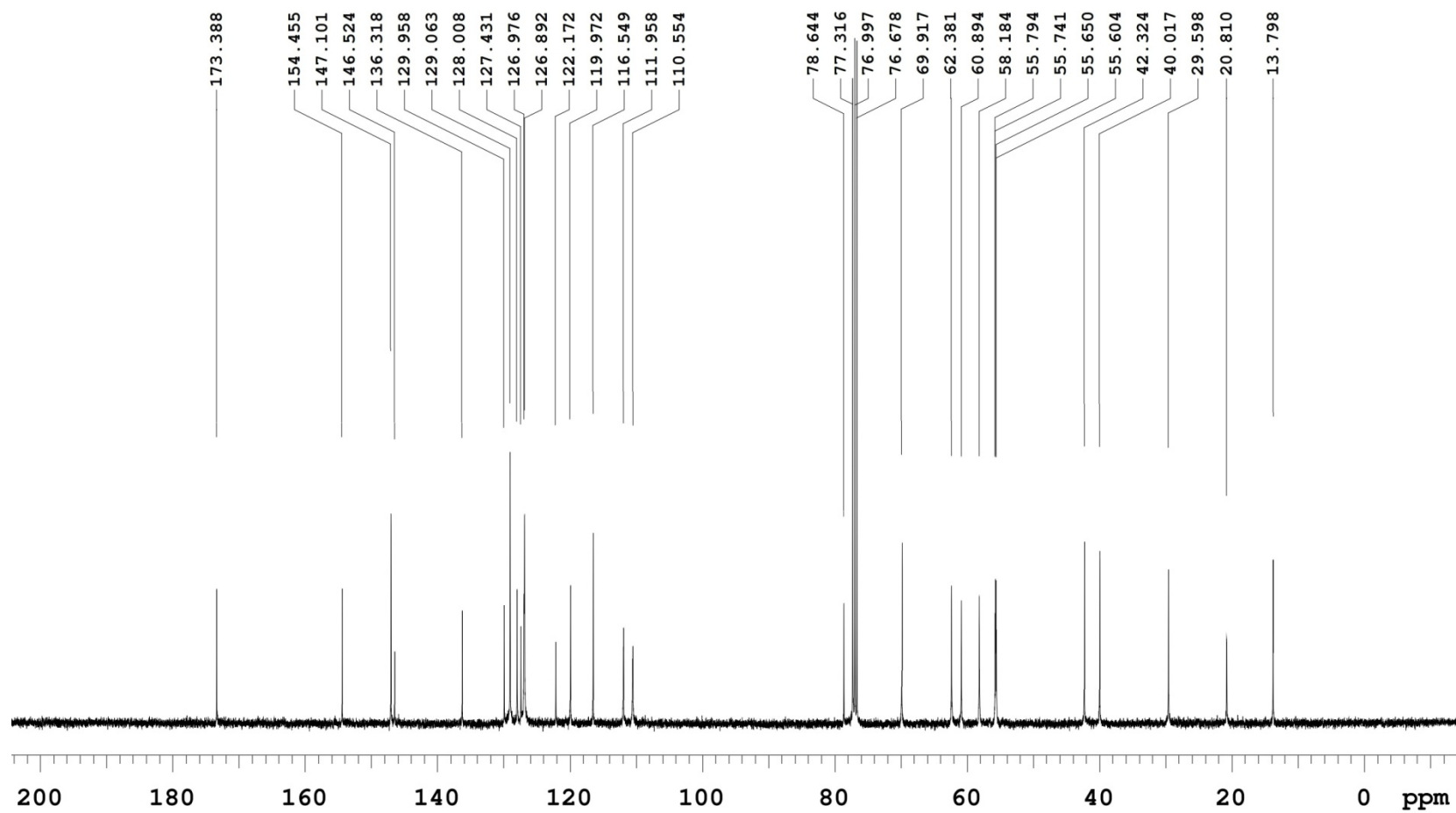
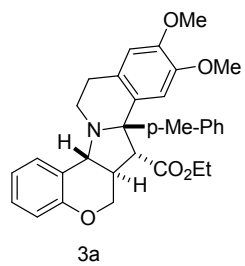
<sup>1</sup>H NMR of **3a** in CDCl<sub>3</sub>



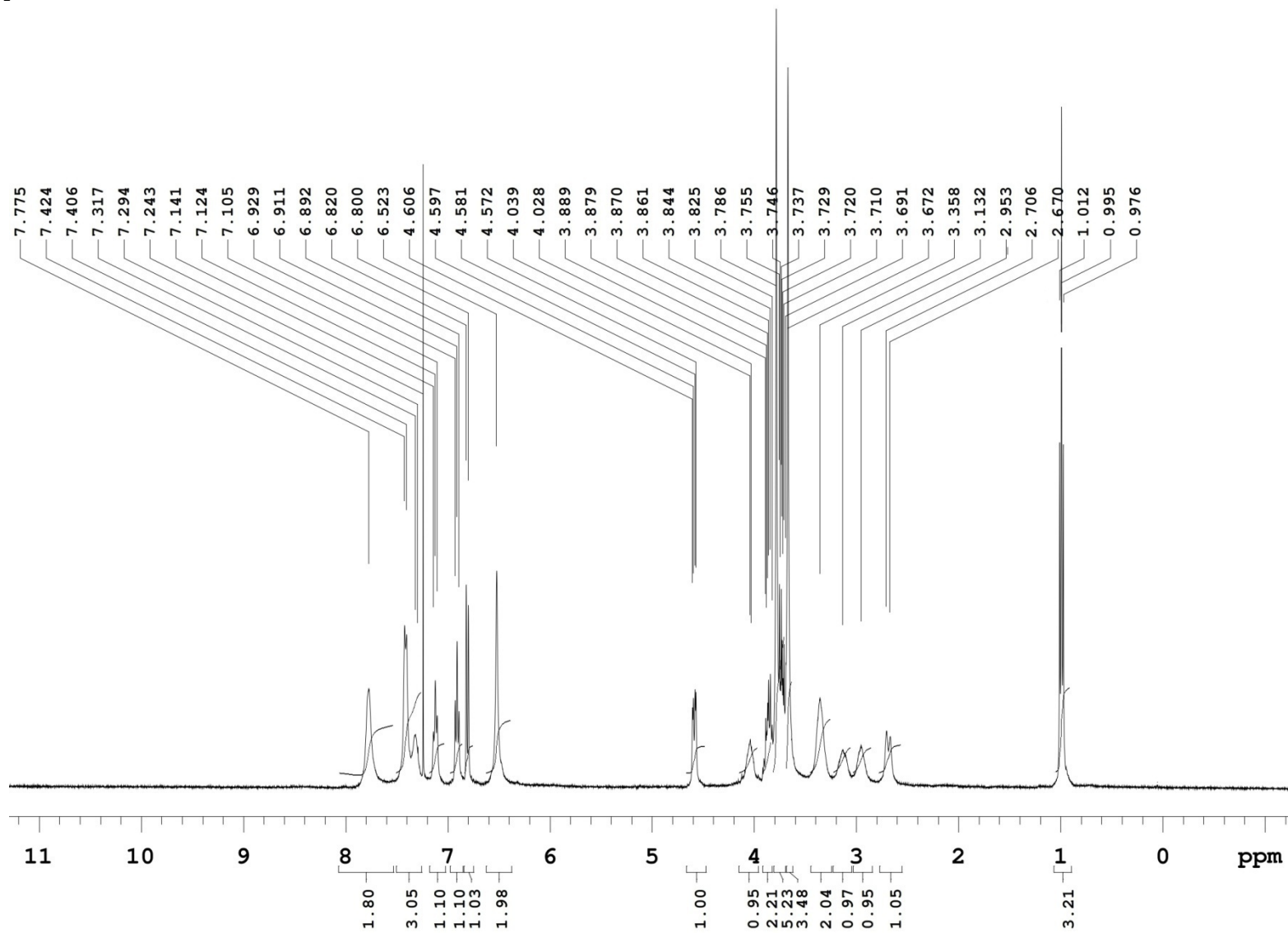
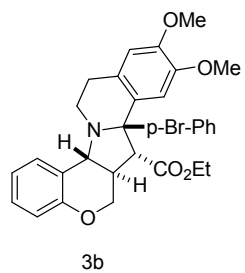
**3a**



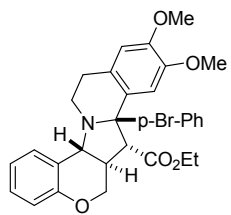
<sup>13</sup>C NMR of **3a** in CDCl<sub>3</sub>



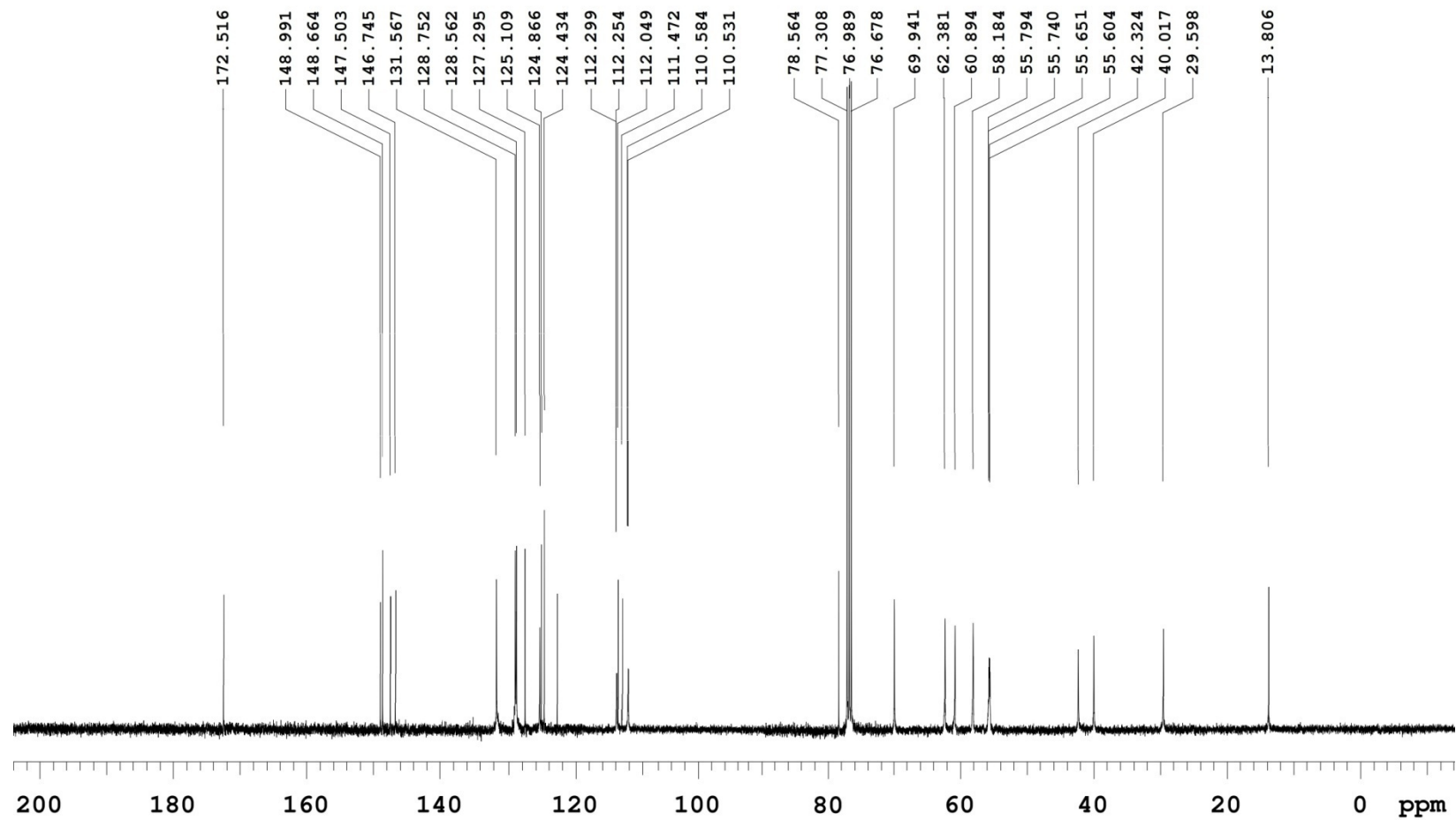
<sup>1</sup>H NMR of **3b** in CDCl<sub>3</sub>



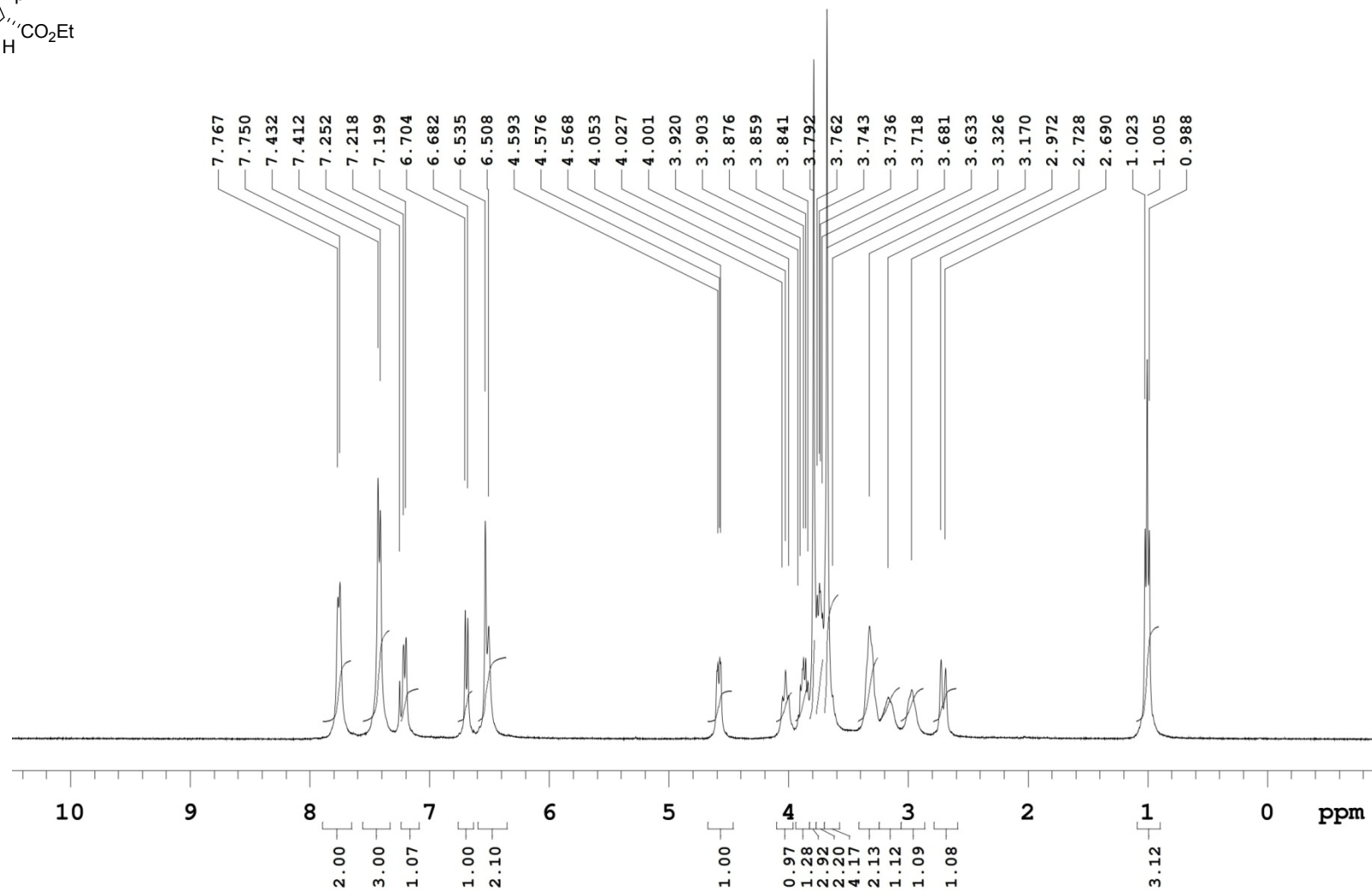
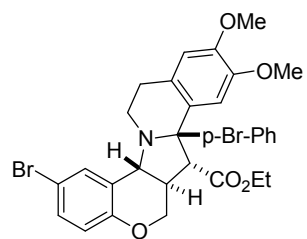
$^{13}\text{C}$  NMR of **3b** in  $\text{CDCl}_3$



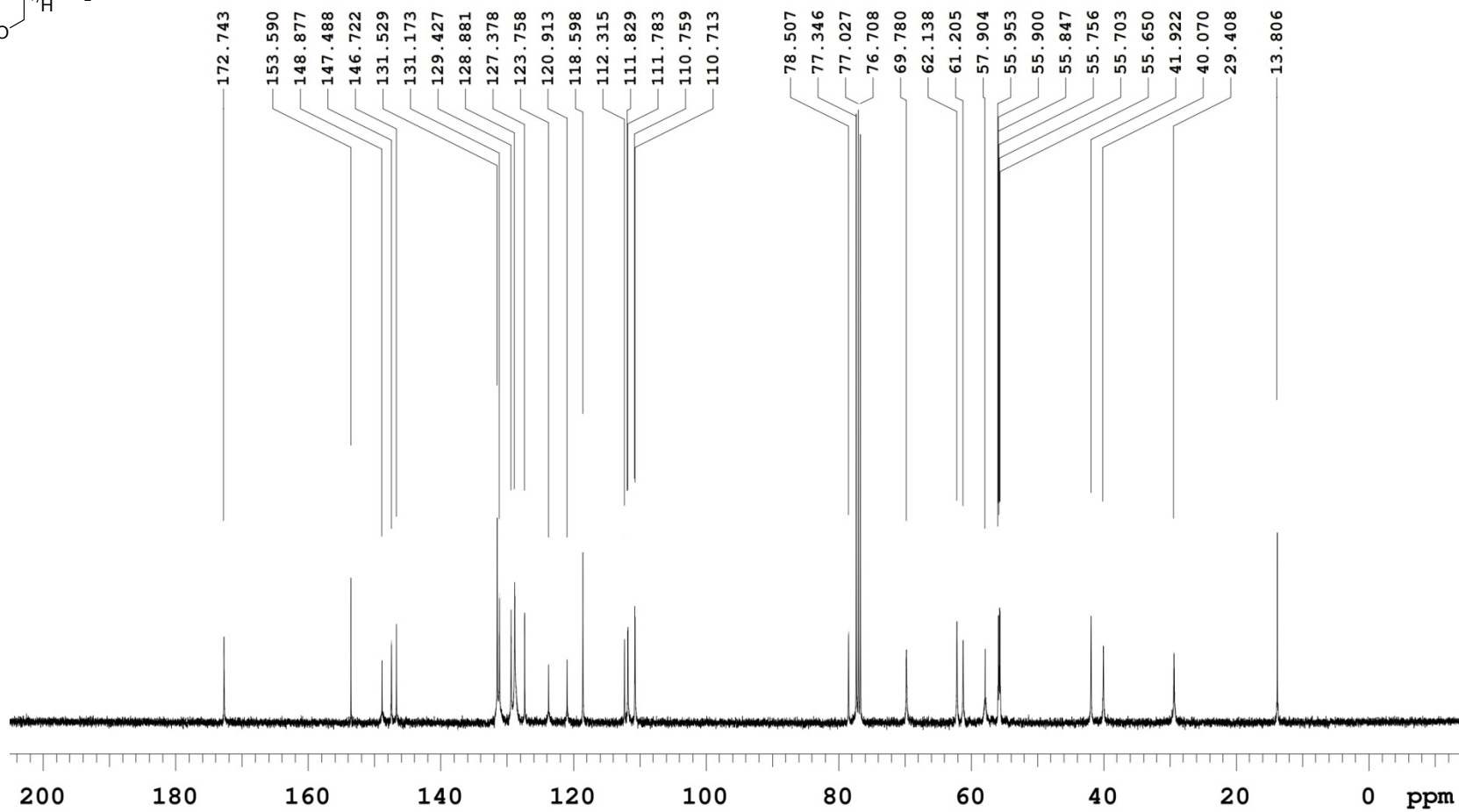
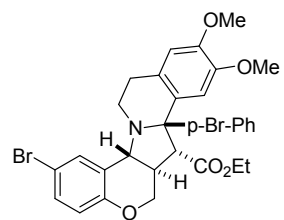
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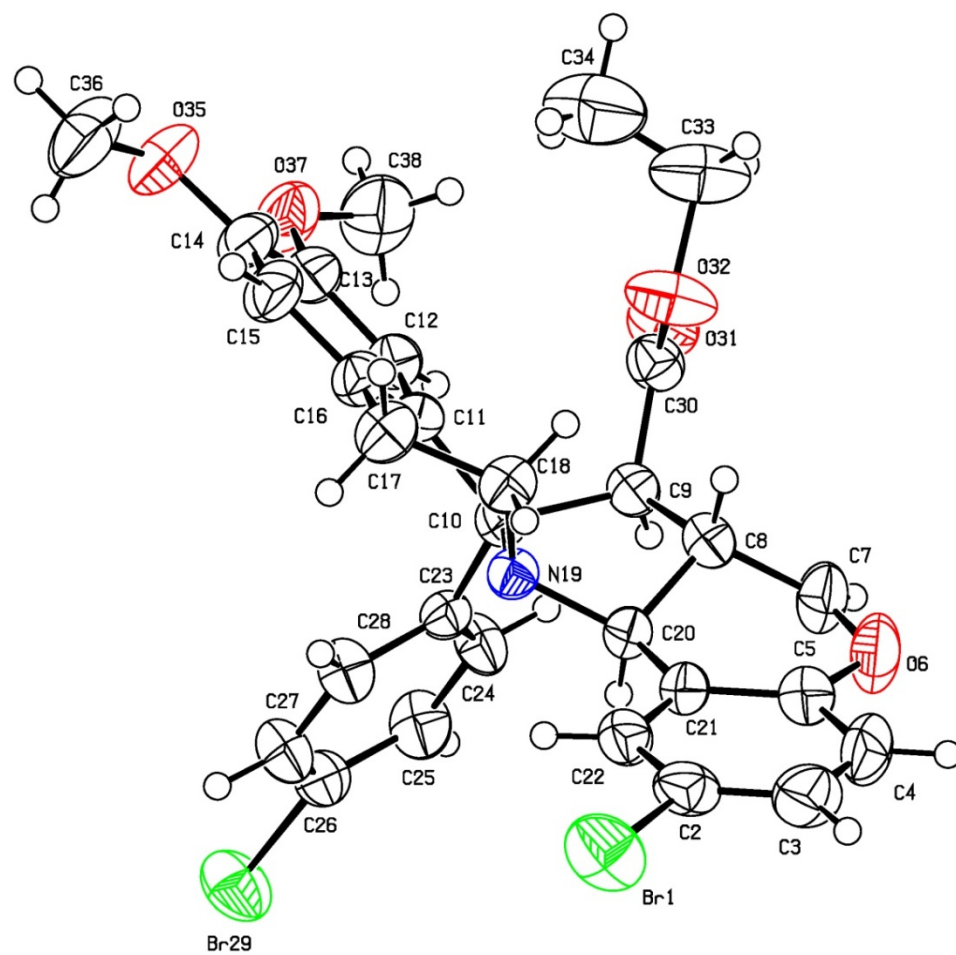
<sup>1</sup>H NMR of **3c** in CDCl<sub>3</sub>



<sup>13</sup>C NMR of **3c** in CDCl<sub>3</sub>

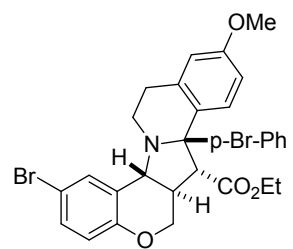


ORTEP diagram of **3c**

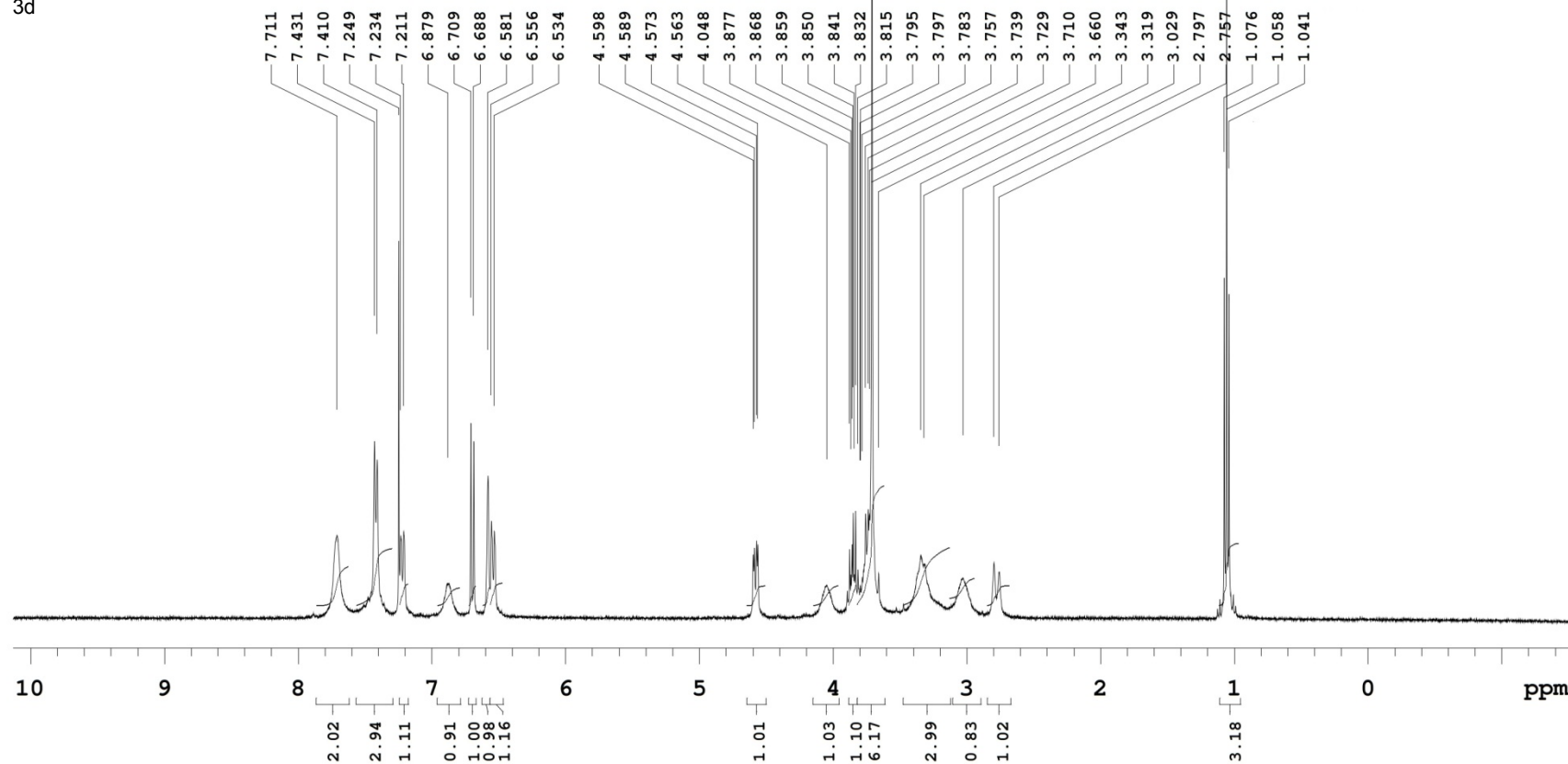




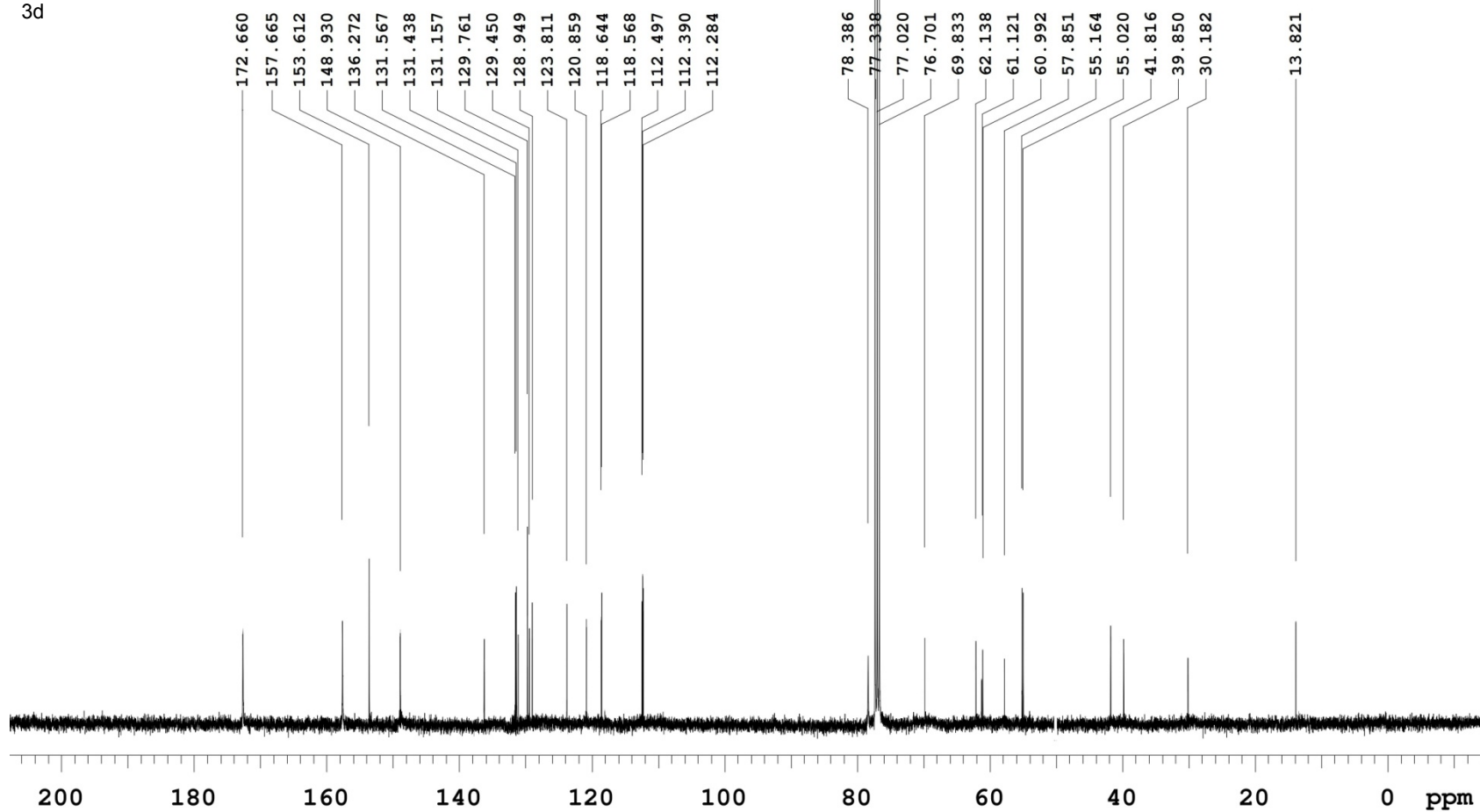
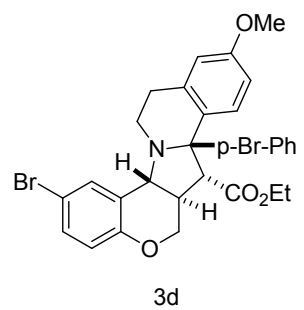
<sup>1</sup>H NMR of **3d** in CDCl<sub>3</sub>



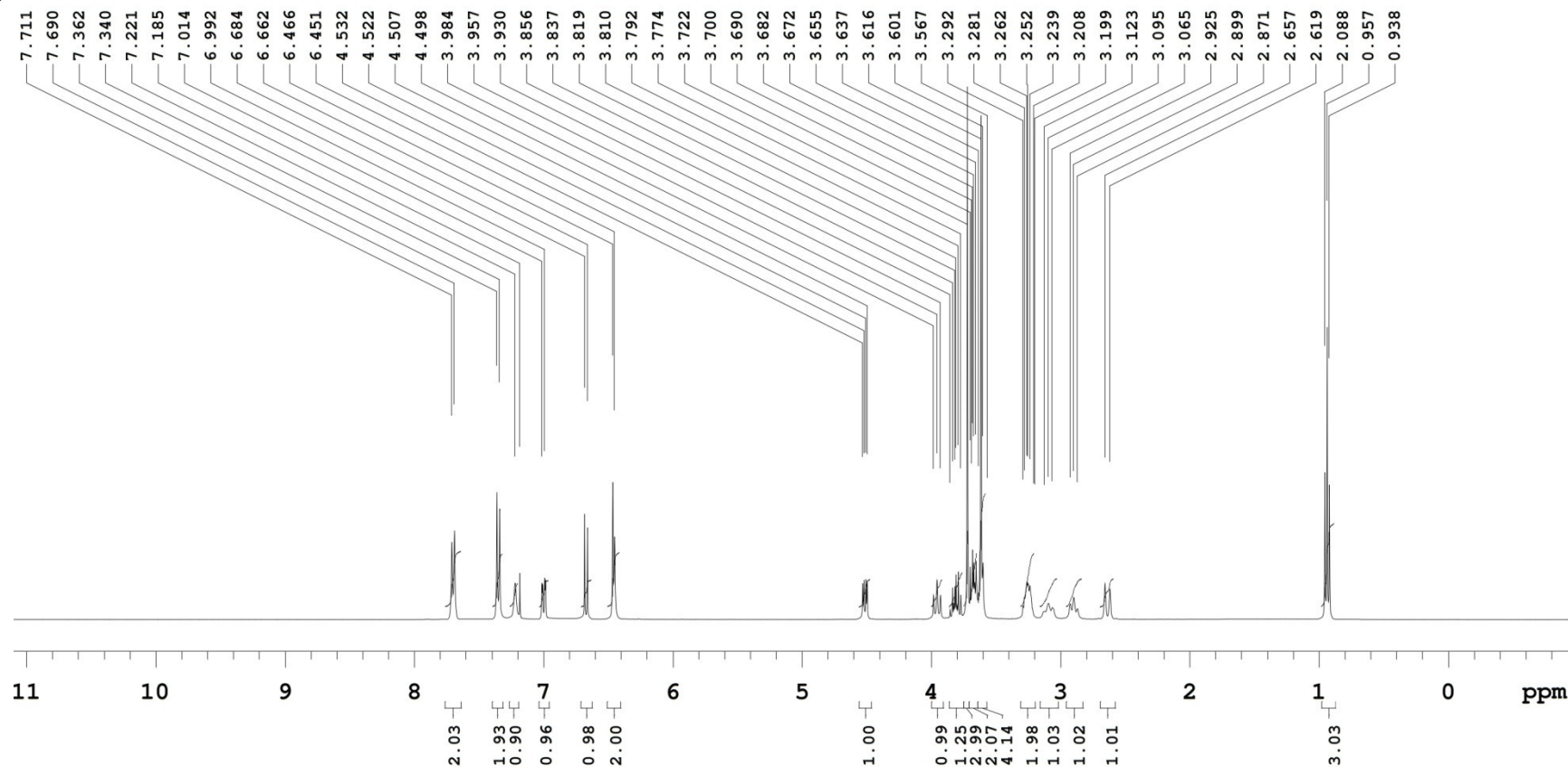
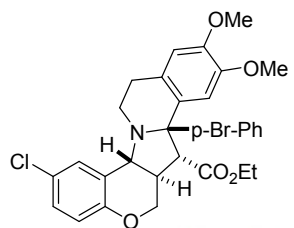
**3d**



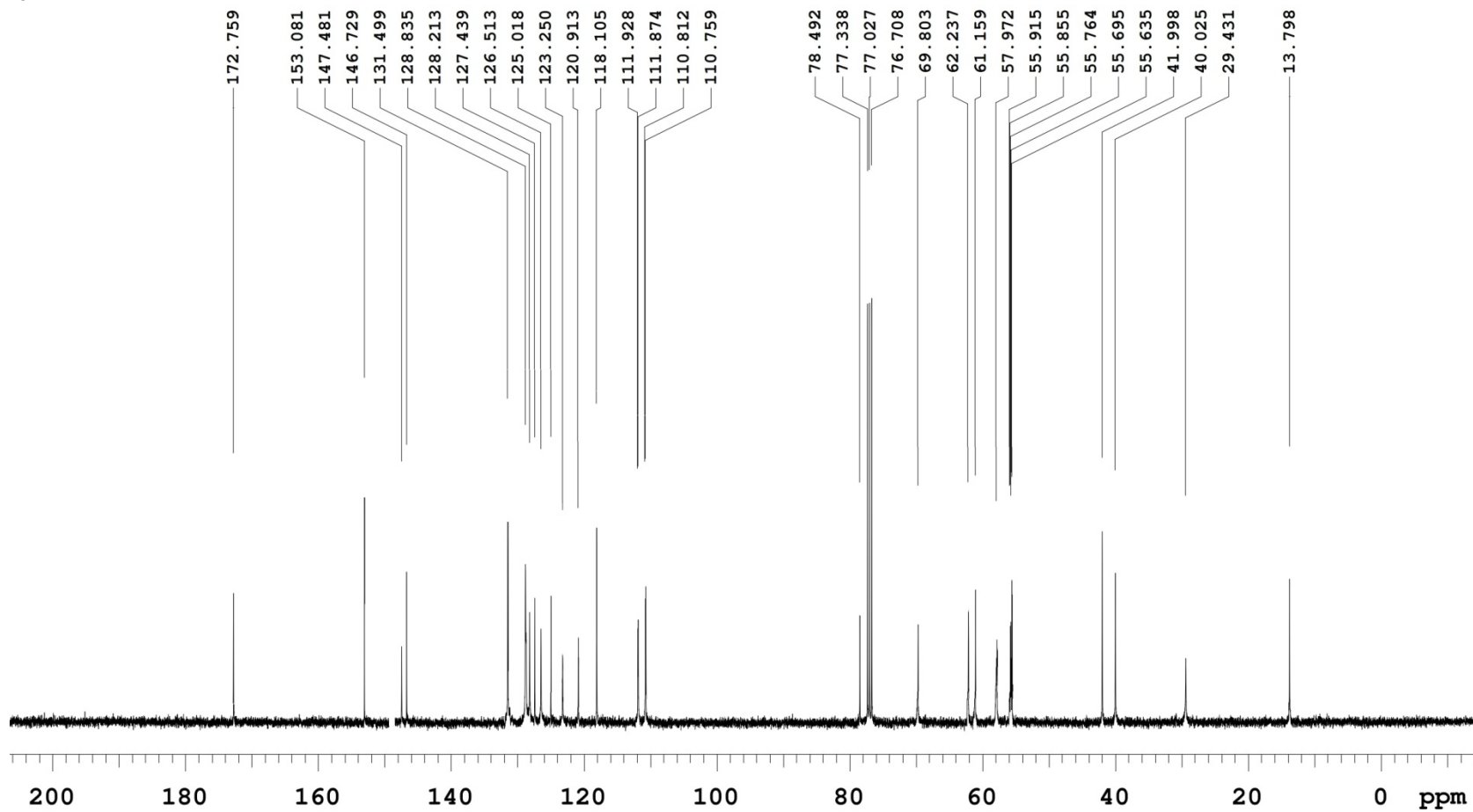
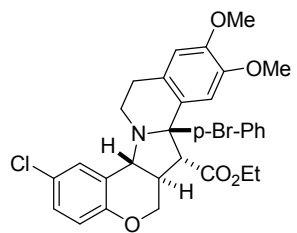
<sup>13</sup>C NMR of **3d** in CDCl<sub>3</sub>



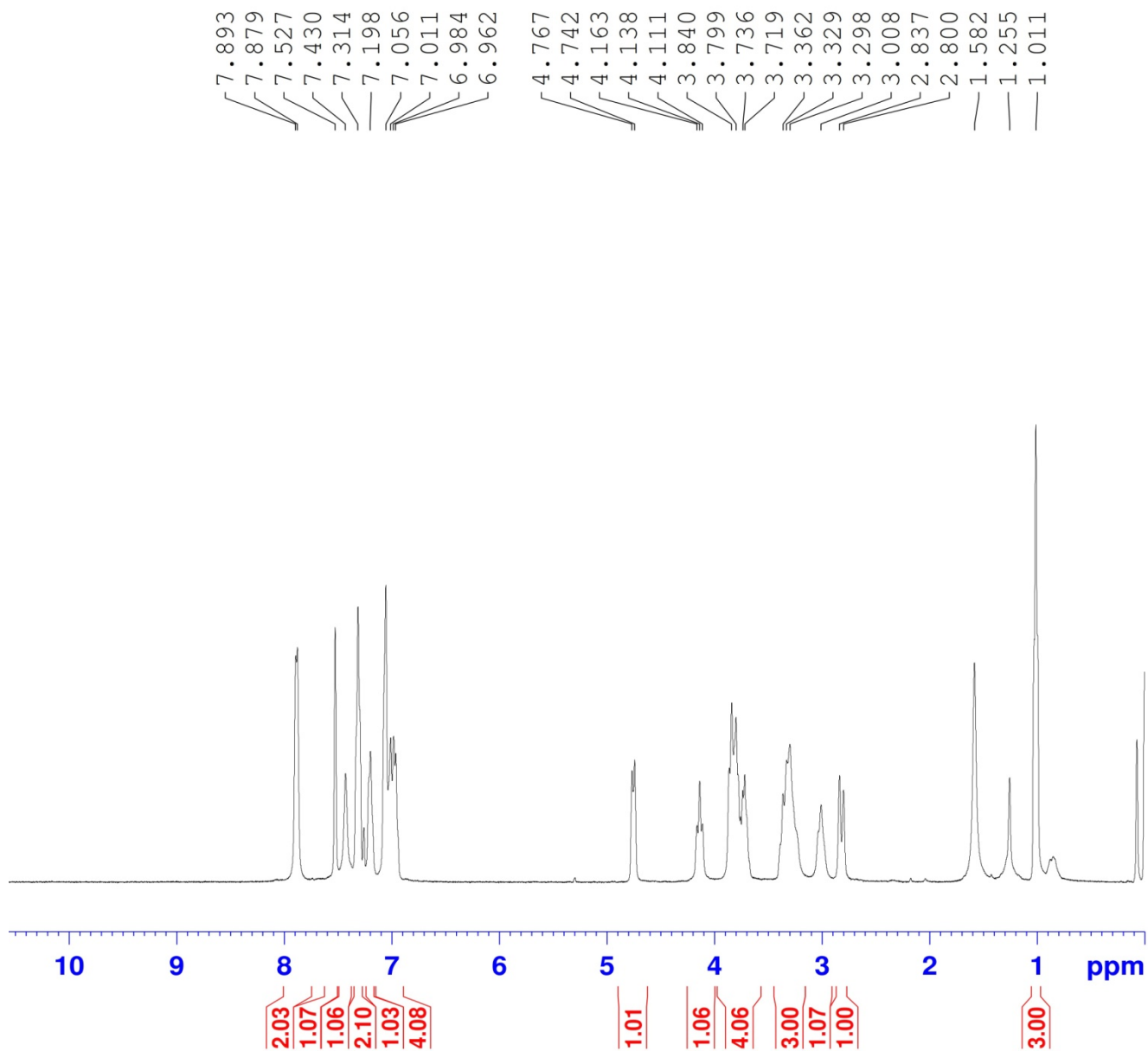
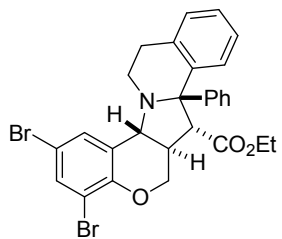
<sup>1</sup>H NMR of **3e** in CDCl<sub>3</sub>



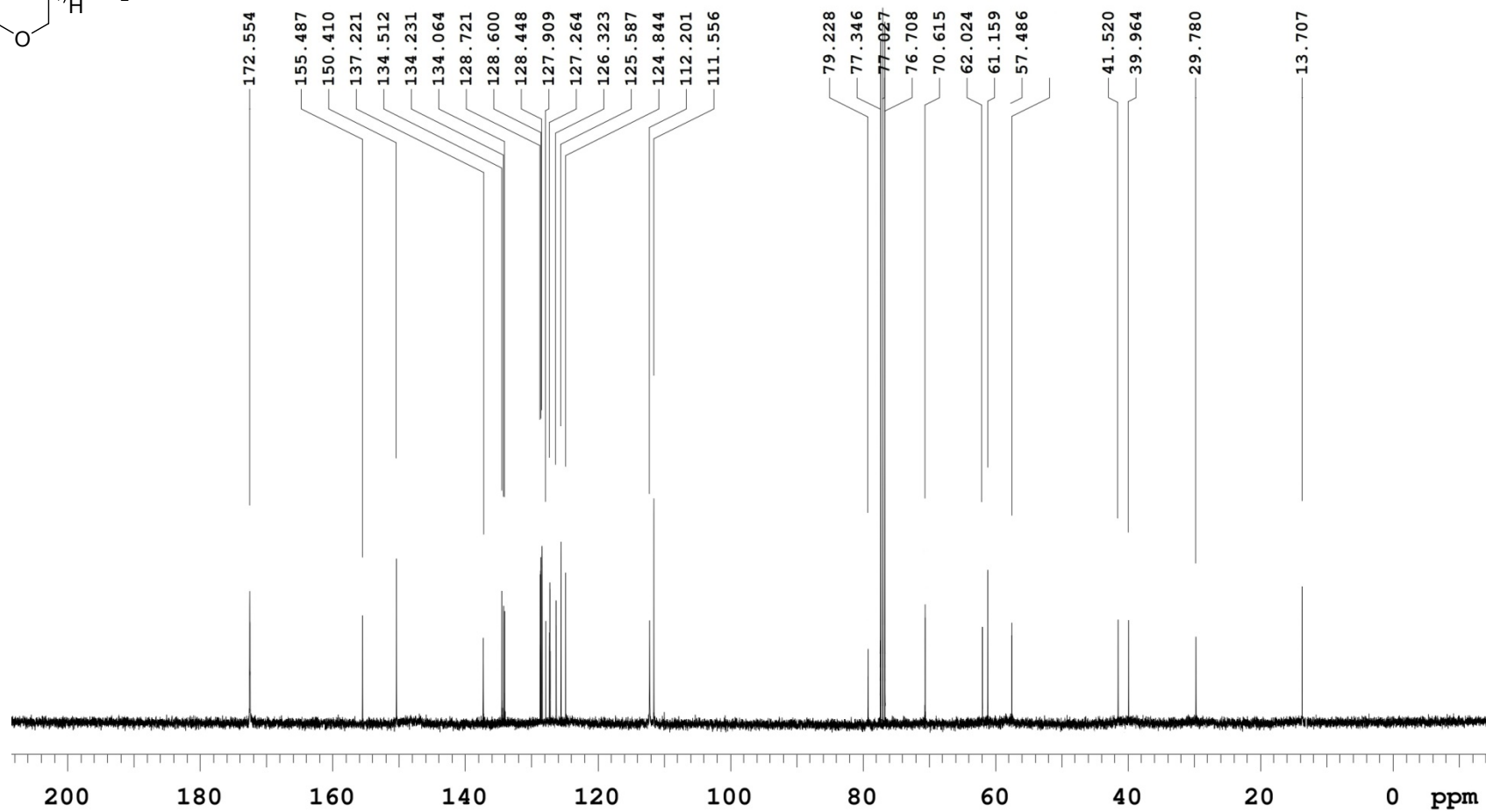
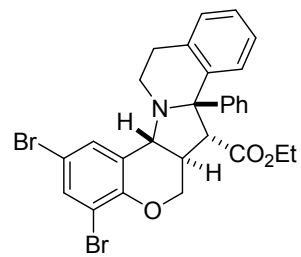
<sup>13</sup>C NMR of **3e** in CDCl<sub>3</sub>



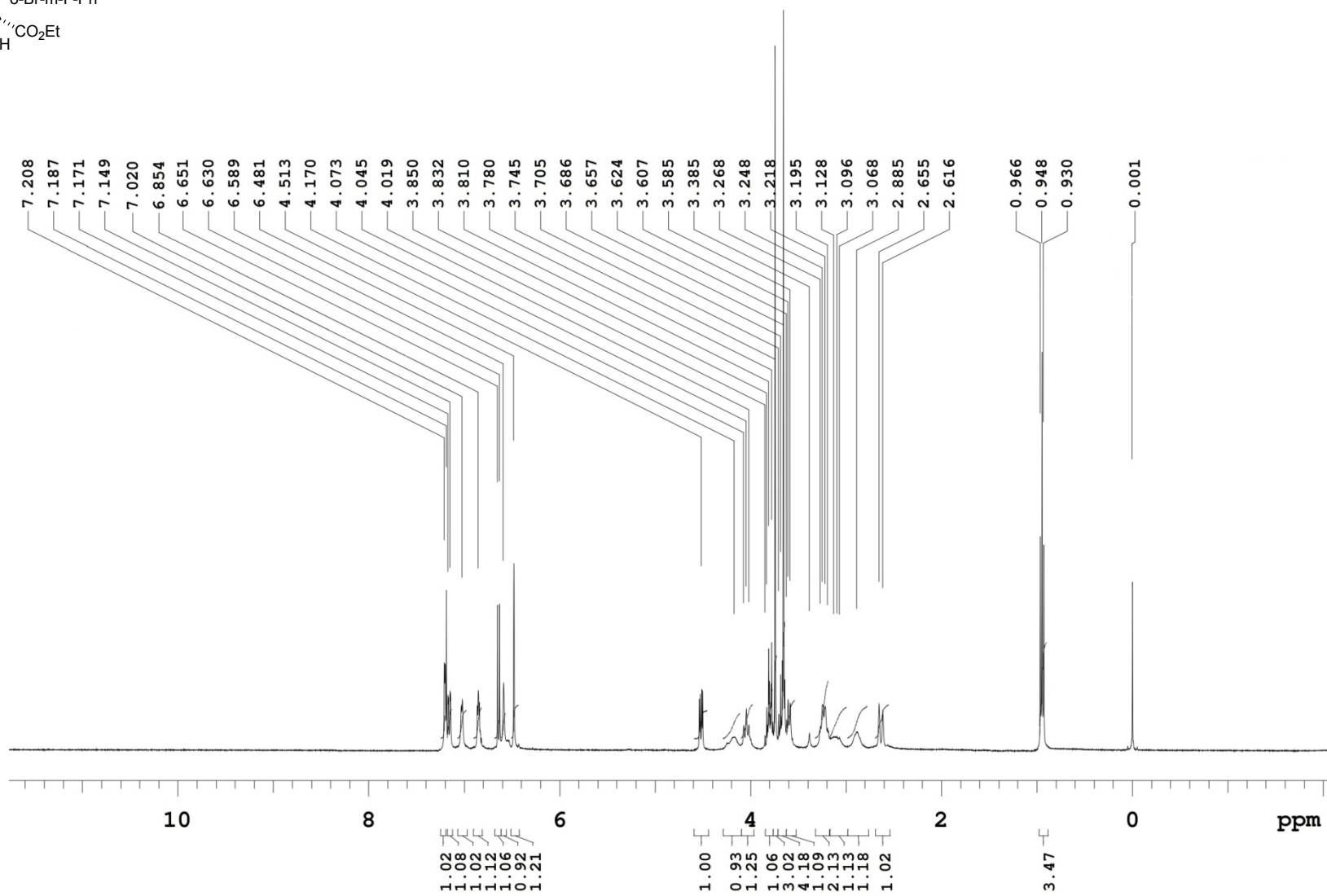
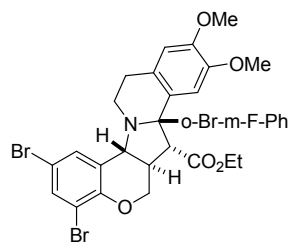
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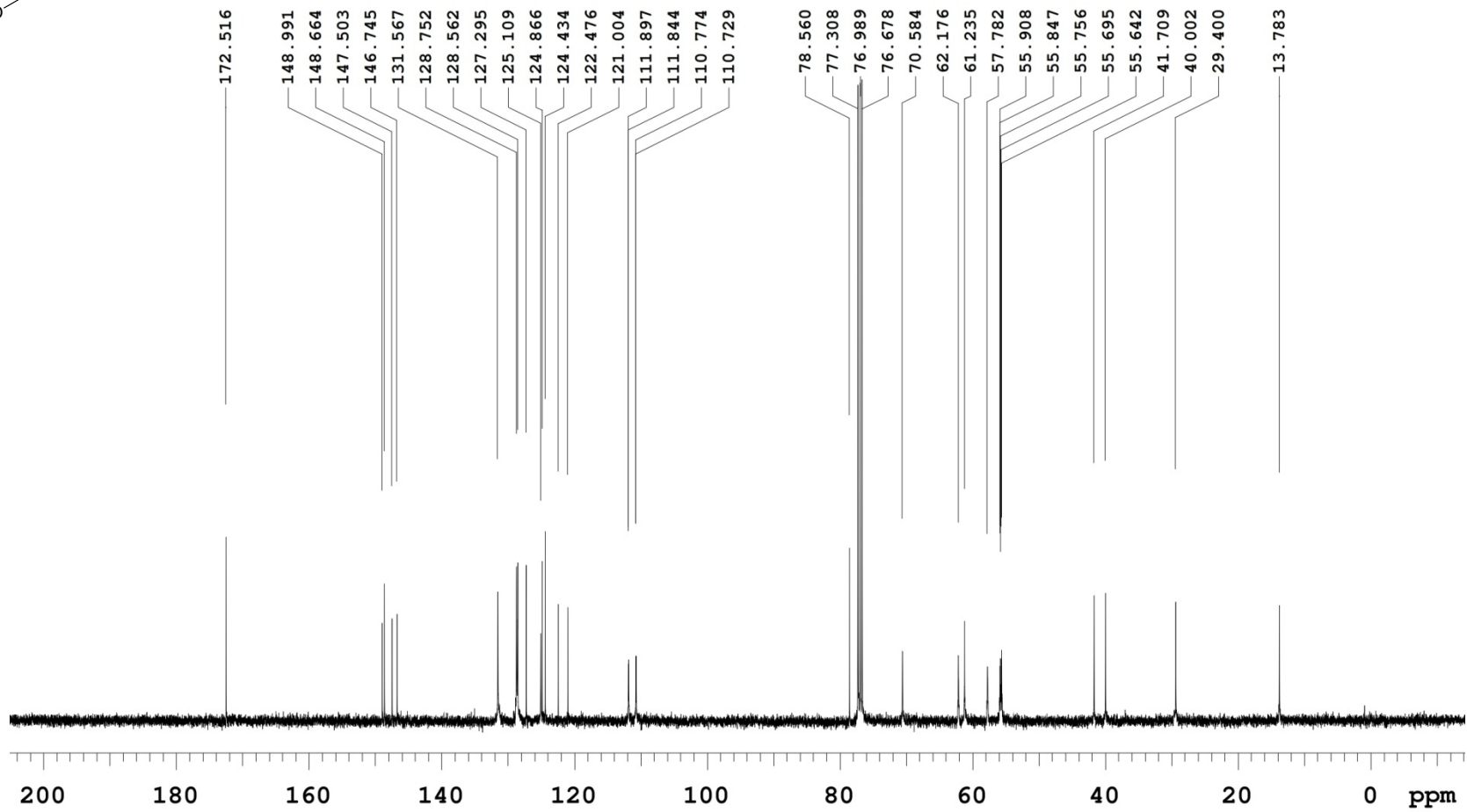
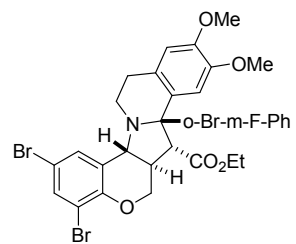
$^{13}\text{C}$  NMR of **3f** in  $\text{CDCl}_3$



<sup>1</sup>H NMR of **3g** in CDCl<sub>3</sub>

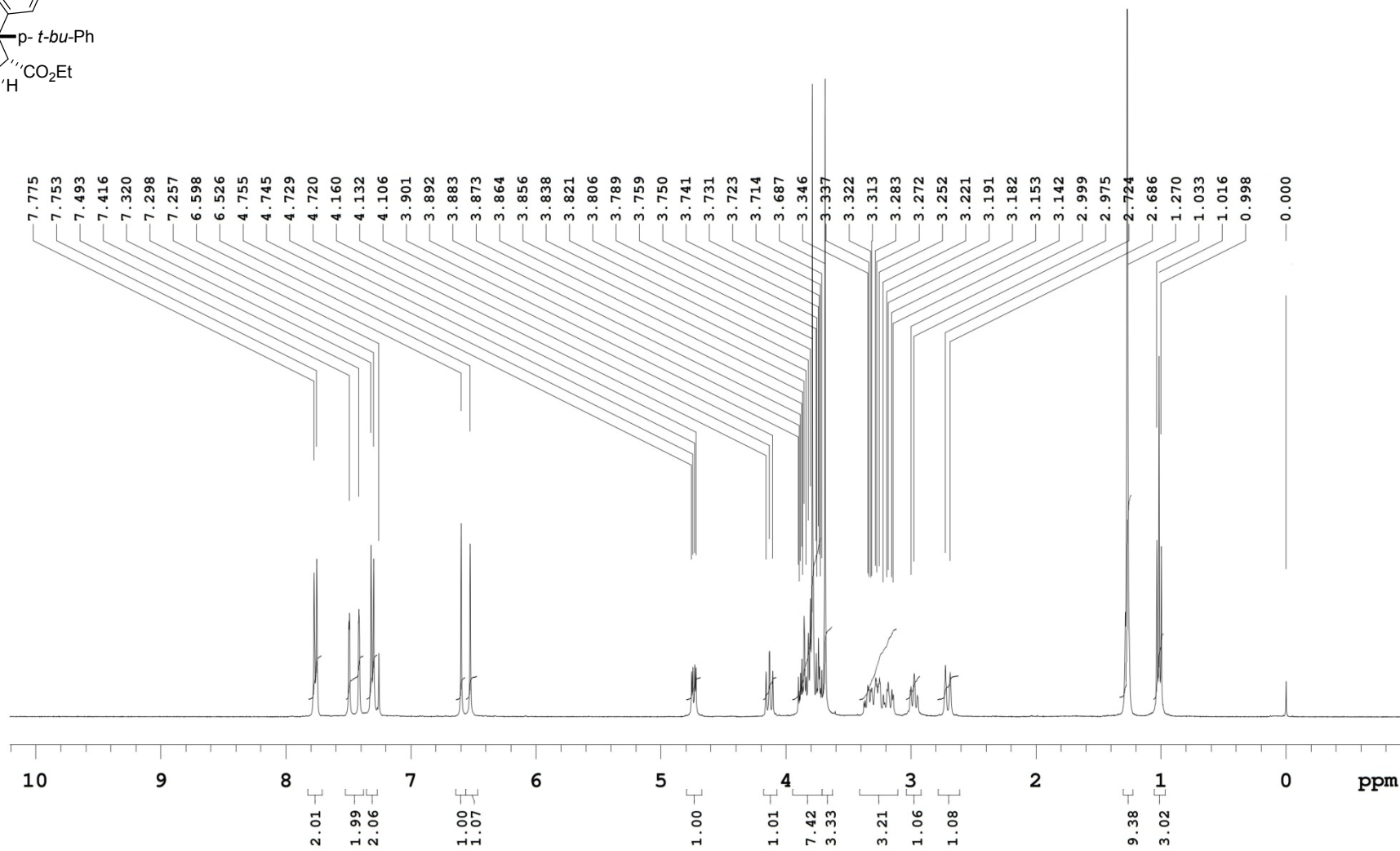
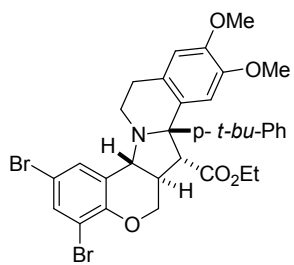


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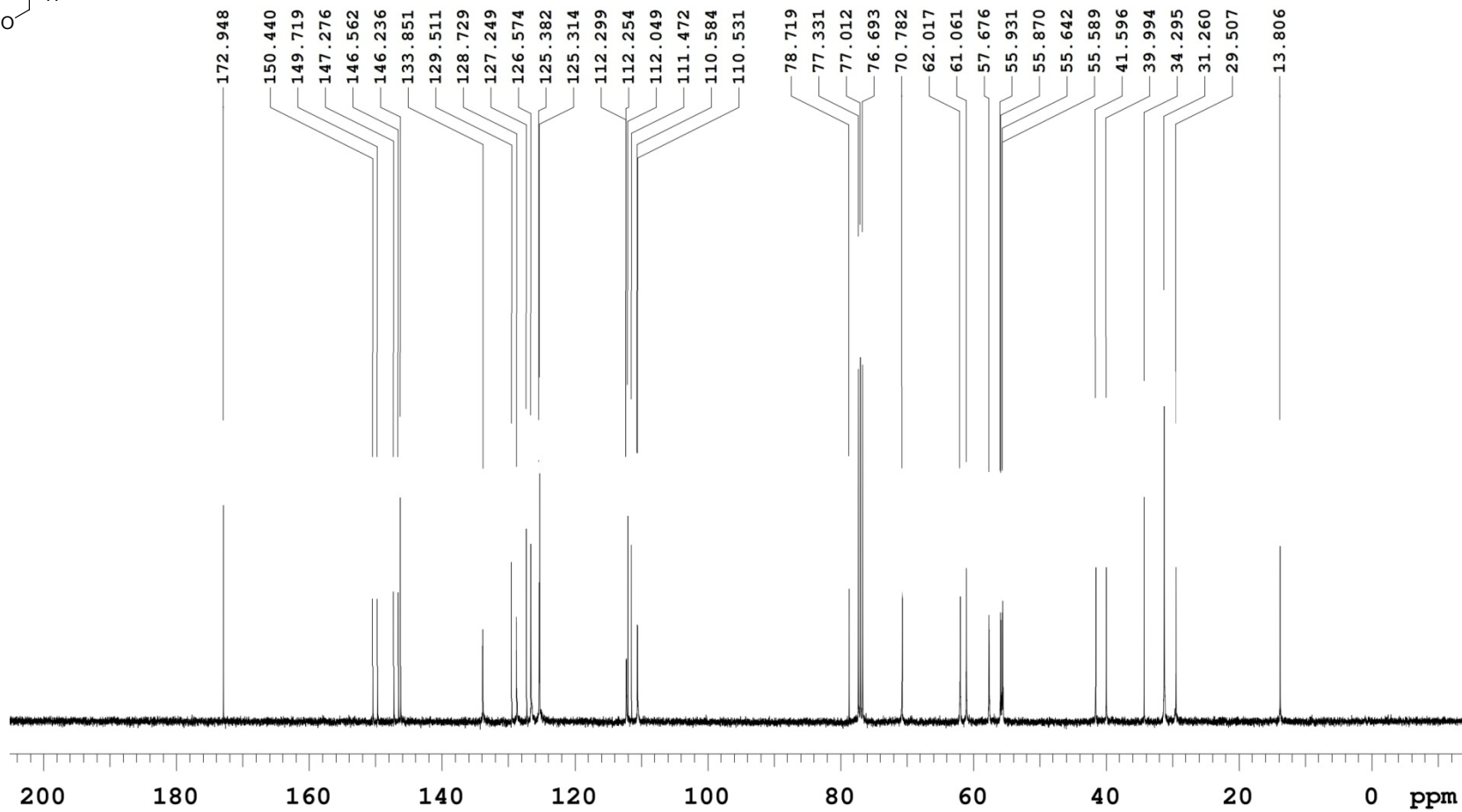
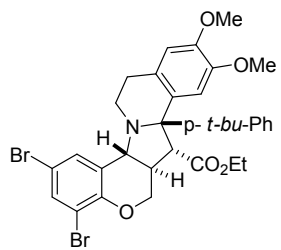




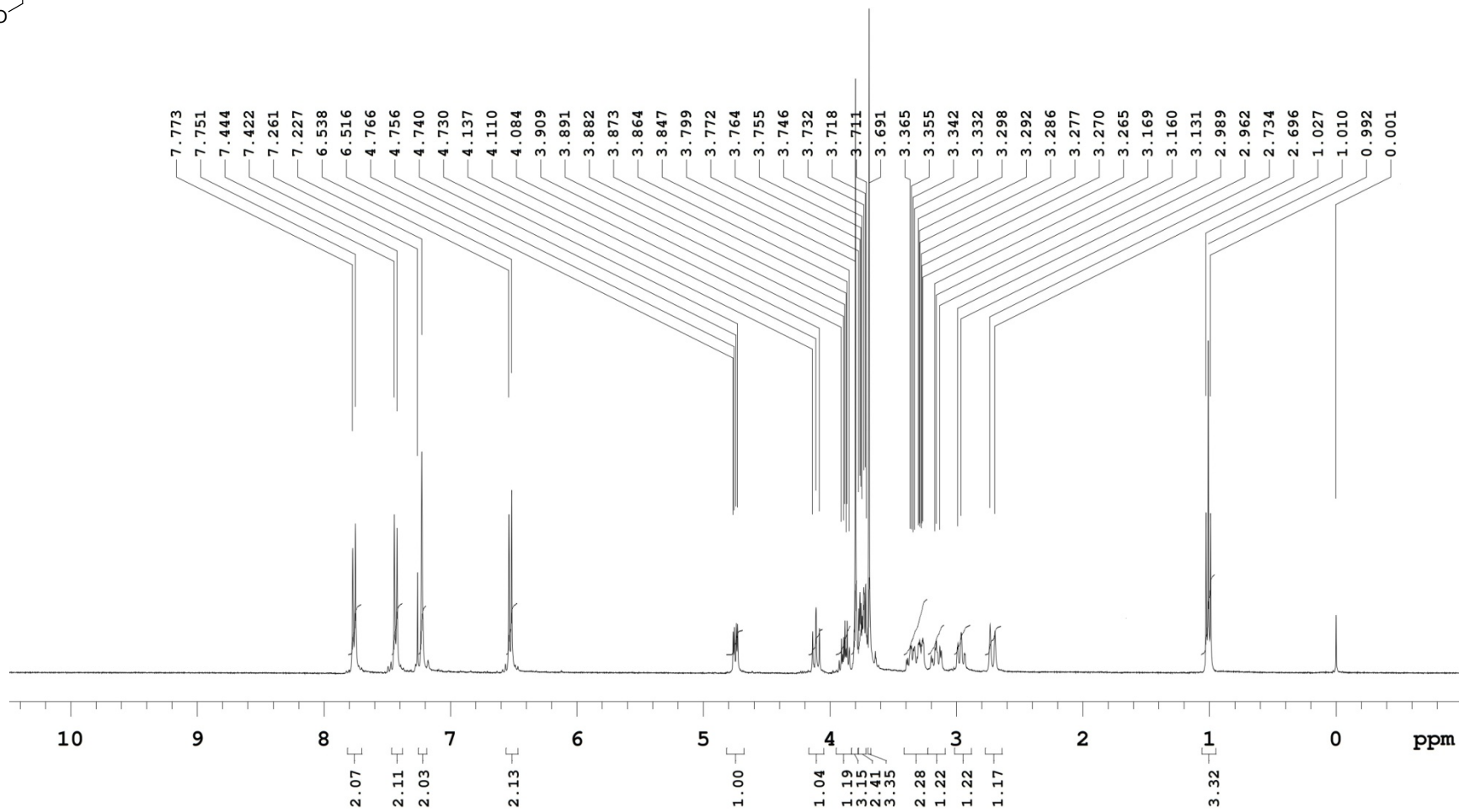
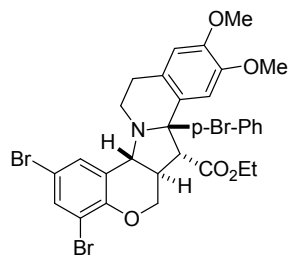
<sup>1</sup>H NMR of **3h** in CDCl<sub>3</sub>



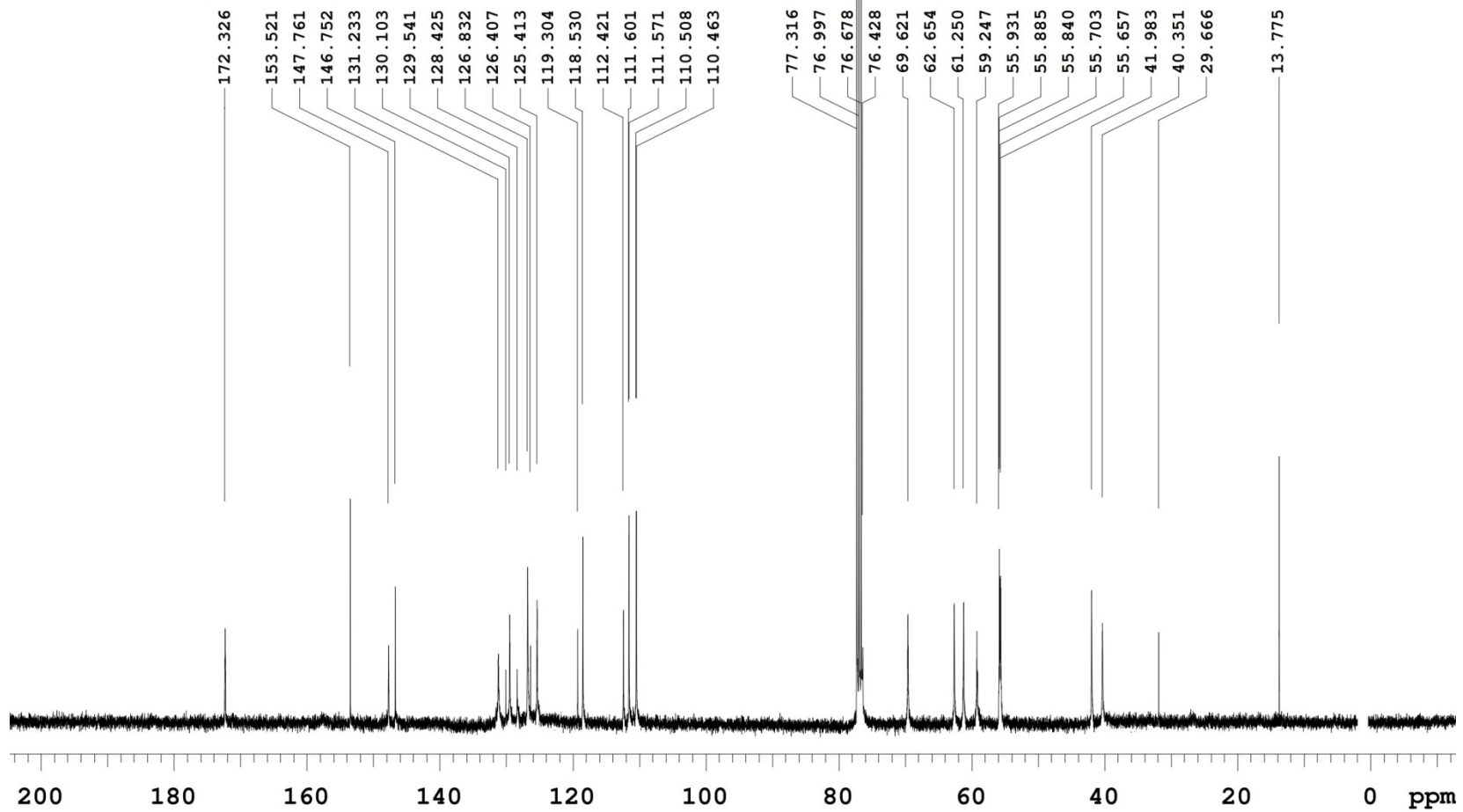
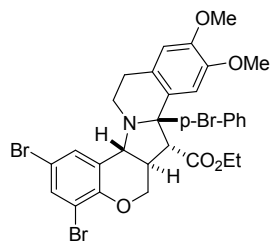
<sup>13</sup>C NMR of **3h** in CDCl<sub>3</sub>



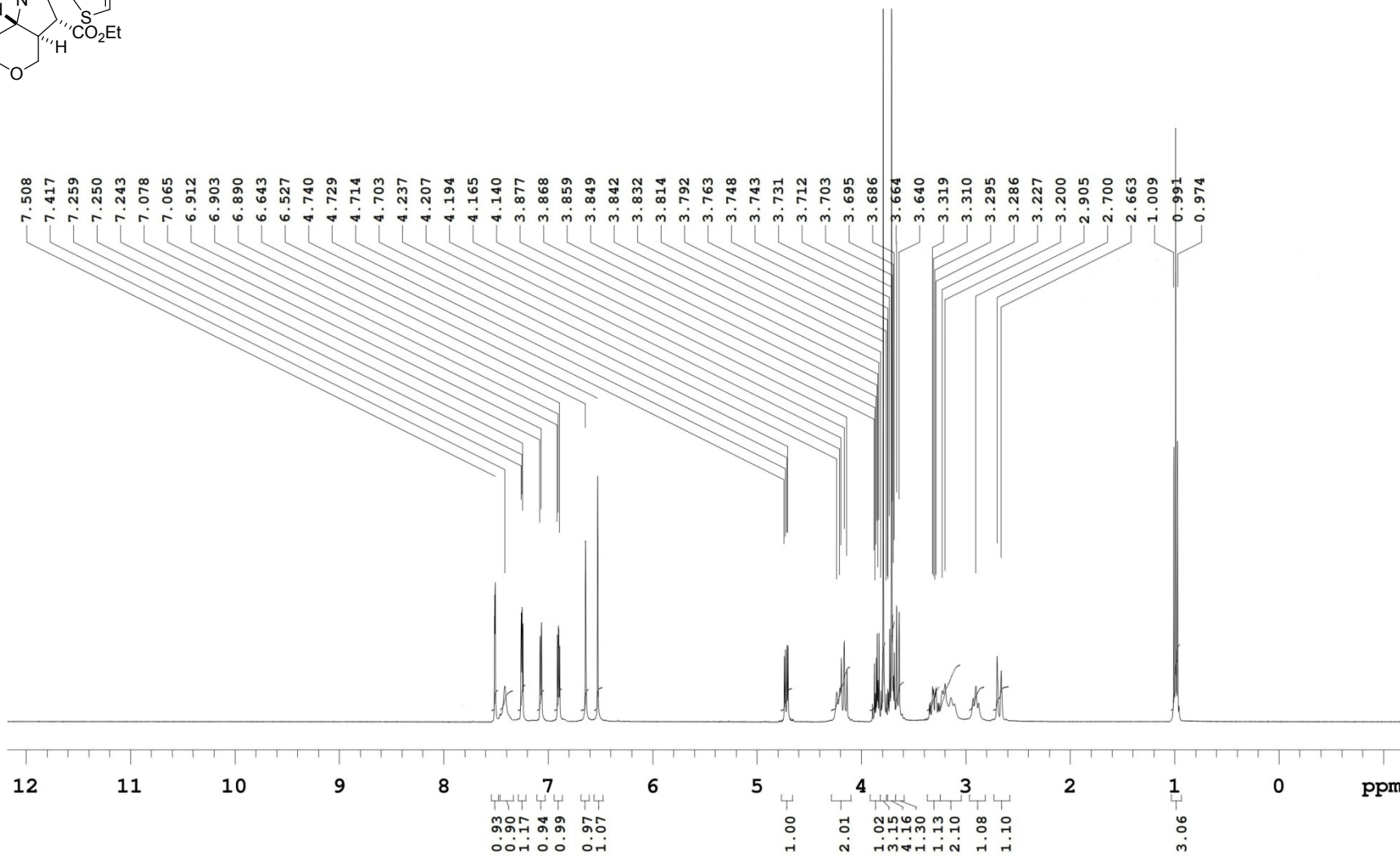
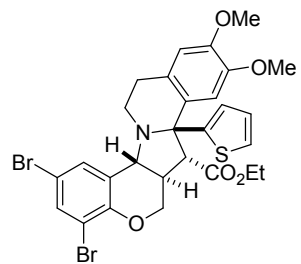
<sup>1</sup>H NMR of **3i** in CDCl<sub>3</sub>



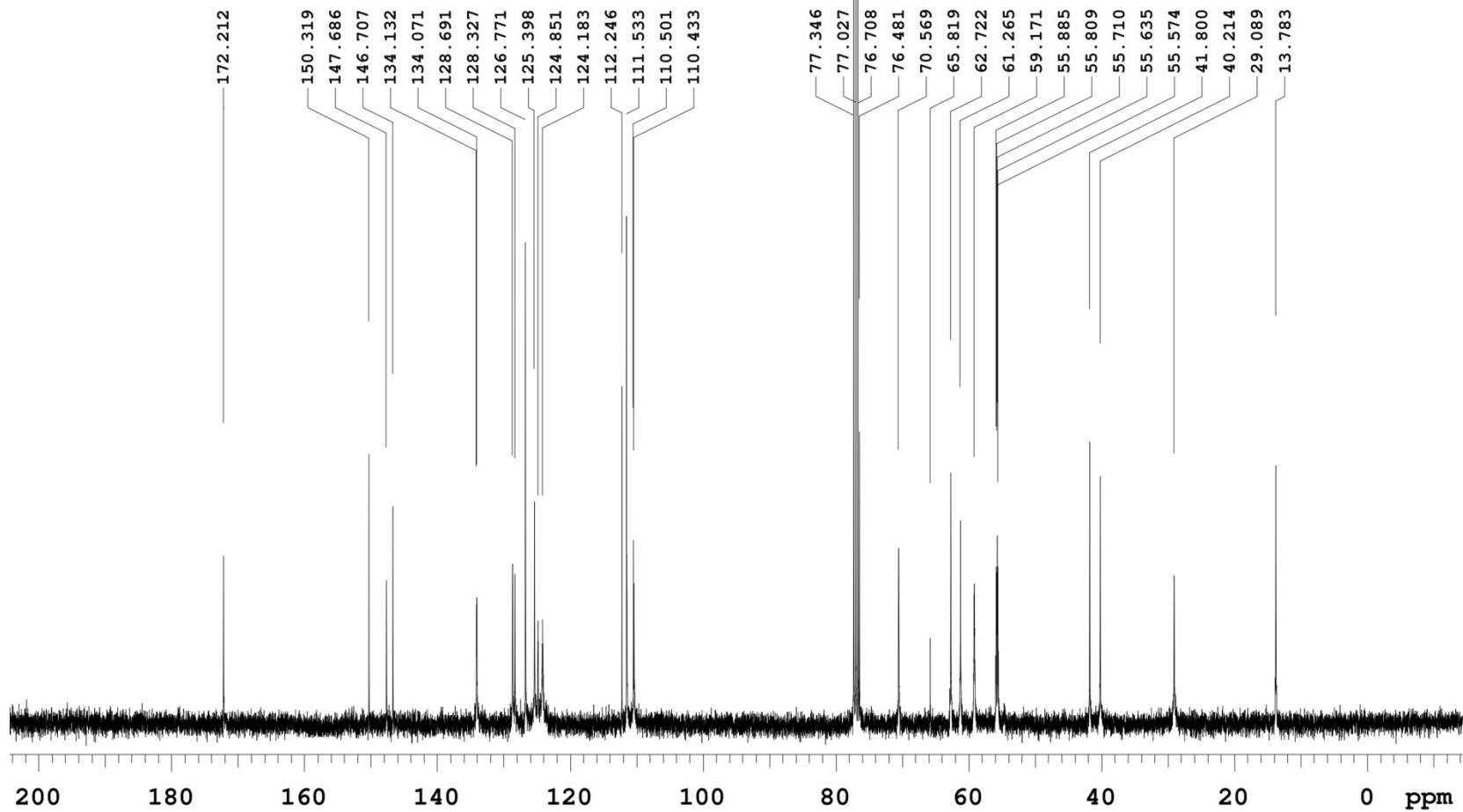
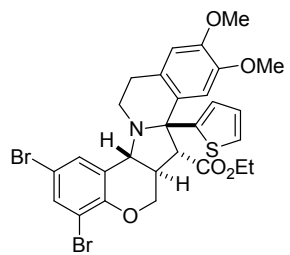
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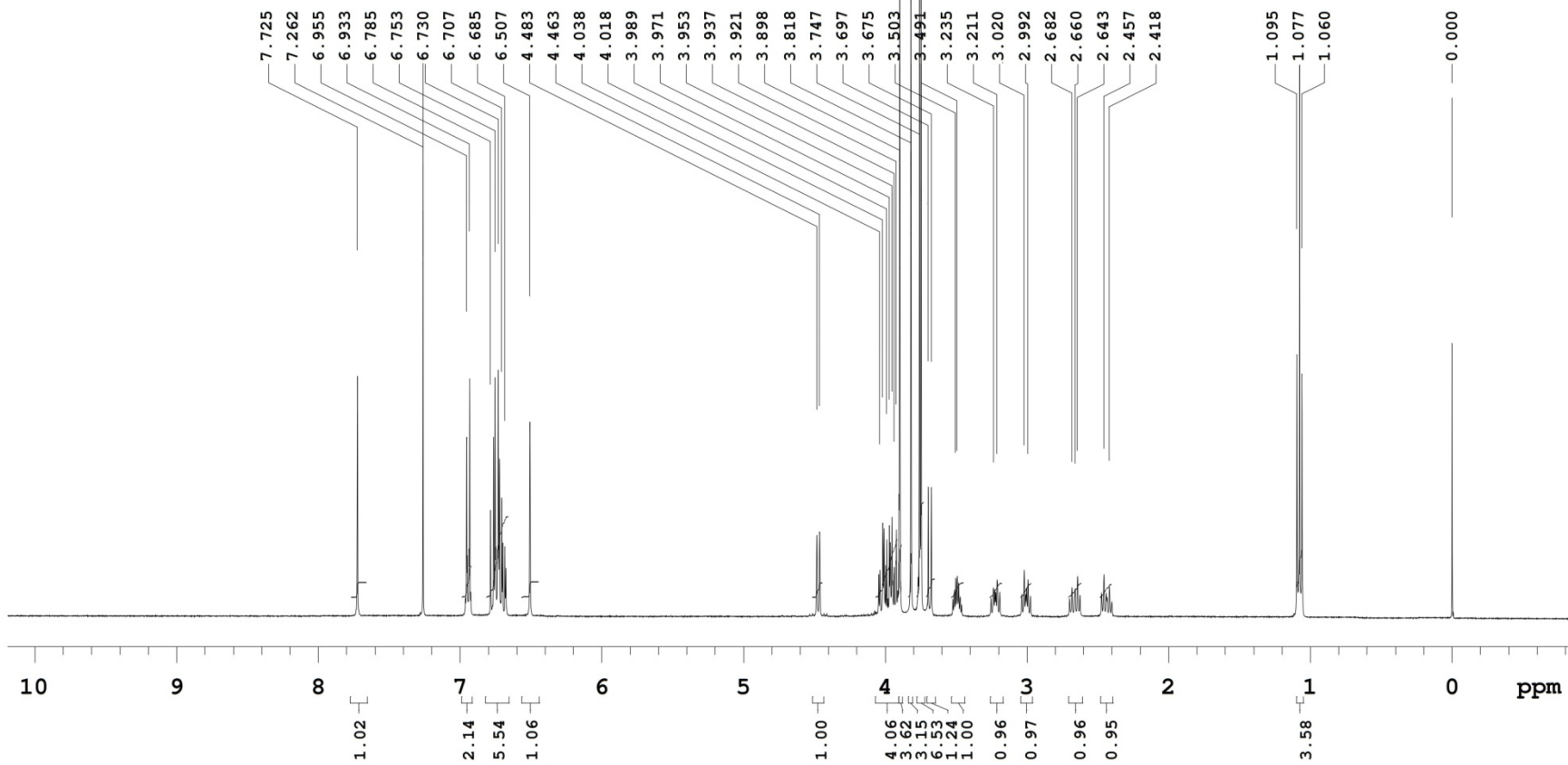
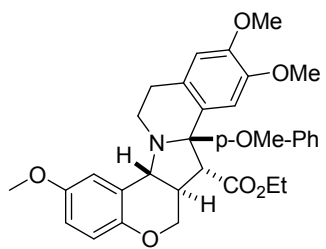
<sup>1</sup>H NMR of **3j** in CDCl<sub>3</sub>



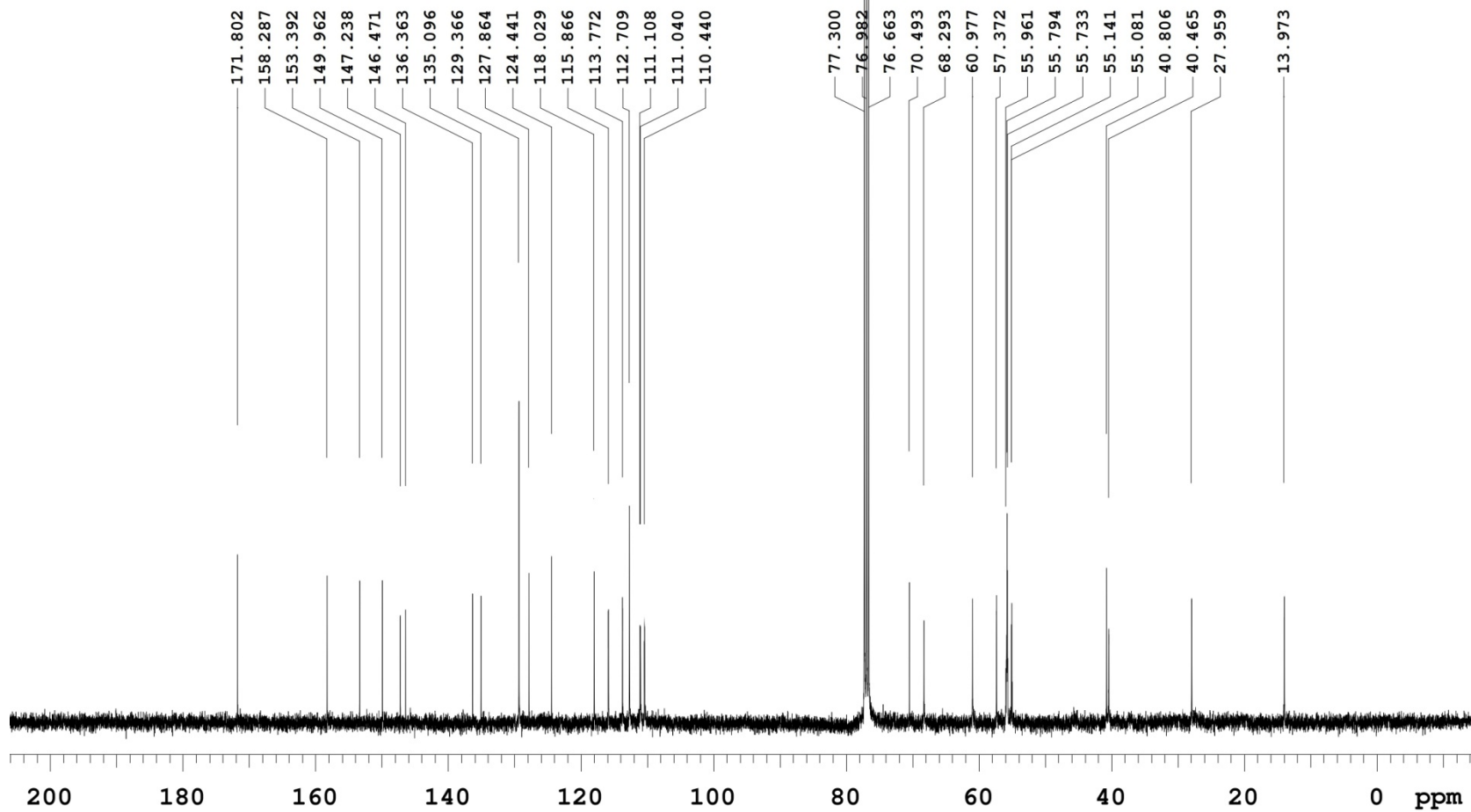
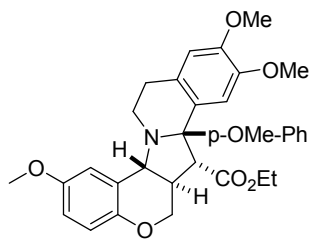
$^{13}\text{C}$  NMR of **3j** in  $\text{CDCl}_3$



<sup>1</sup>H NMR of **3k** in CDCl<sub>3</sub>

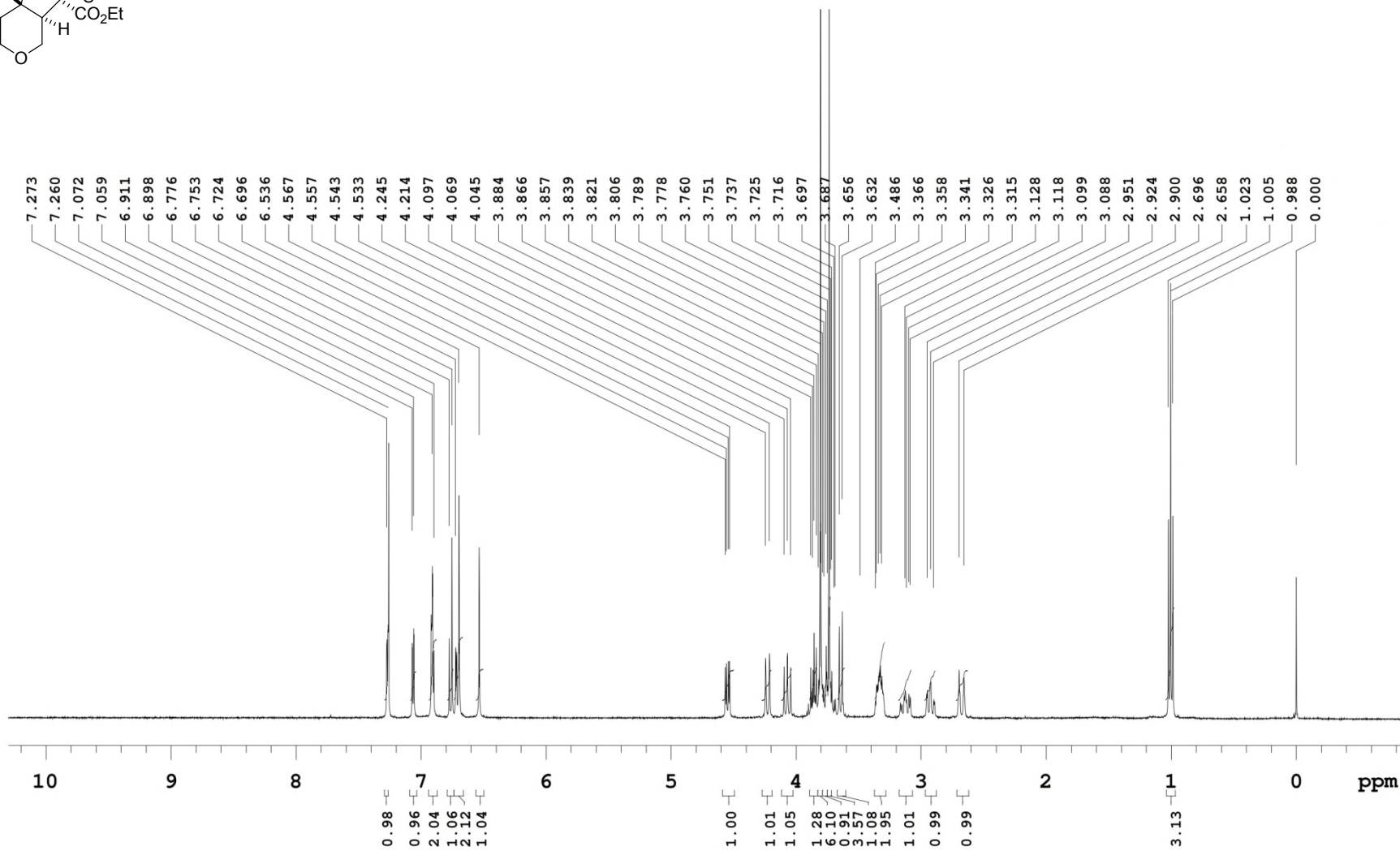
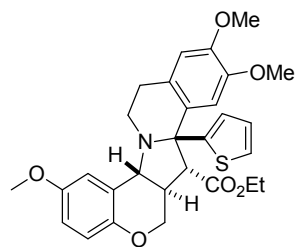


<sup>13</sup>C NMR of **3k** in CDCl<sub>3</sub>

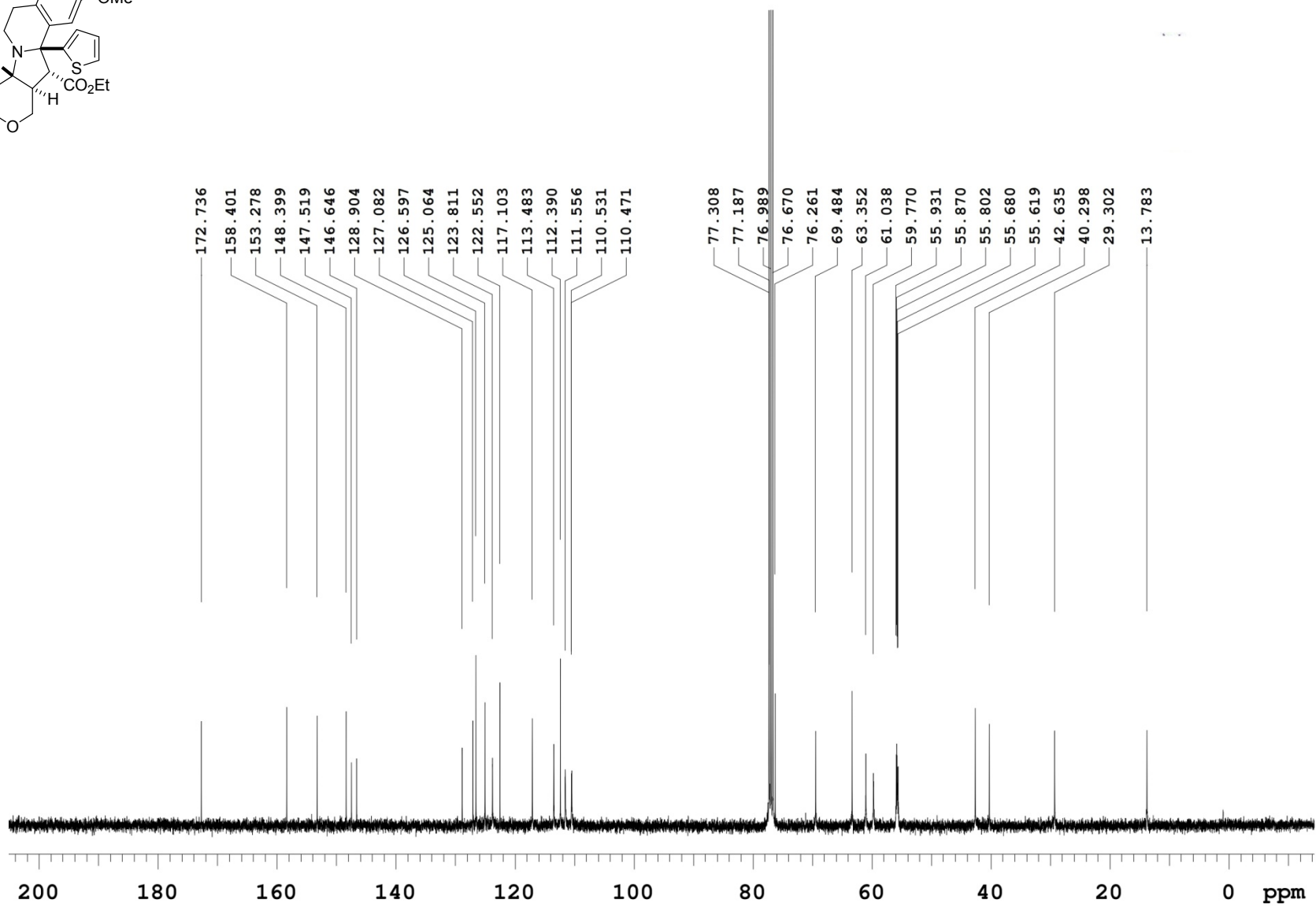
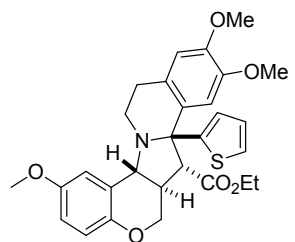




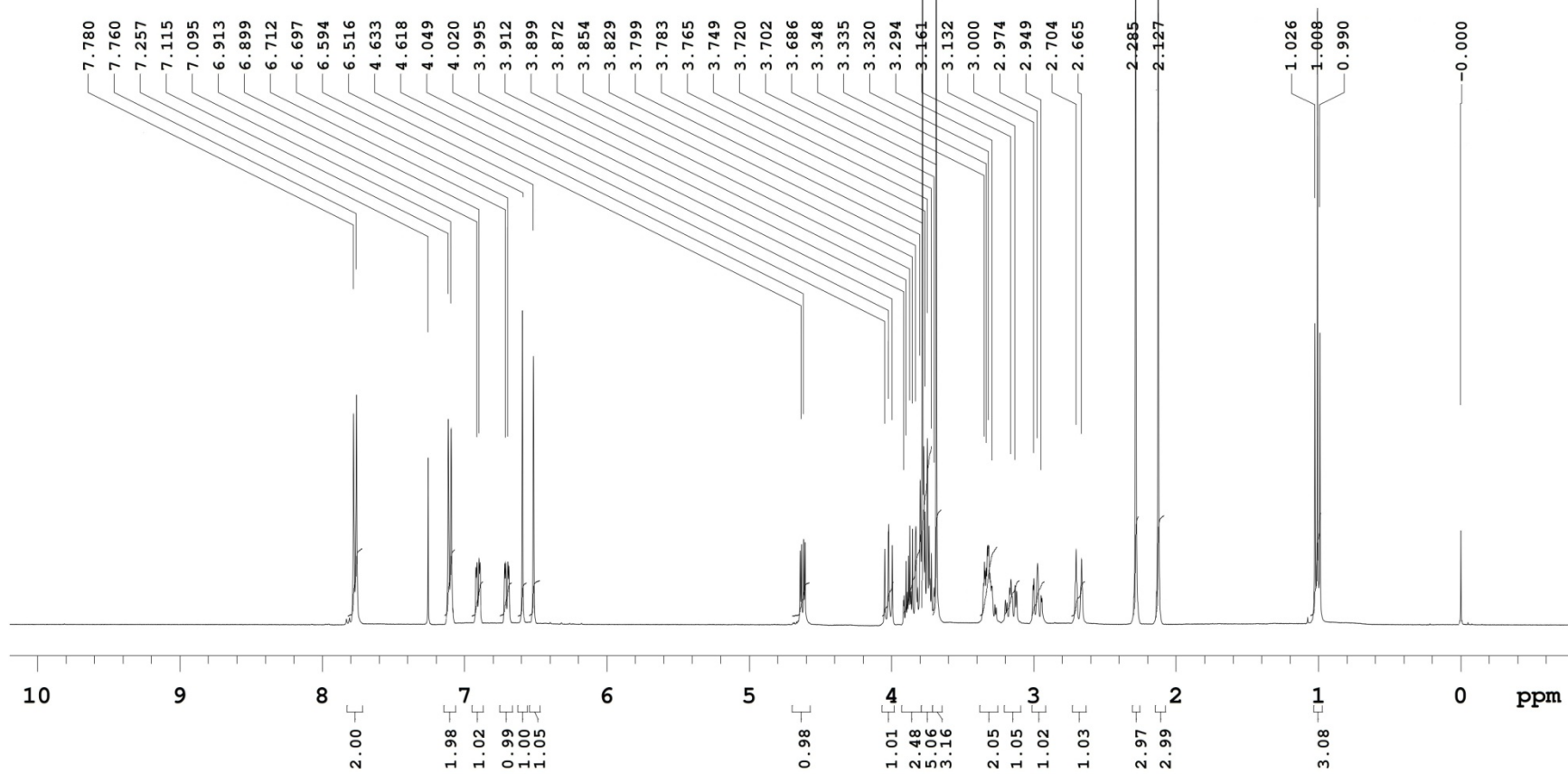
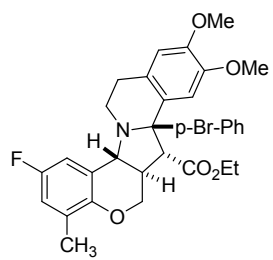
<sup>1</sup>H NMR of **31** in CDCl<sub>3</sub>



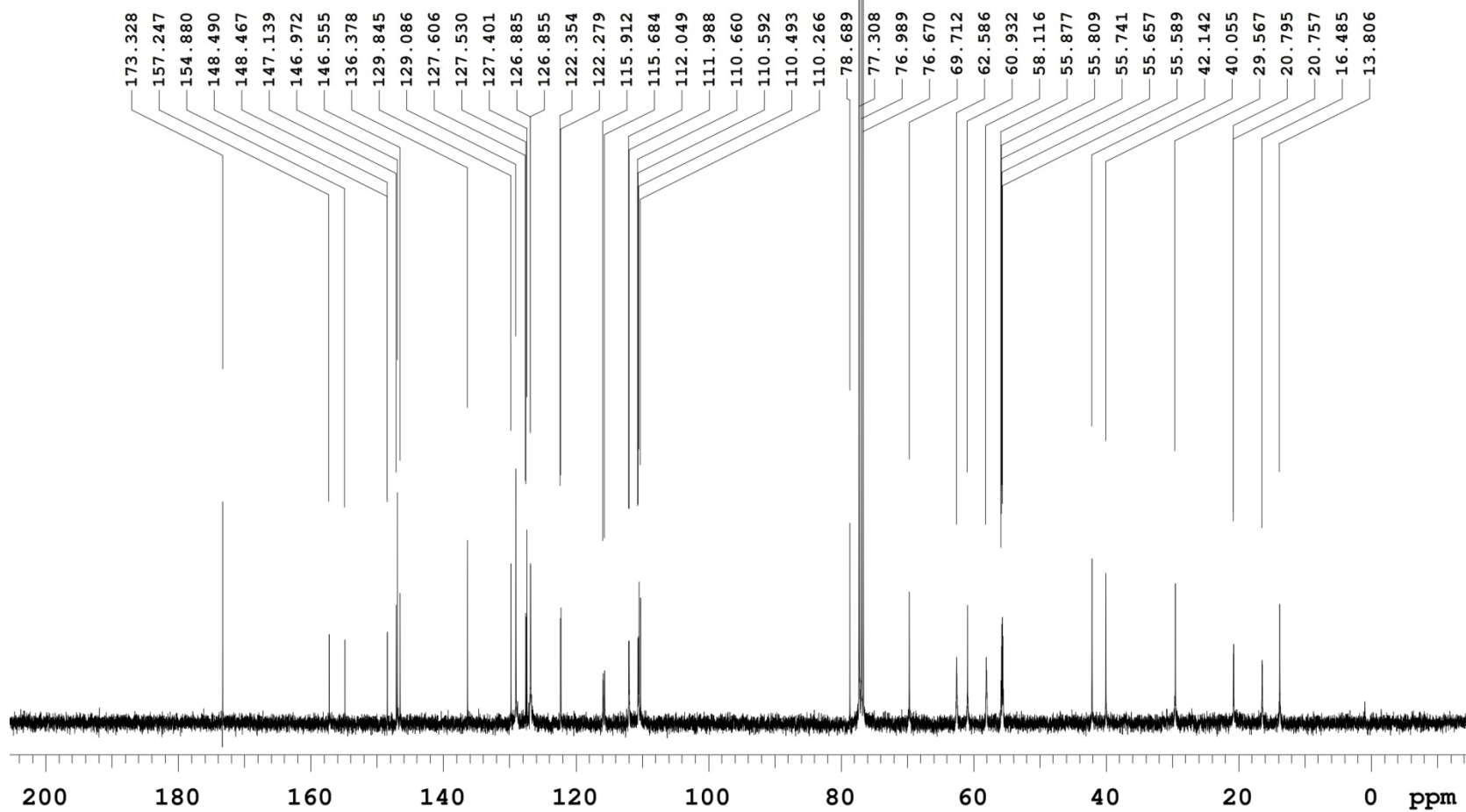
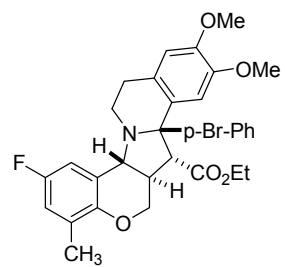
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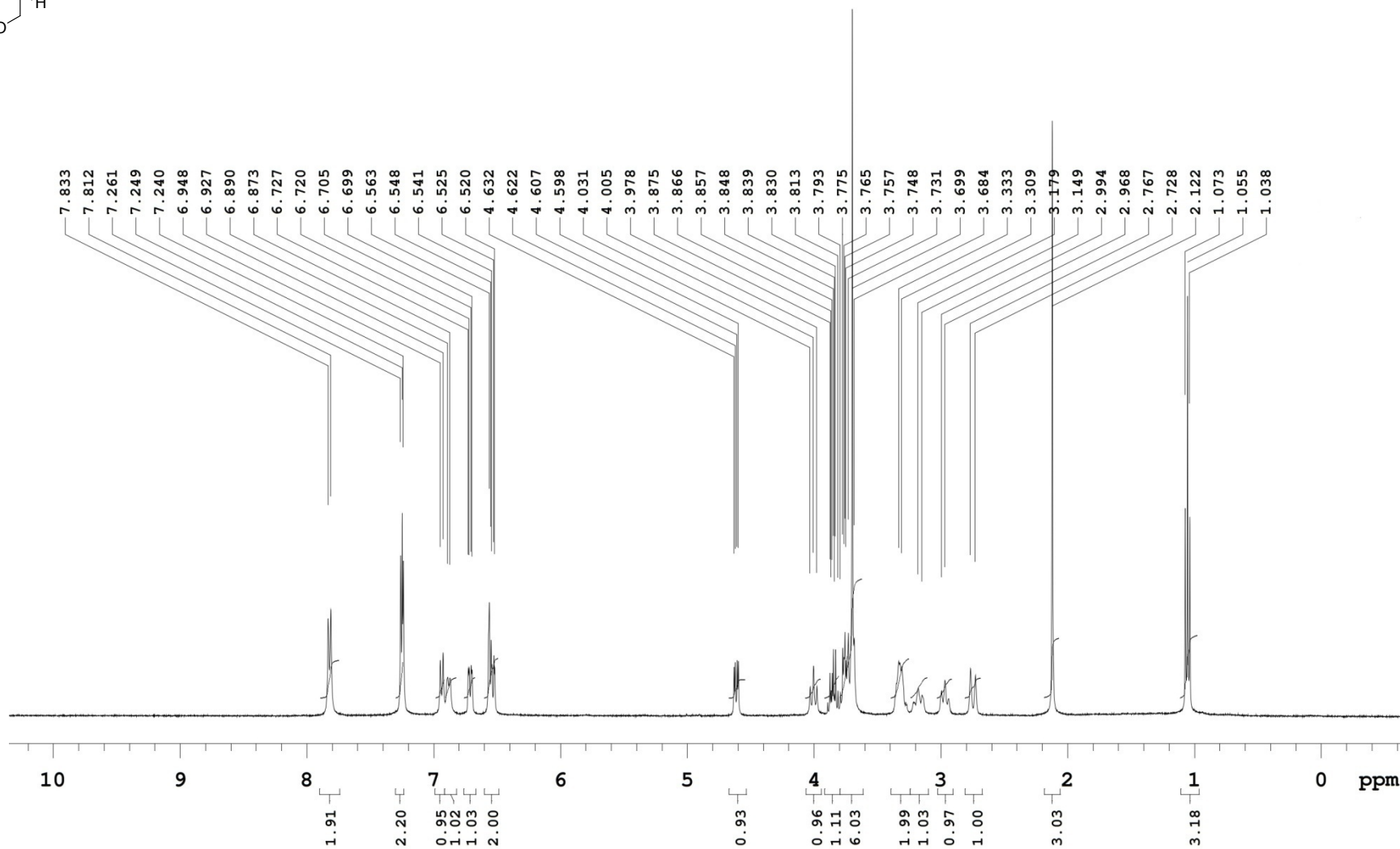
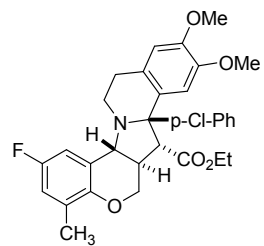
<sup>13</sup>C NMR of **3m** in CDCl<sub>3</sub>



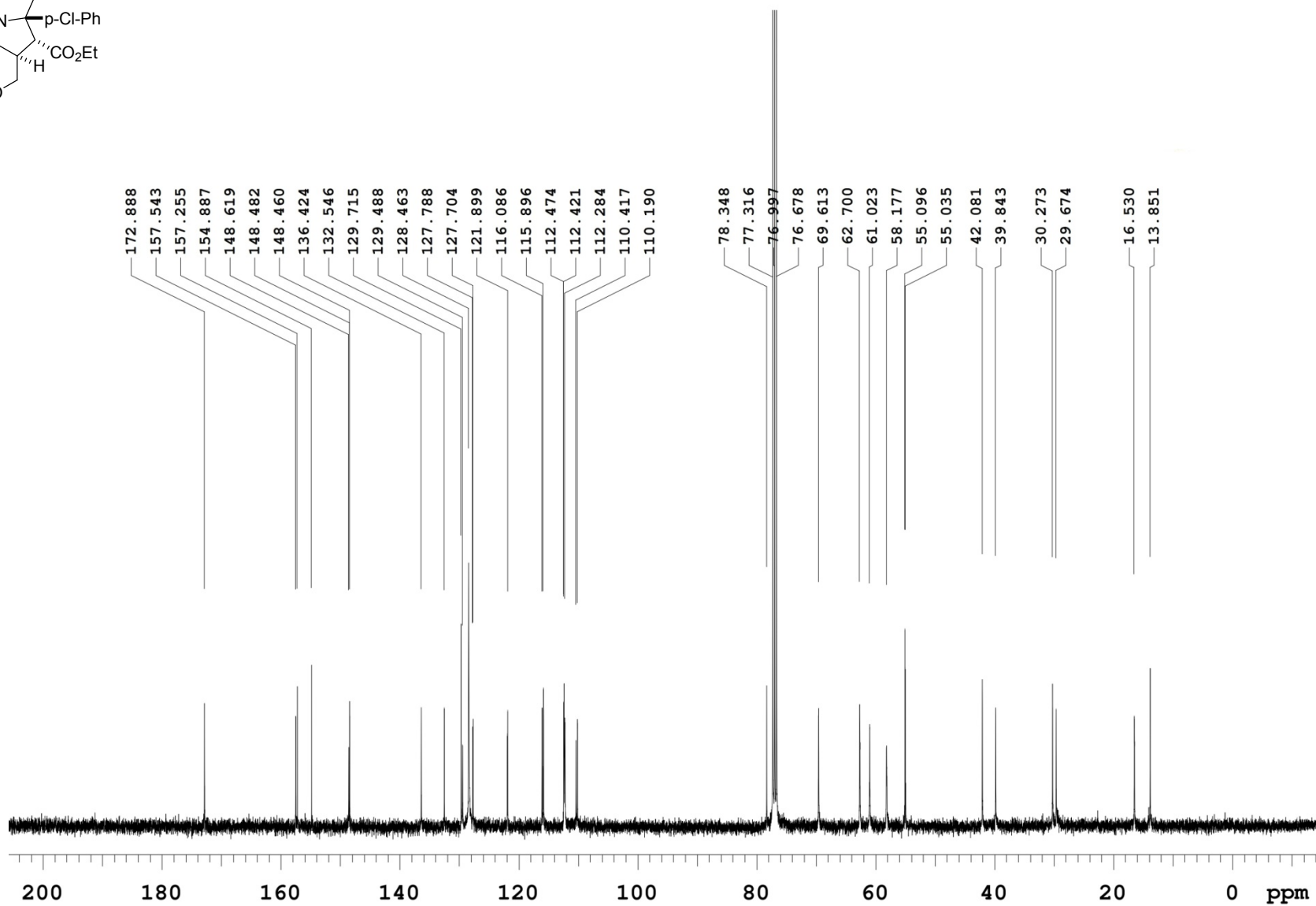
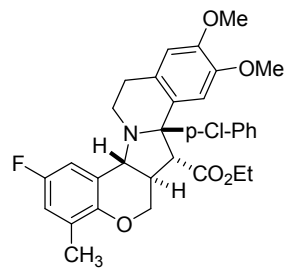
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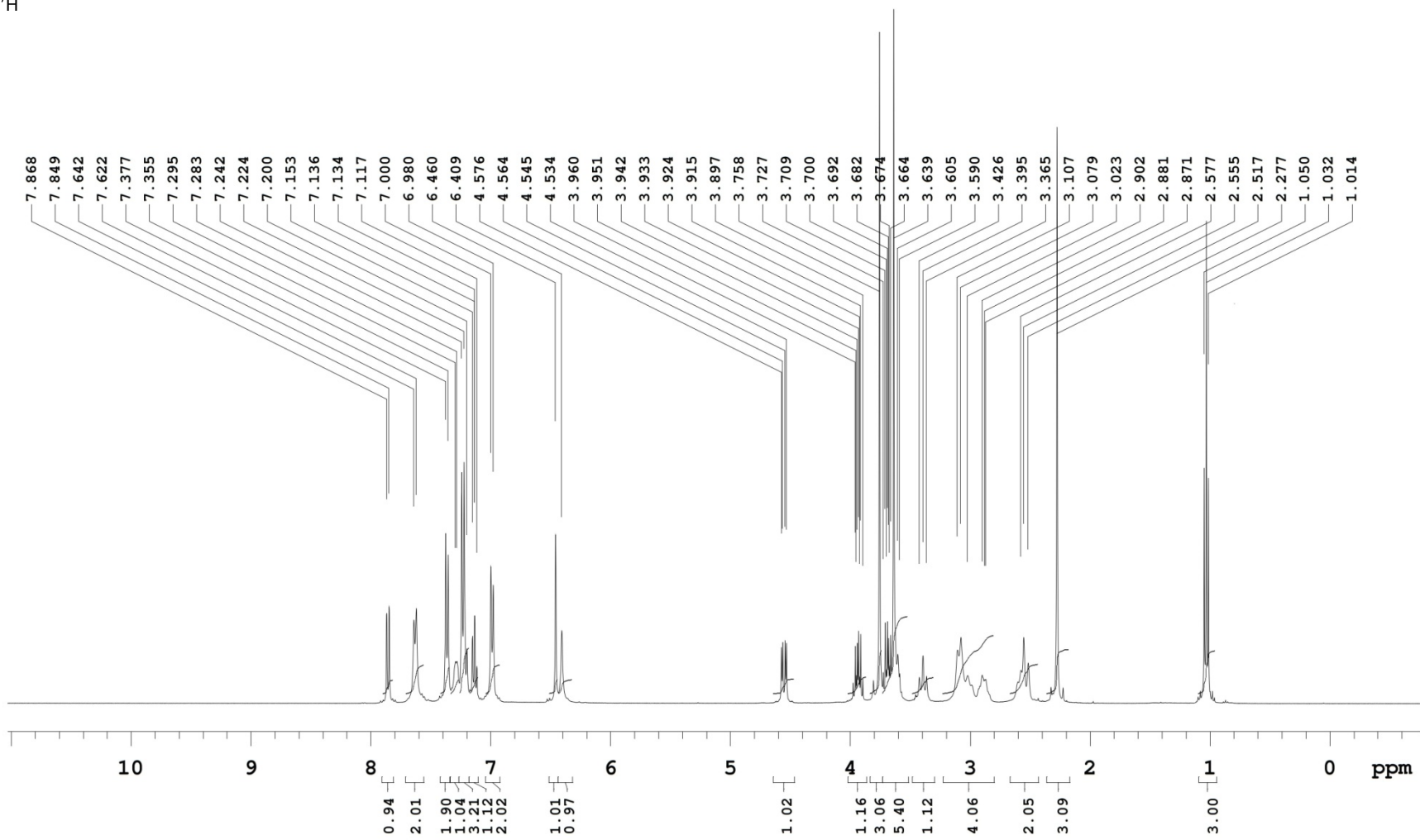
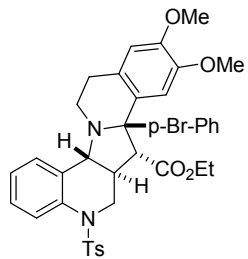
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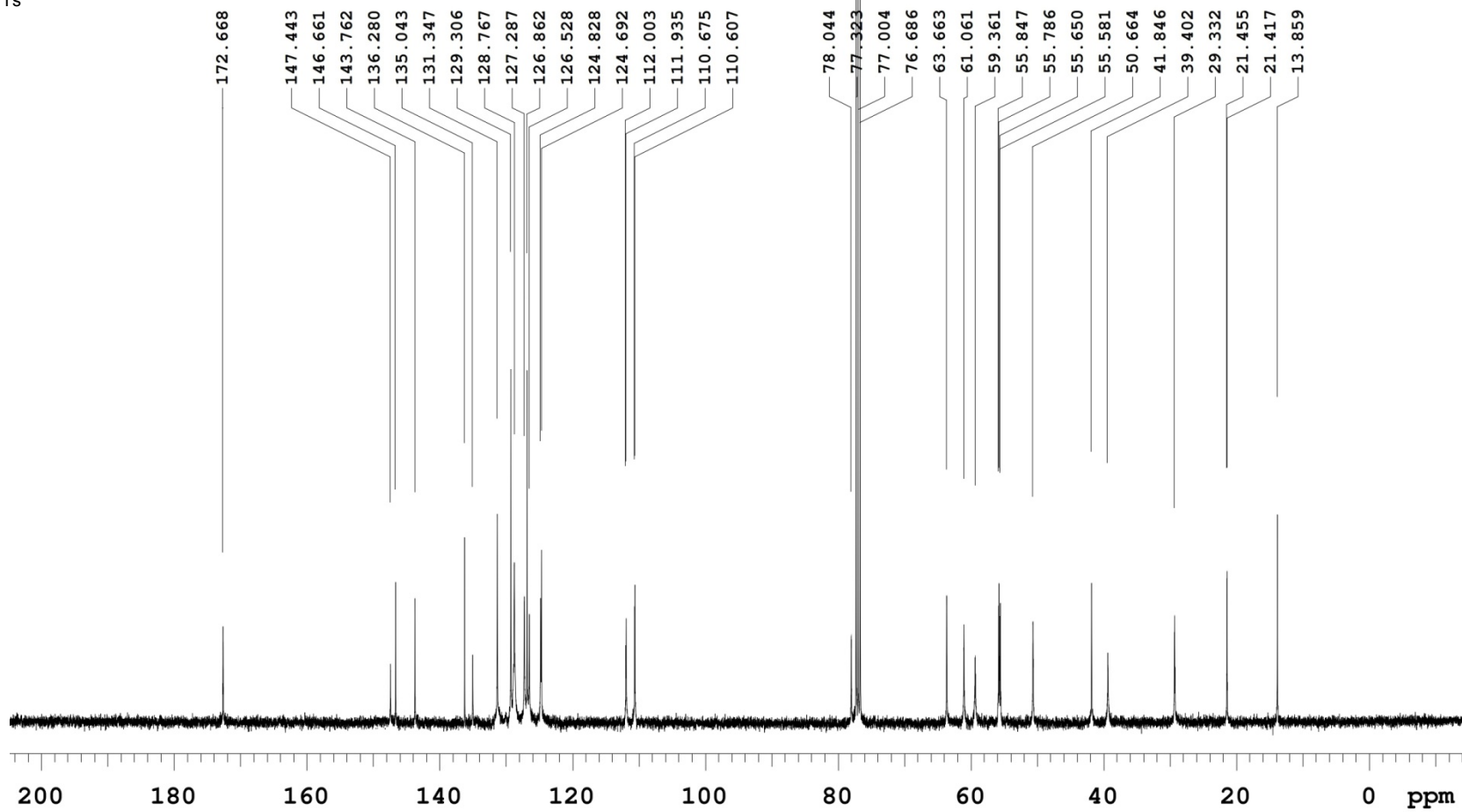
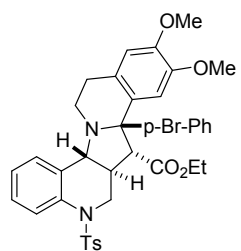
<sup>13</sup>C NMR of **3n** in CDCl<sub>3</sub>



<sup>1</sup>H NMR of **3o** in CDCl<sub>3</sub>

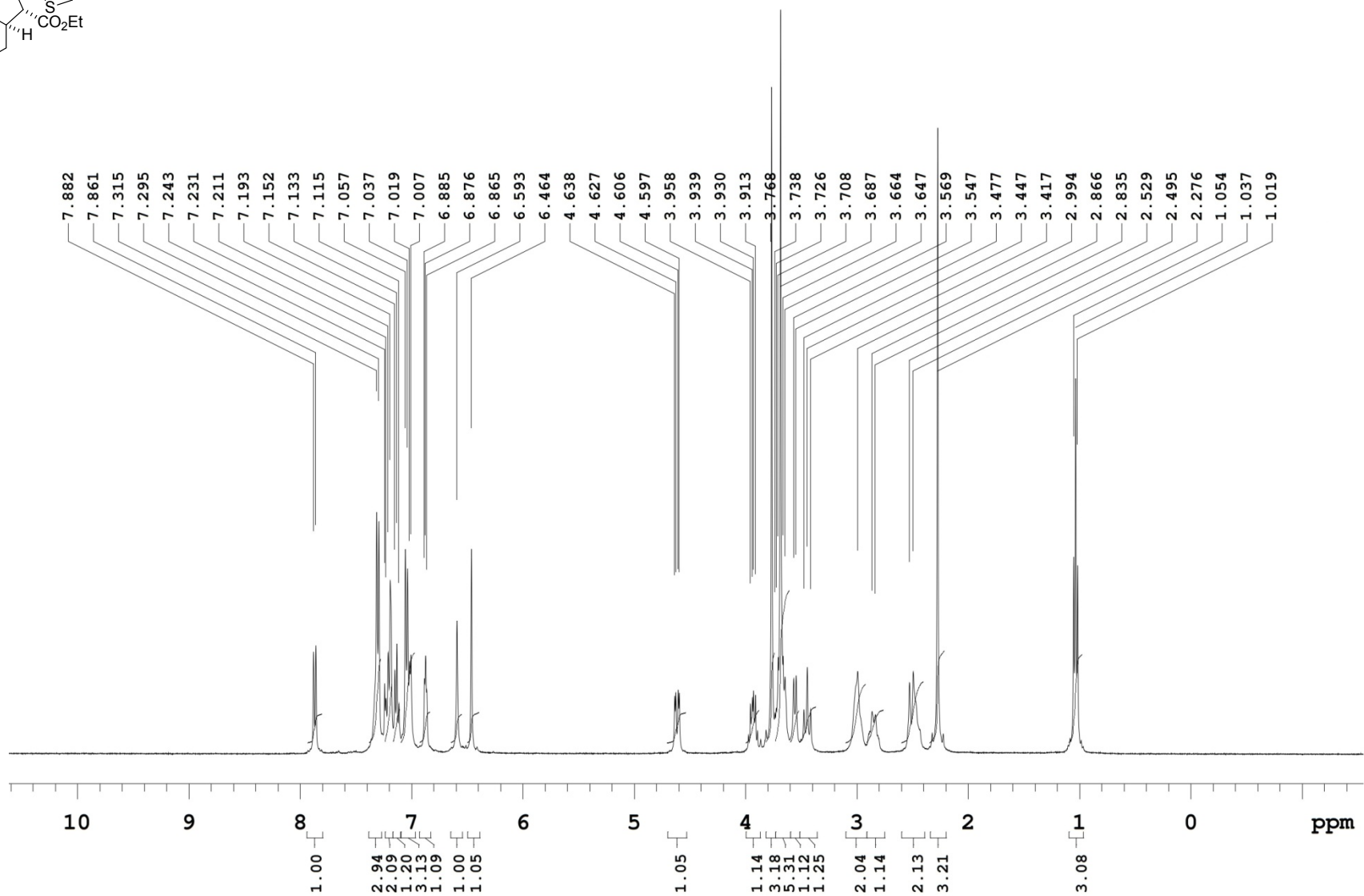
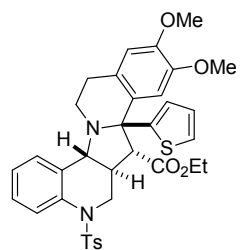


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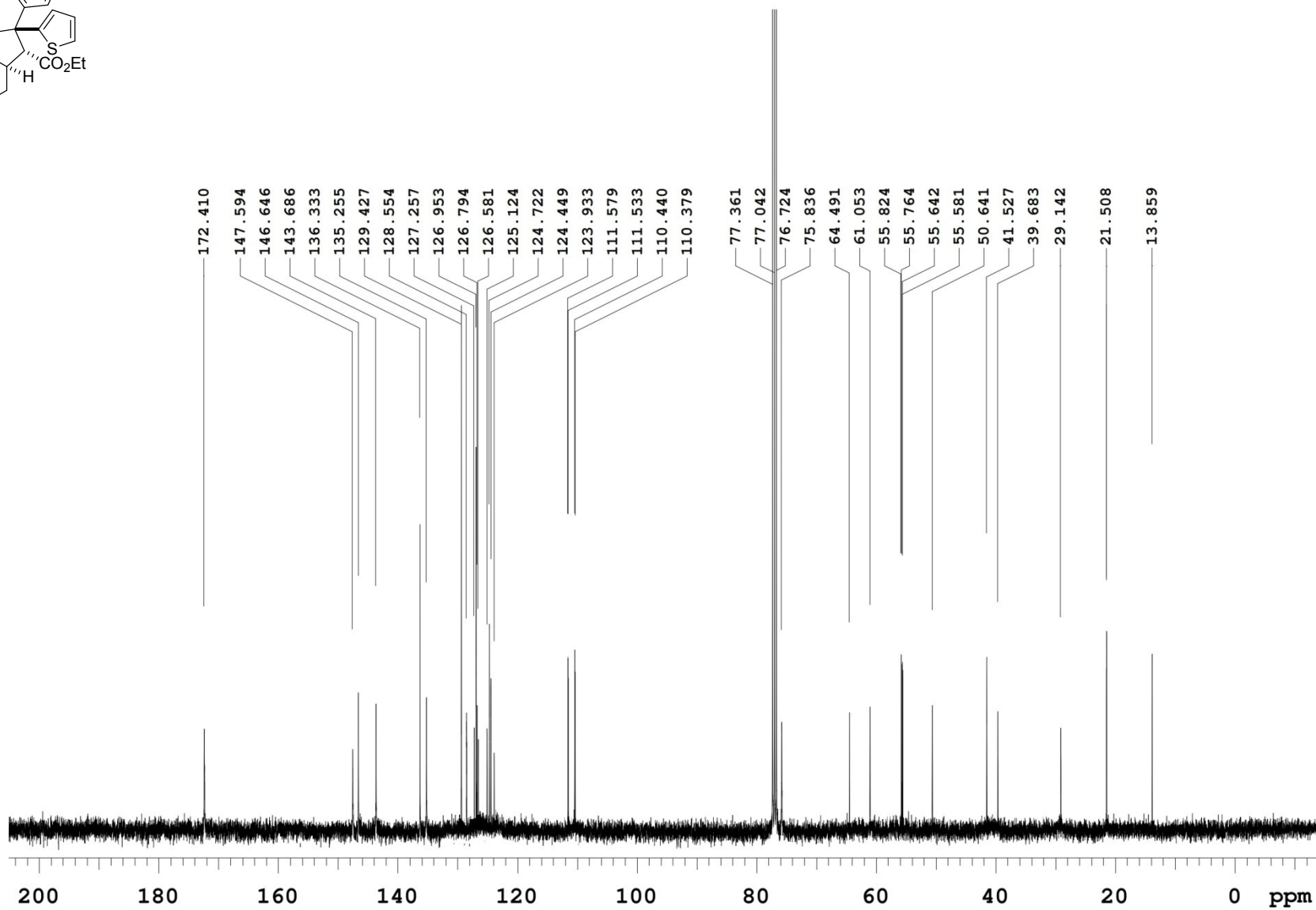
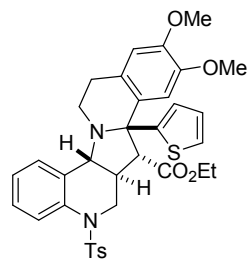




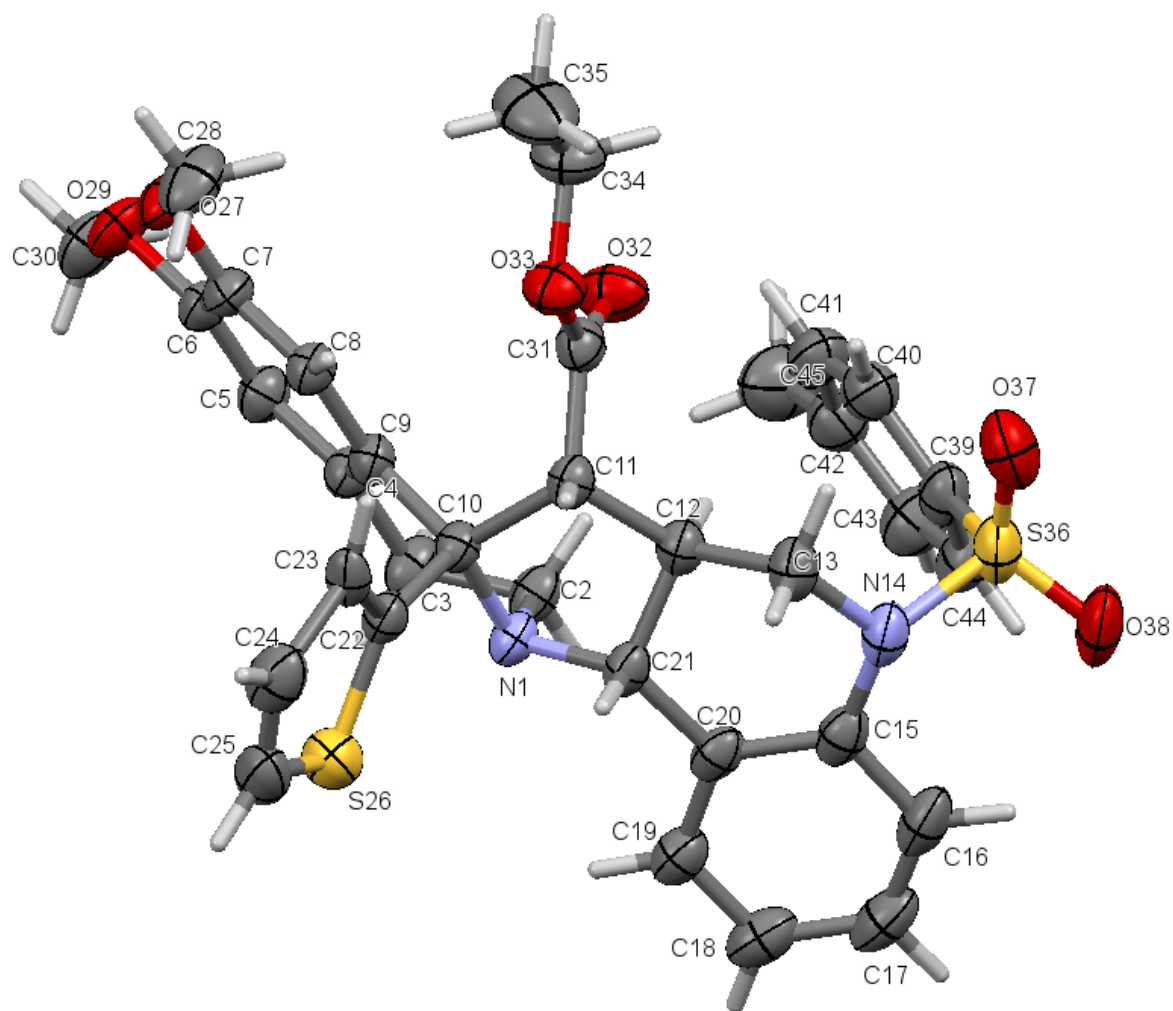
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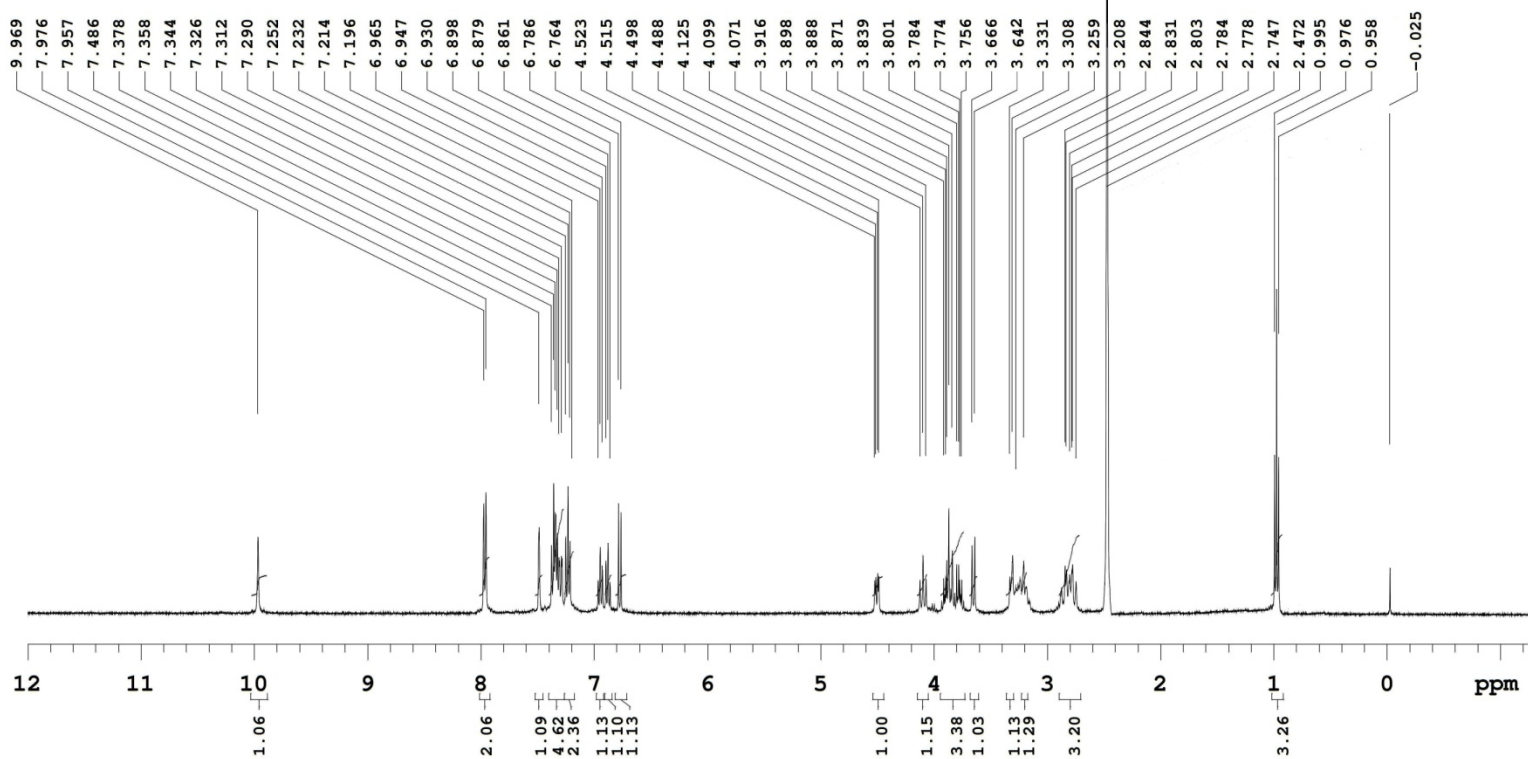
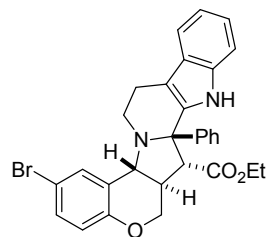
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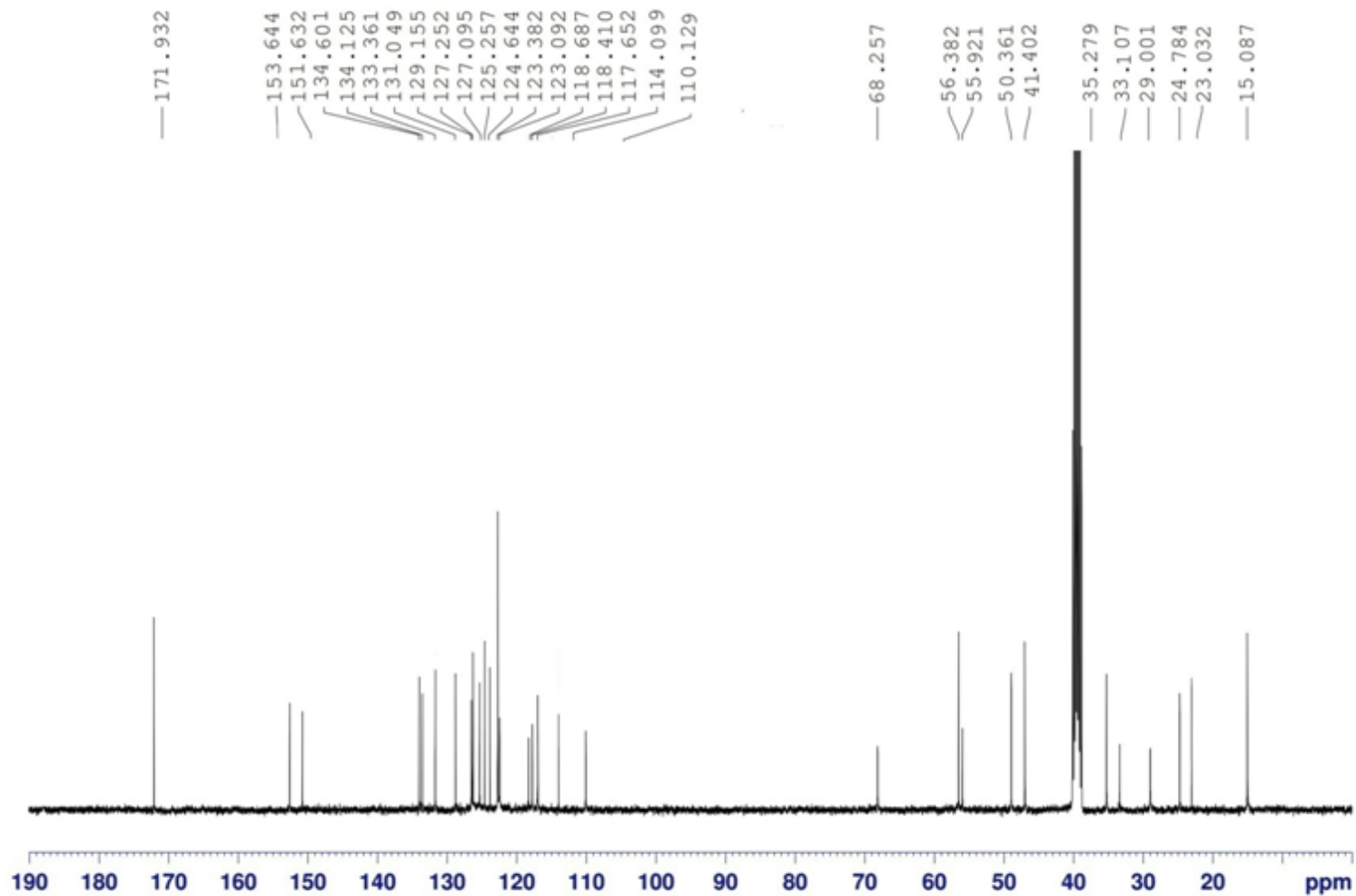
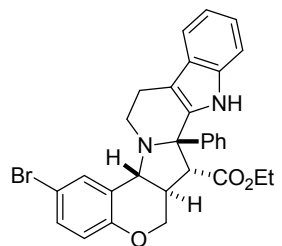
ORTEP Diagram Of 3p



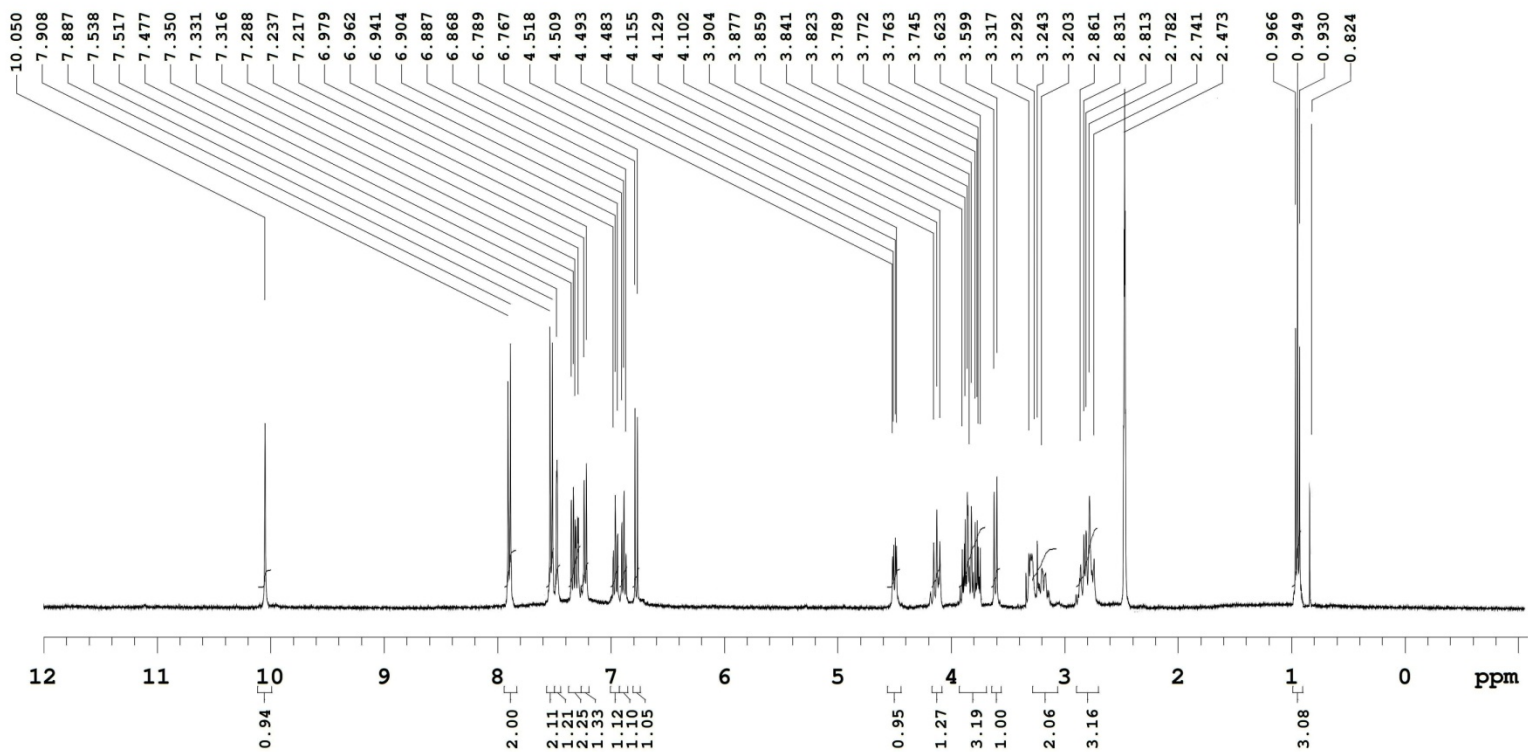
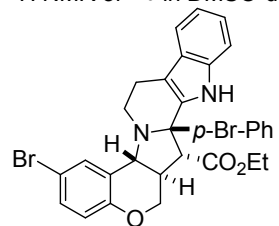
<sup>1</sup>H NMR of **4a** in DMSO-d<sub>6</sub>



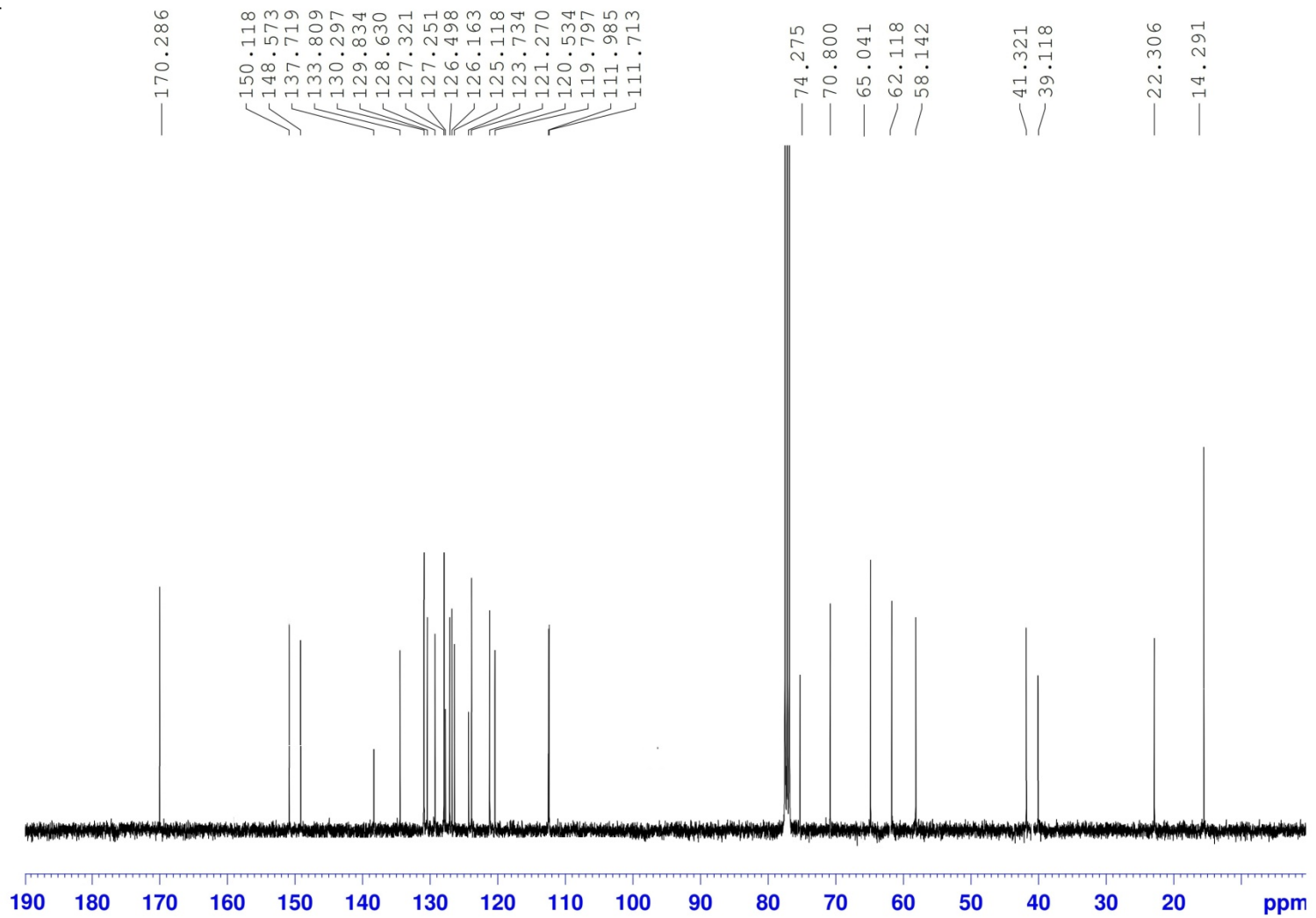
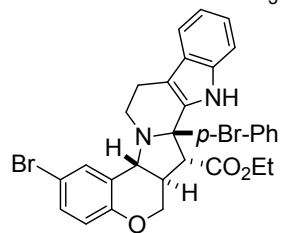
<sup>13</sup>C NMR of **4a** in DMSO-d<sub>6</sub>



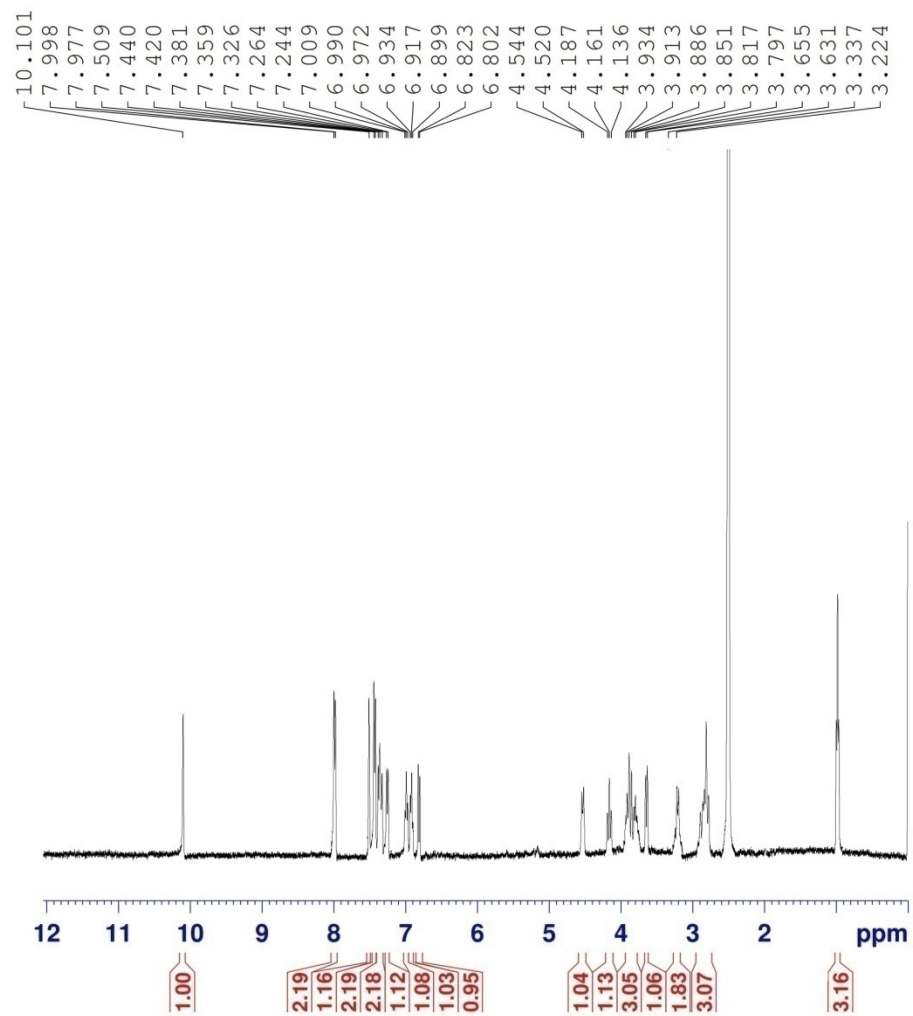
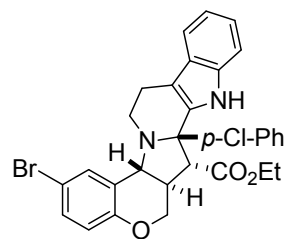
<sup>1</sup>H NMR of **4b** in DMSO-d<sub>6</sub>



<sup>13</sup>C NMR of **4b** in CDCl<sub>3</sub>

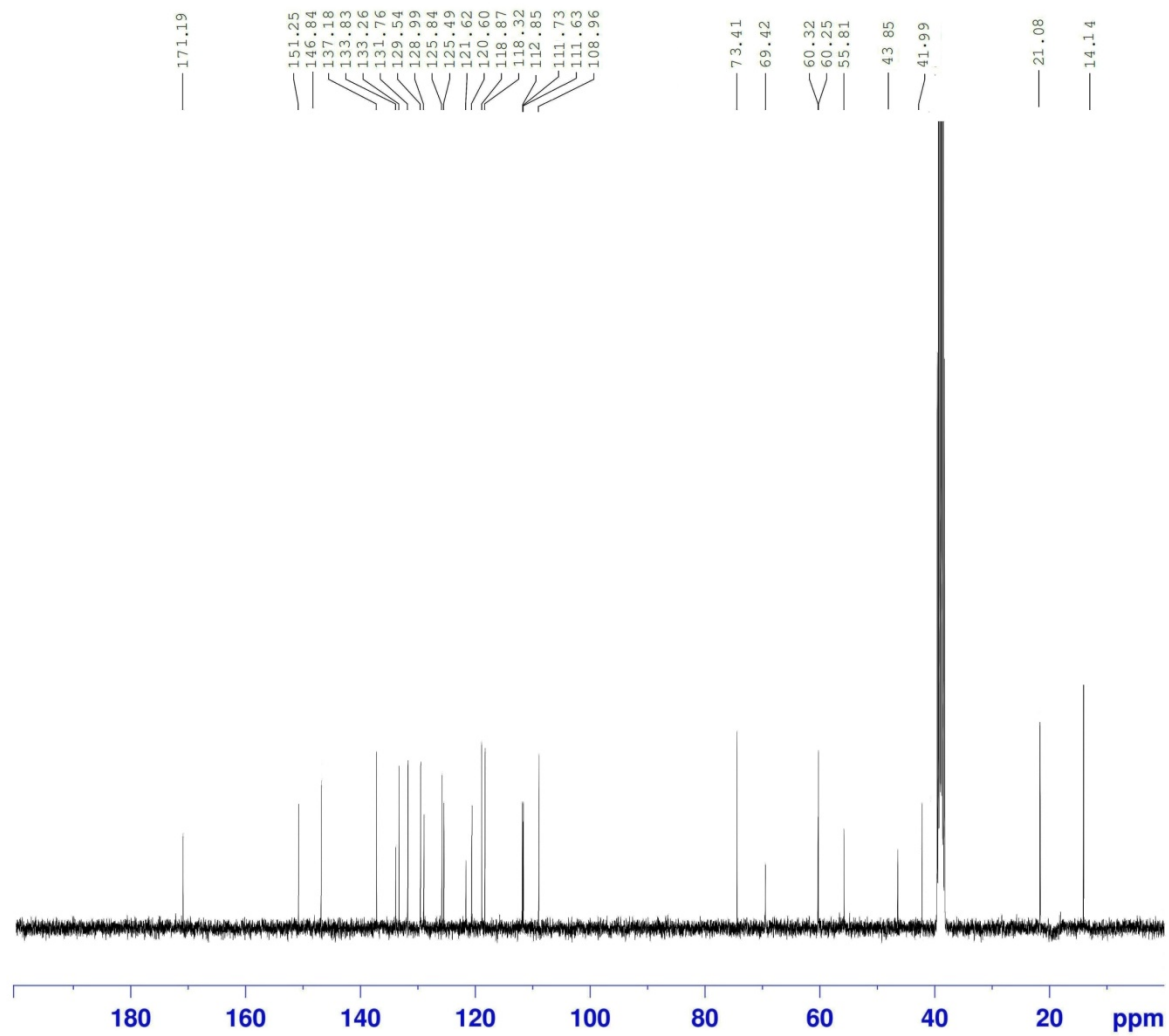
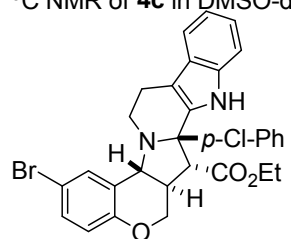


$^1\text{H}$  NMR of **4c** in  $\text{DMSO-d}_6$

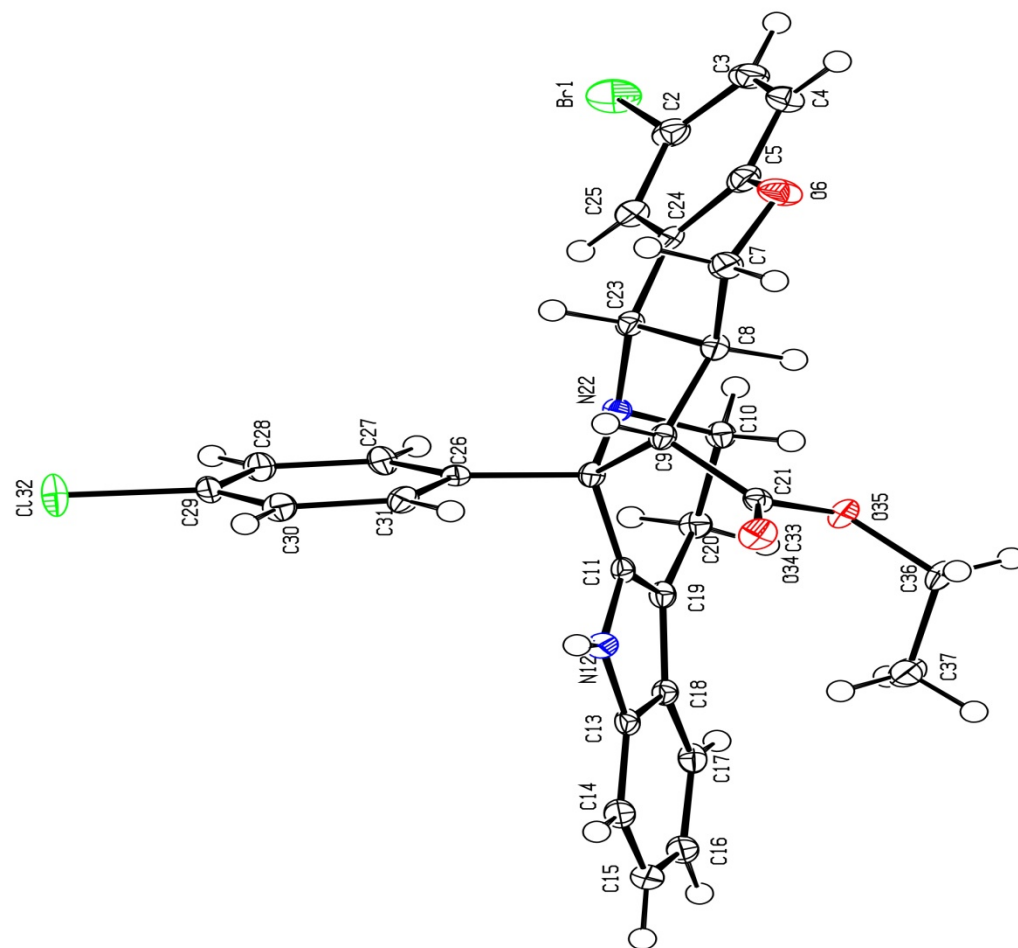




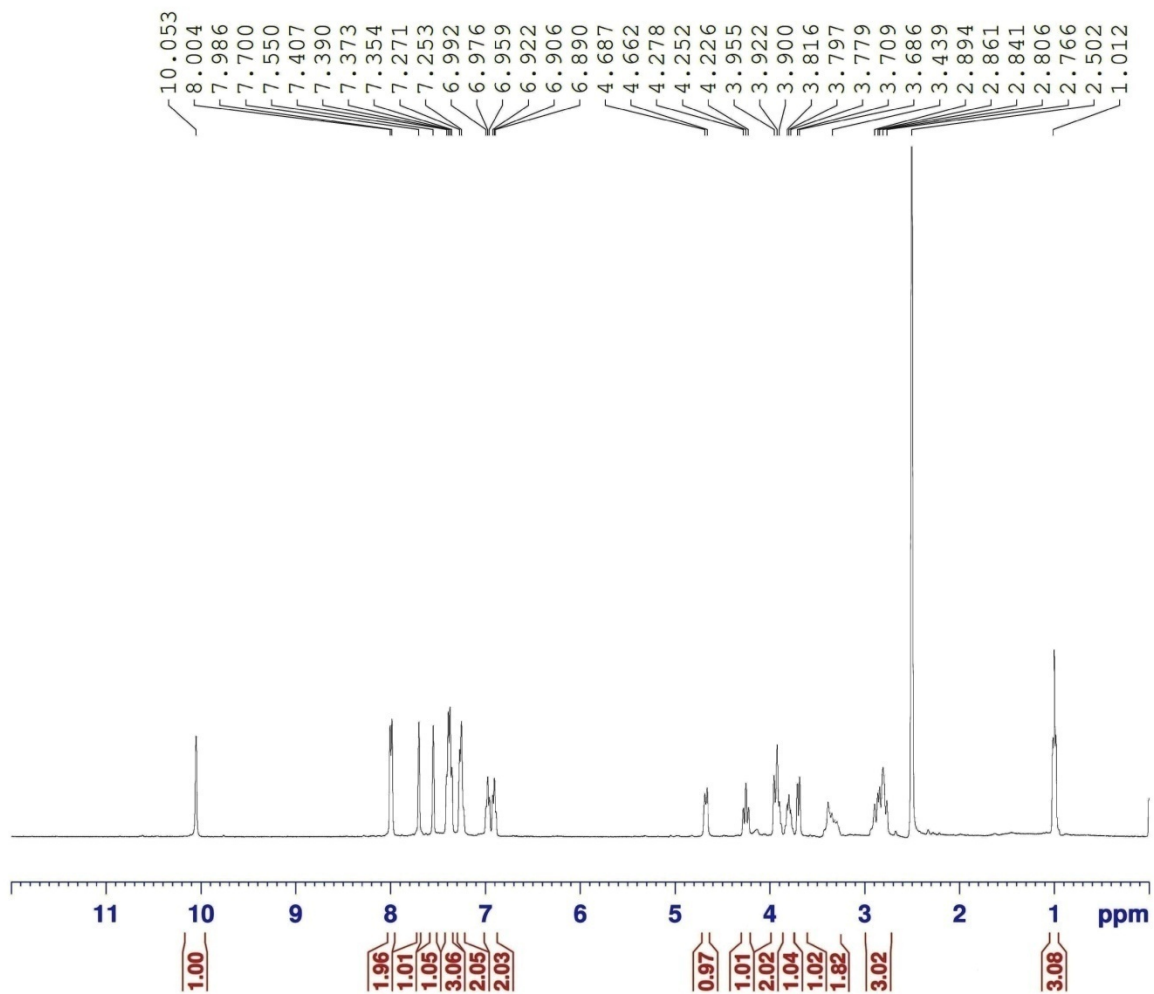
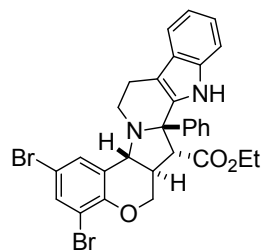
$^{13}\text{C}$  NMR of **4c** in  $\text{DMSO-d}_6$



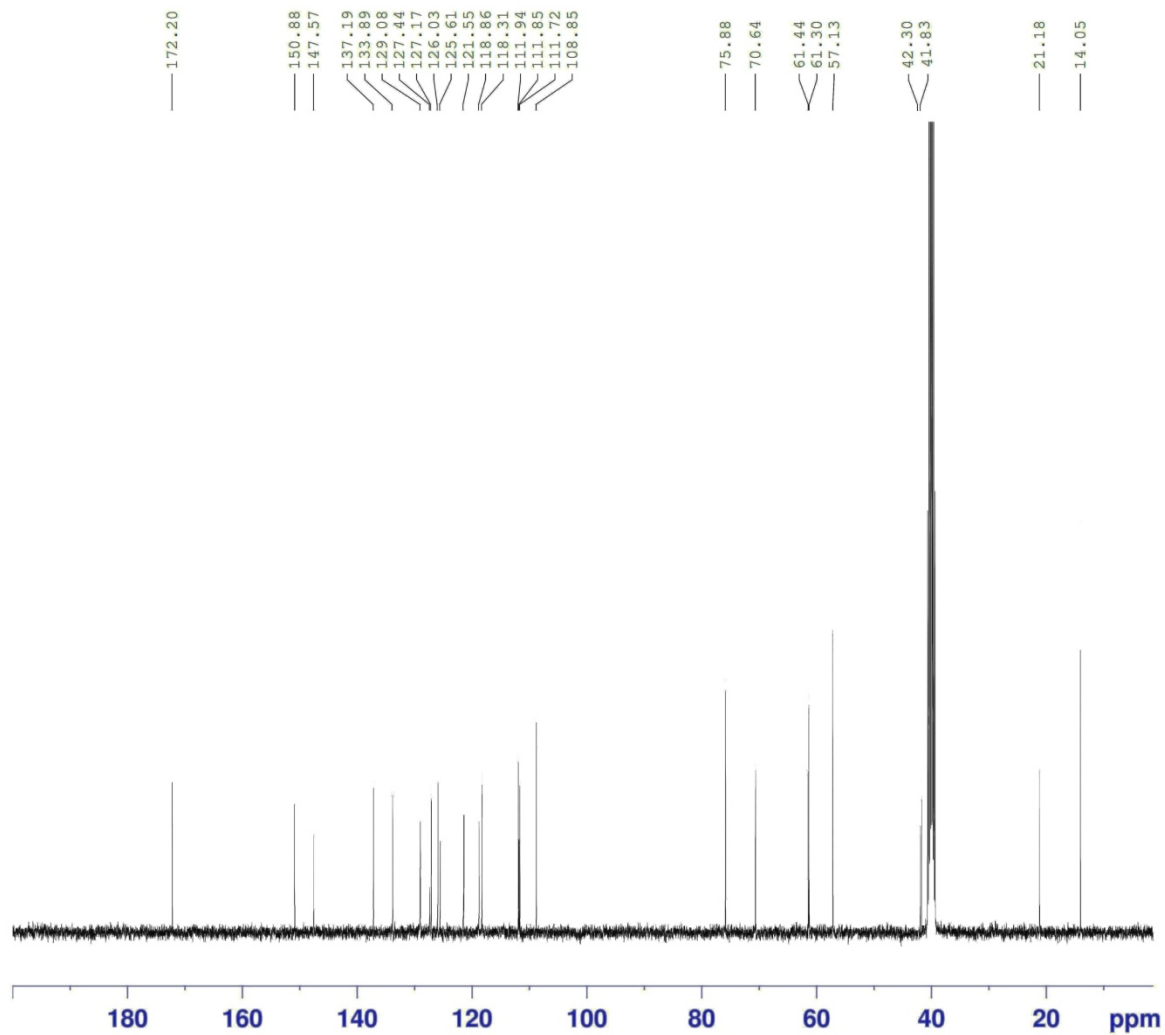
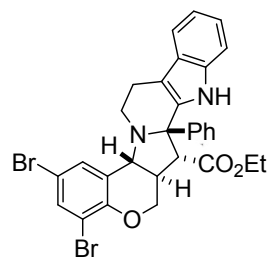
ORTEP diagram of **4c**



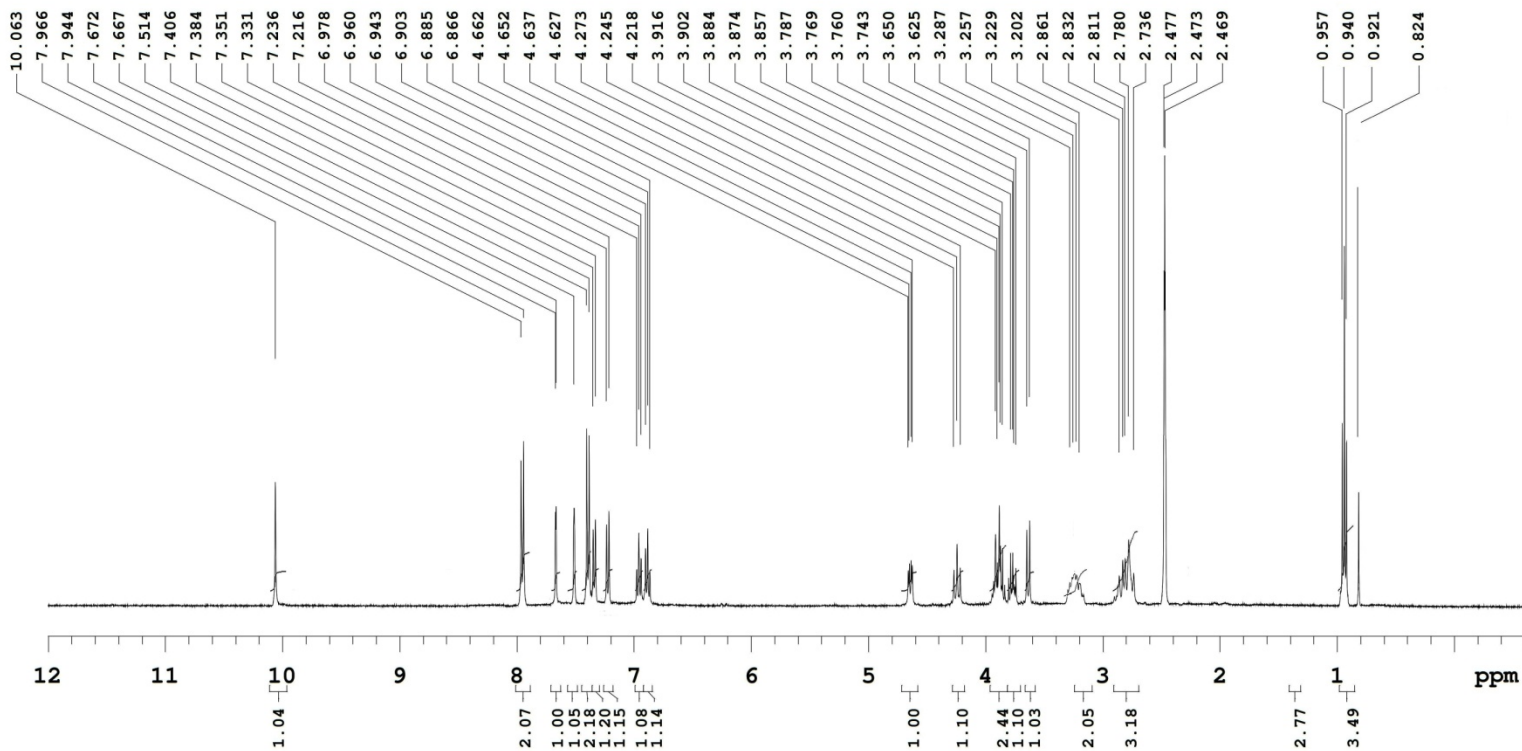
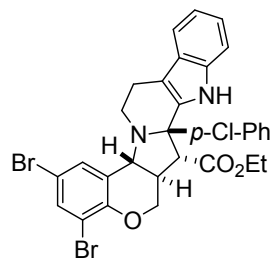
<sup>1</sup>H NMR of **4d** in DMSO-d<sub>6</sub>



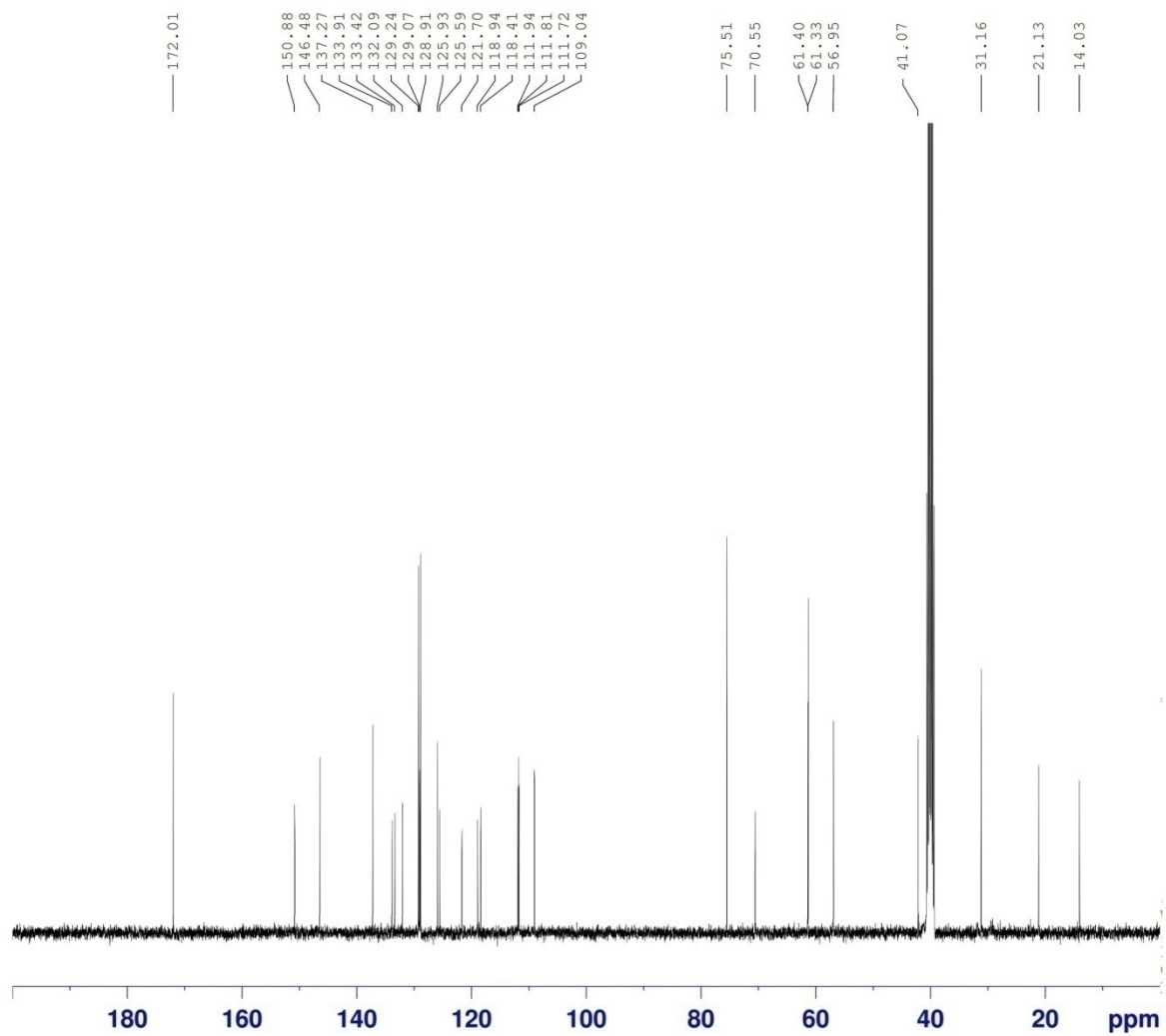
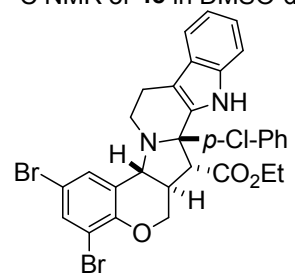
$^{13}\text{C}$  NMR of **4d** in DMSO- $d_6$



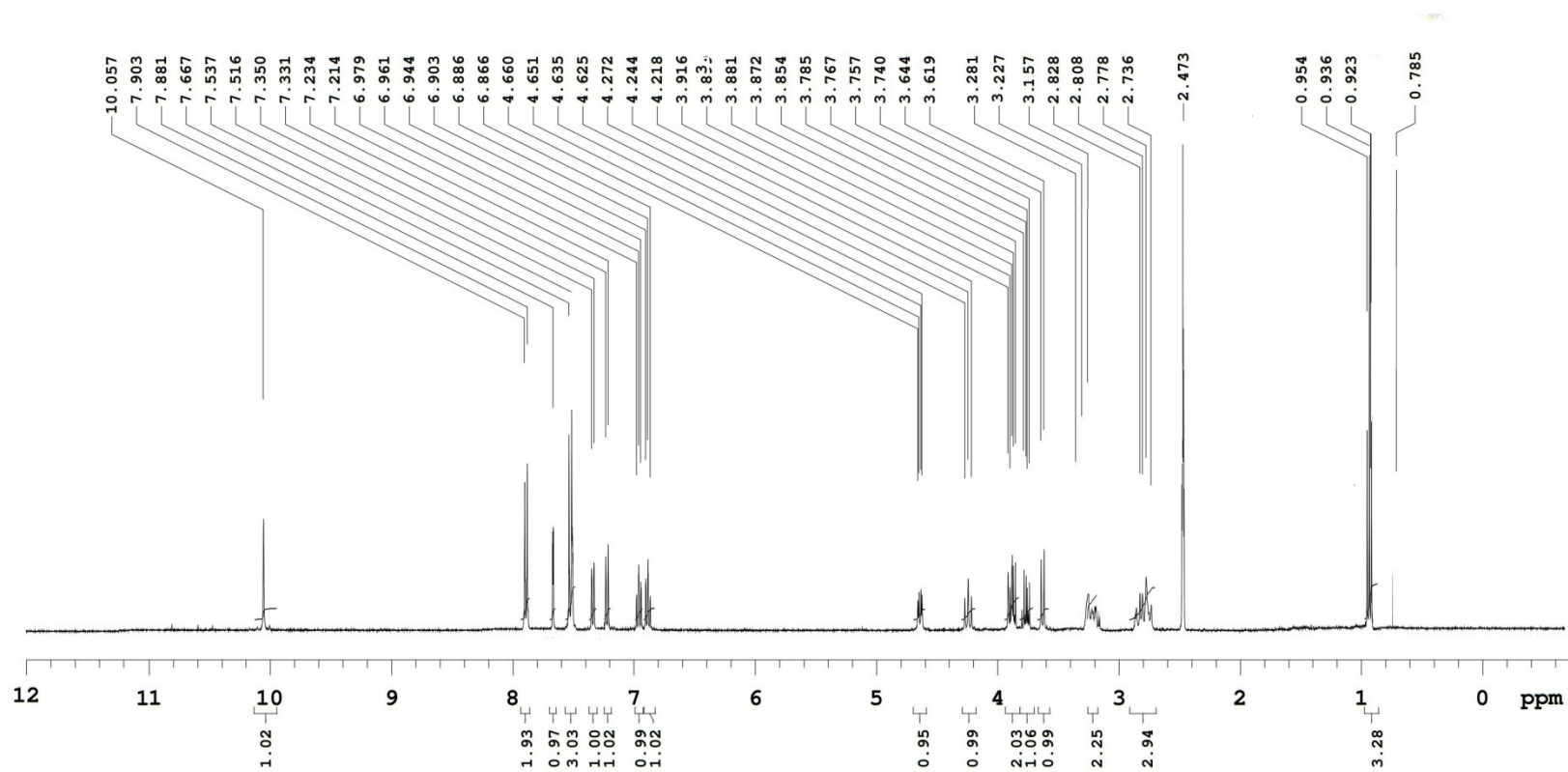
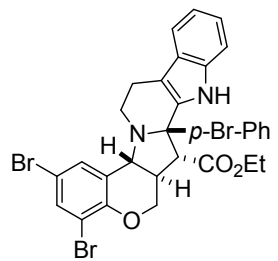
$^1\text{H}$  NMR of **4e** in  $\text{DMSO-d}_6$



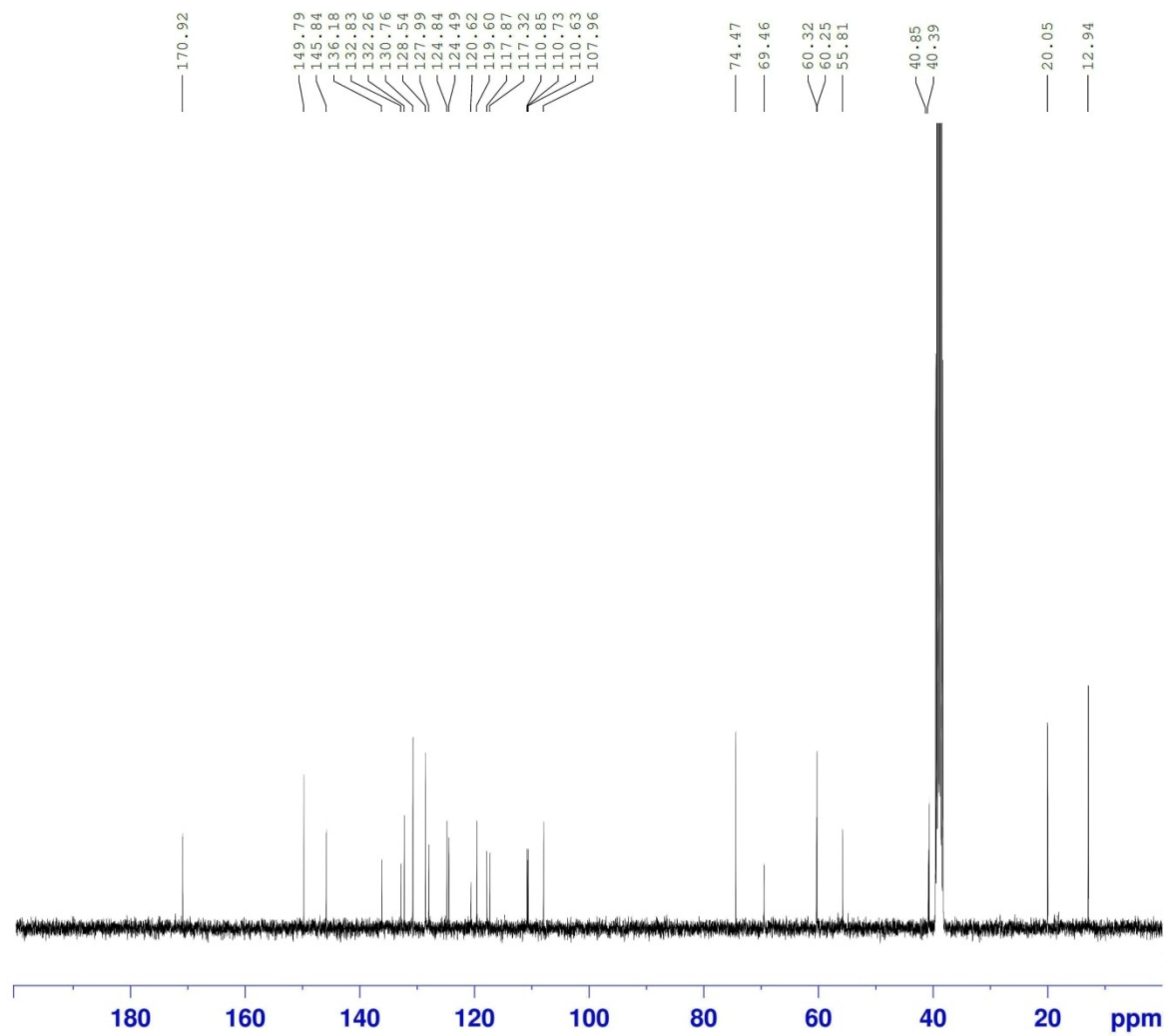
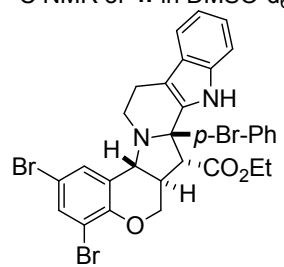
<sup>13</sup>C NMR of **4e** in DMSO-d<sub>6</sub>



<sup>1</sup>H NMR of **4f** in DMSO-d<sub>6</sub>

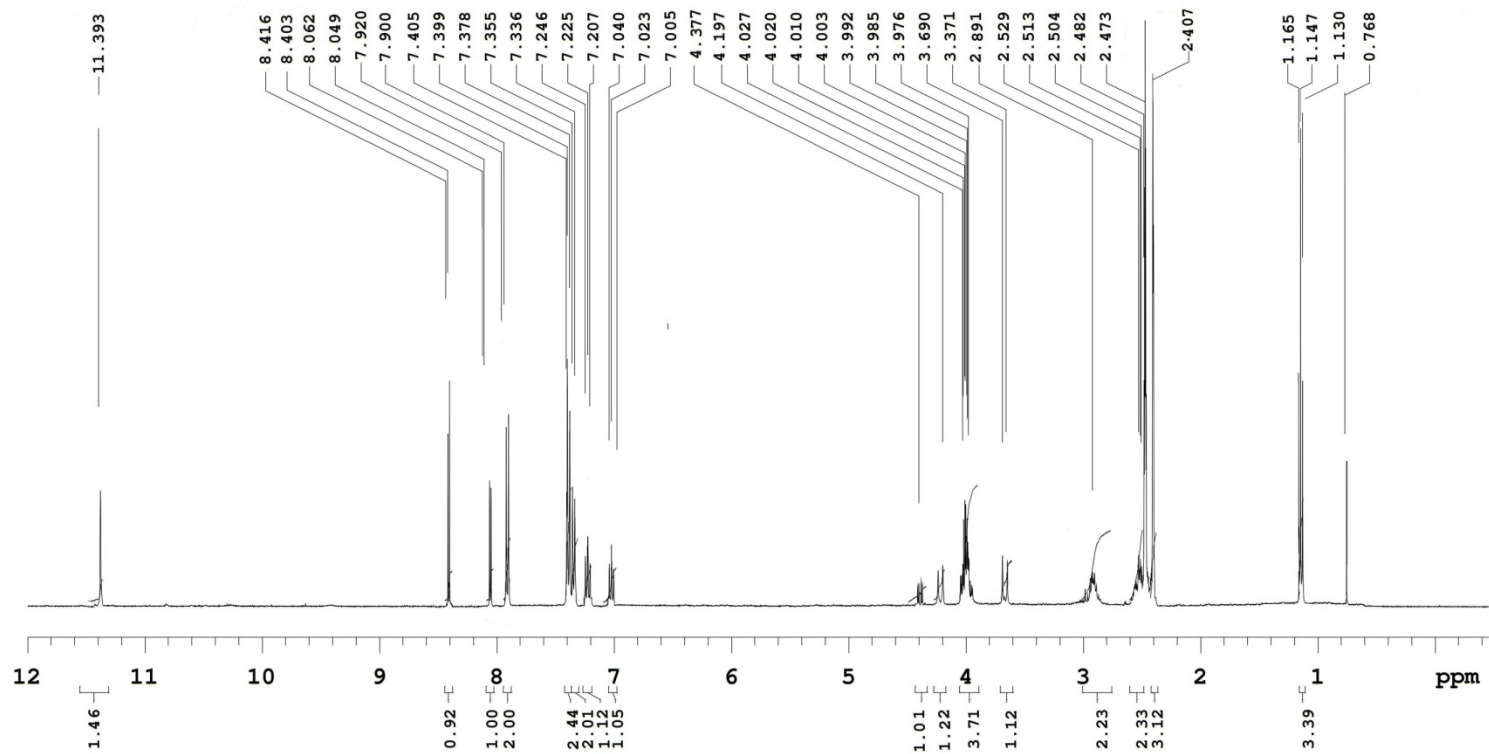
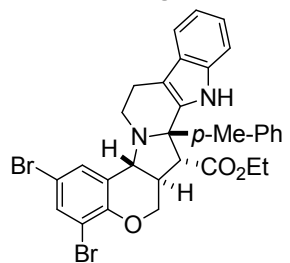


$^{13}\text{C}$  NMR of **4f** in  $\text{DMSO-d}_6$

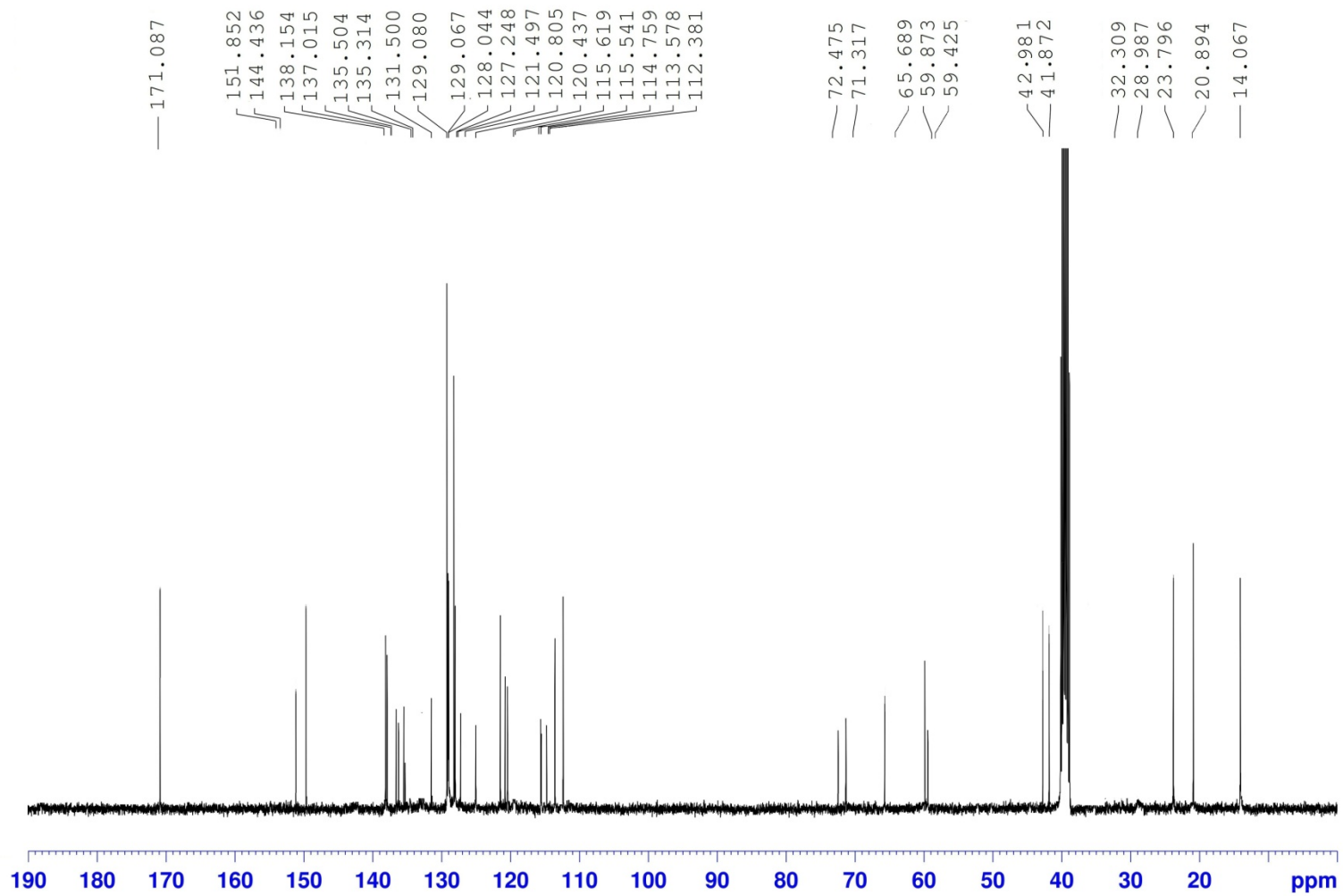
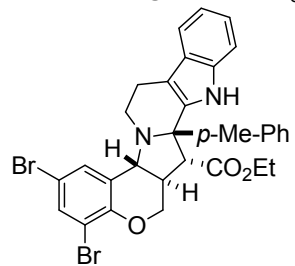




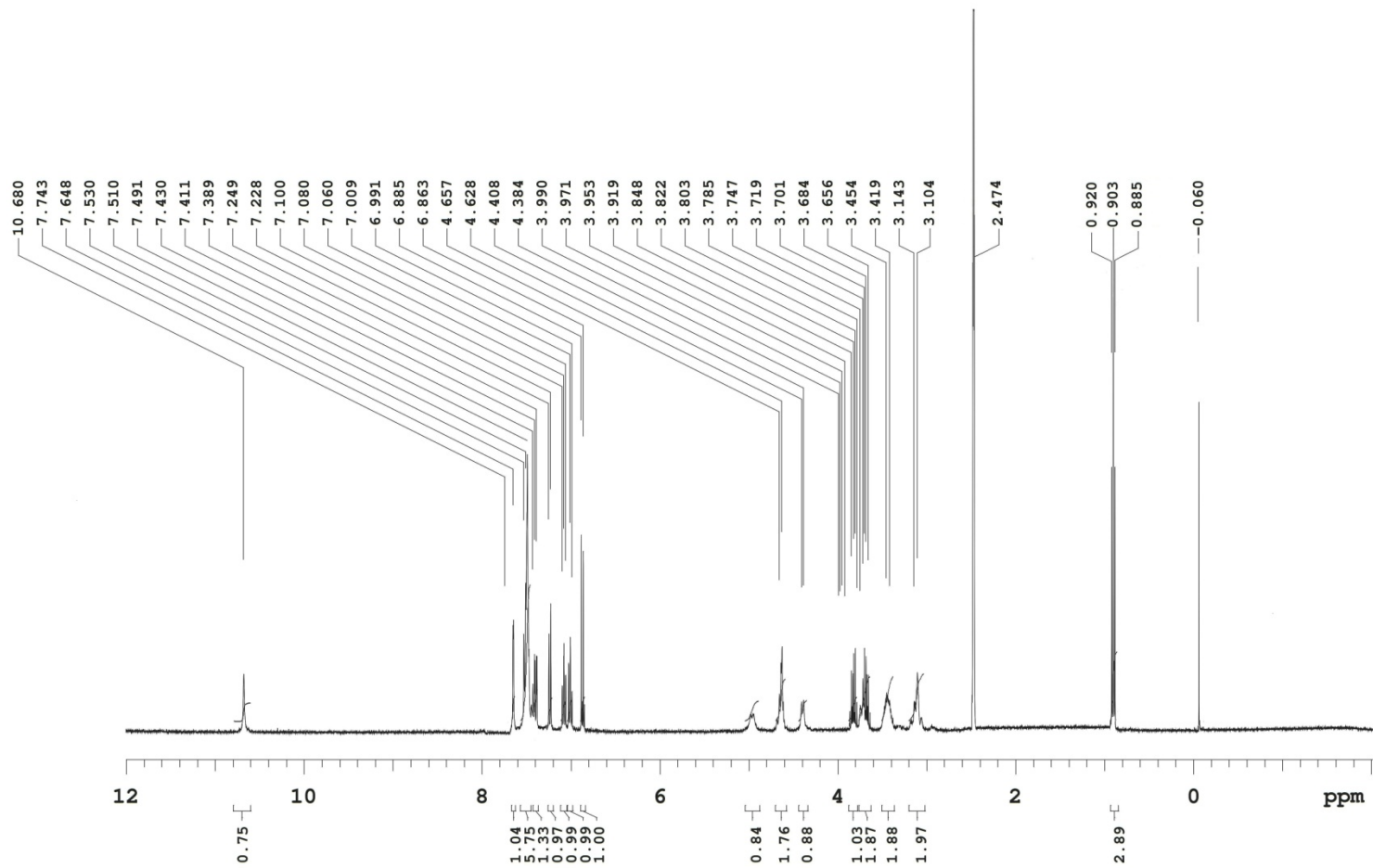
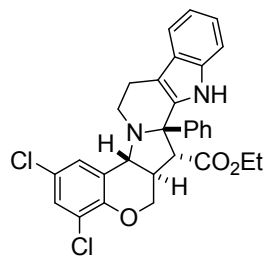
<sup>1</sup>H NMR of **4g** in DMSO-d<sub>6</sub>



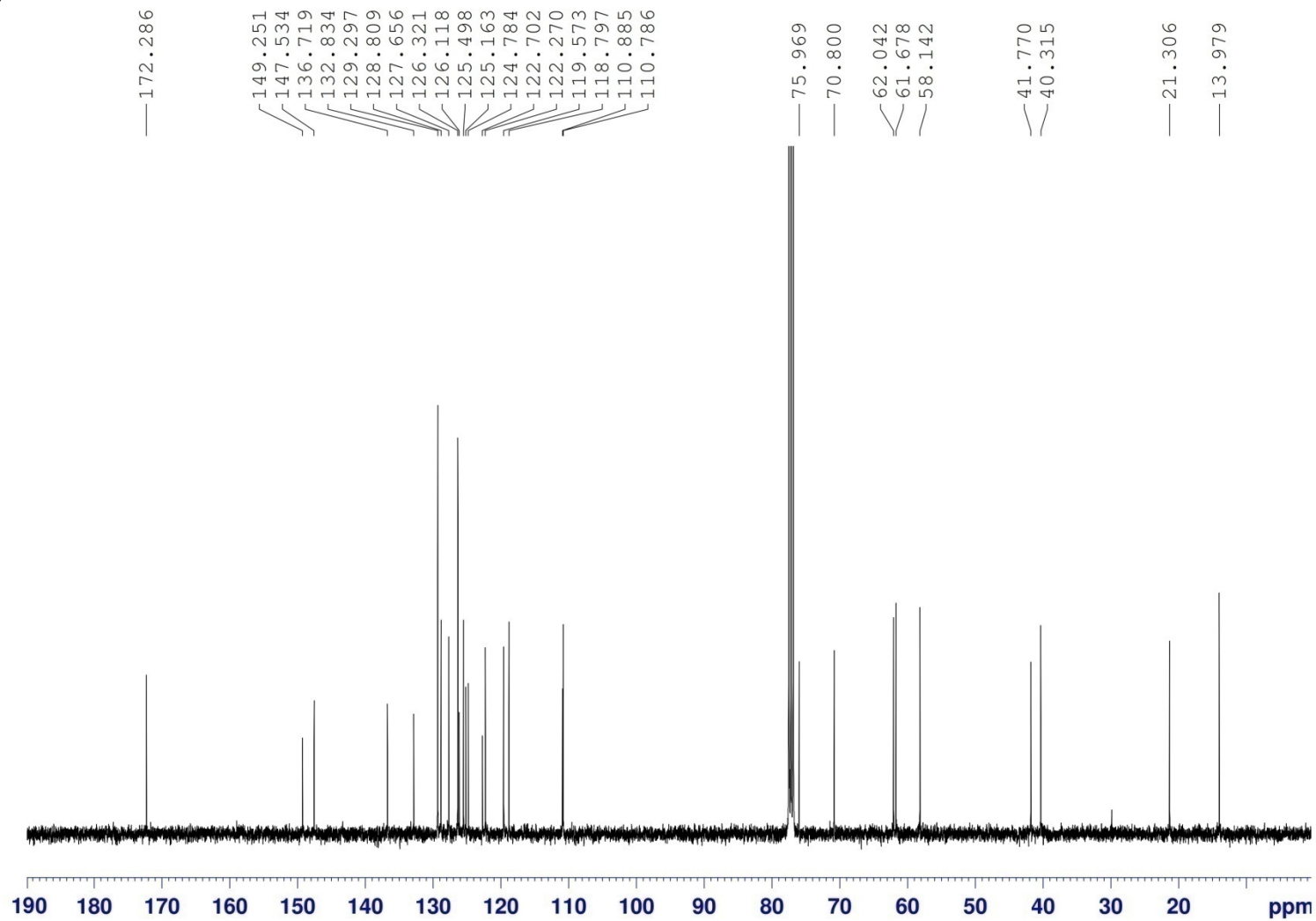
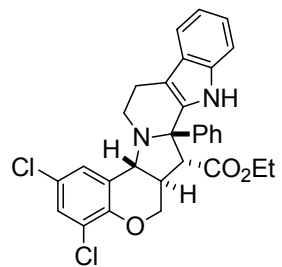
<sup>13</sup>C NMR of **4g** in DMSO-d<sub>6</sub>



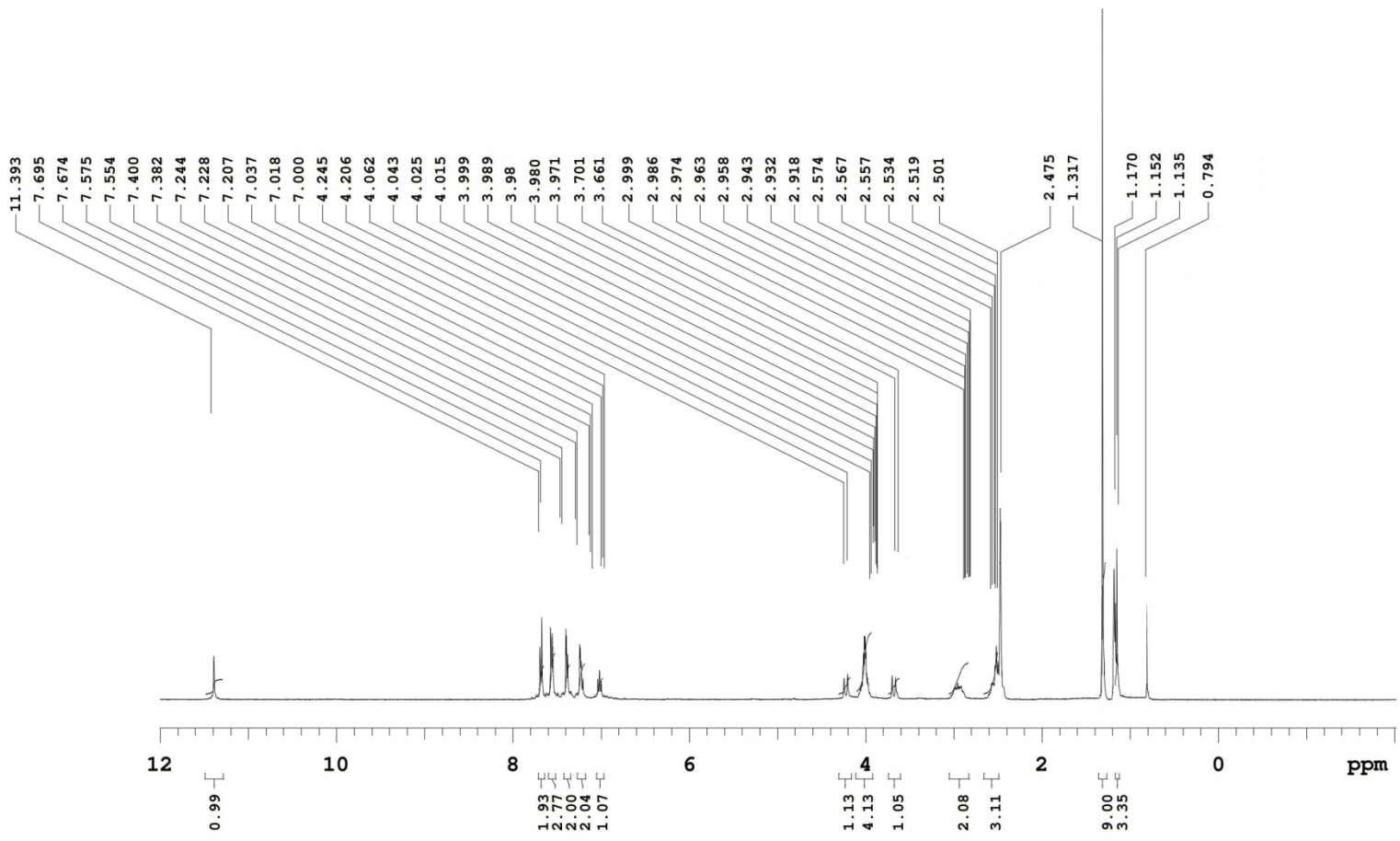
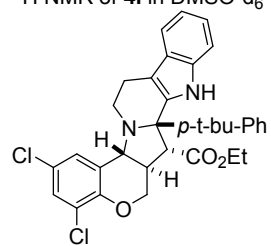
<sup>1</sup>H NMR of **4h** in DMSO-d<sub>6</sub>



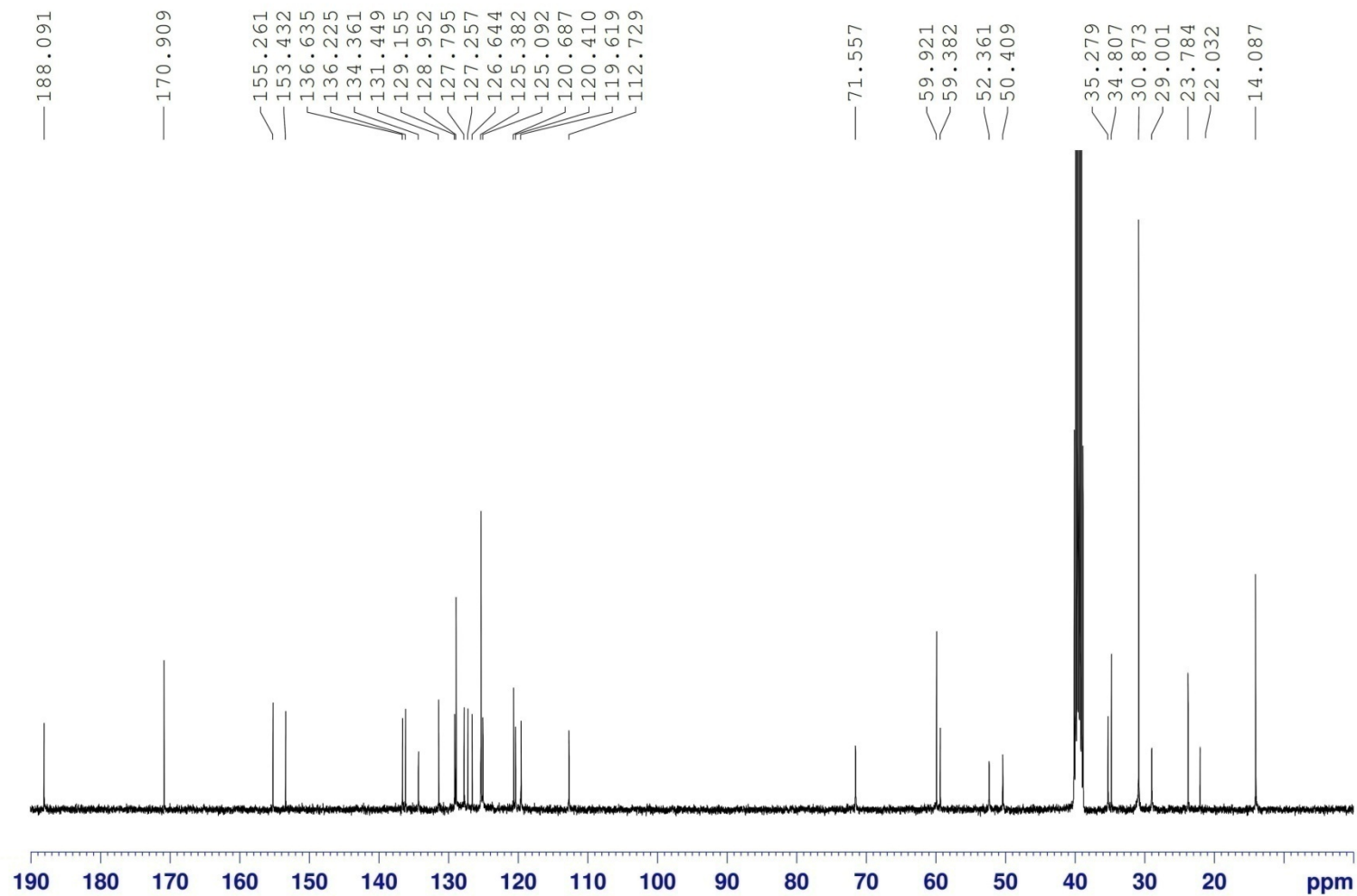
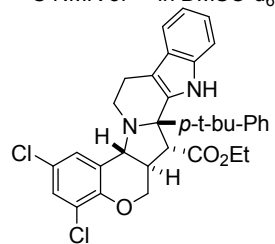
<sup>13</sup>C NMR of **4h** in CDCl<sub>3</sub>



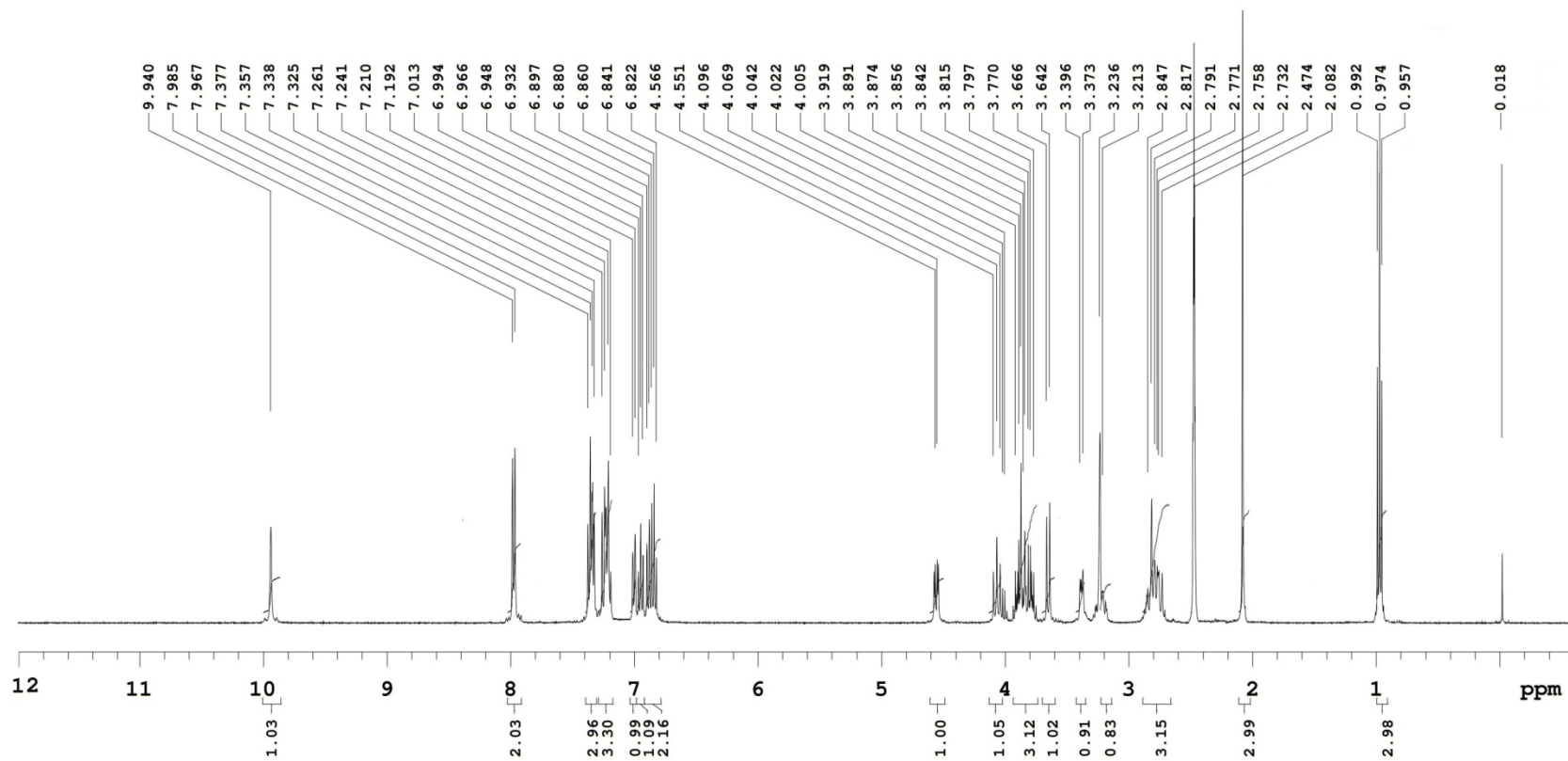
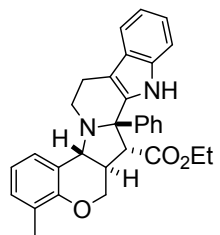
<sup>1</sup>H NMR of **4i** in DMSO-d<sub>6</sub>



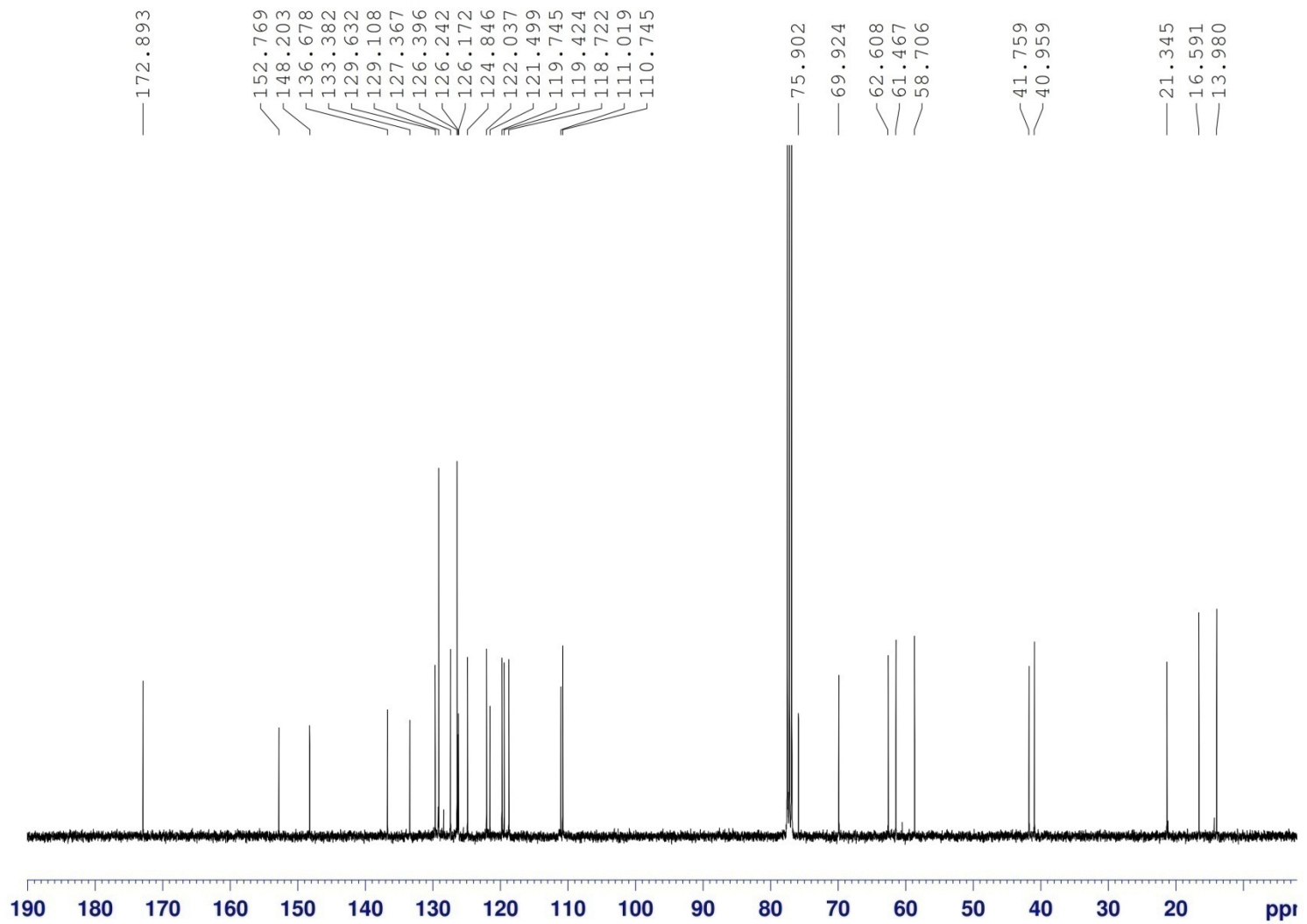
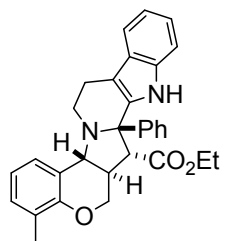
<sup>13</sup>C NMR of **4i** in DMSO-d<sub>6</sub>



<sup>1</sup>H NMR of **4j** in DMSO-d<sub>6</sub>

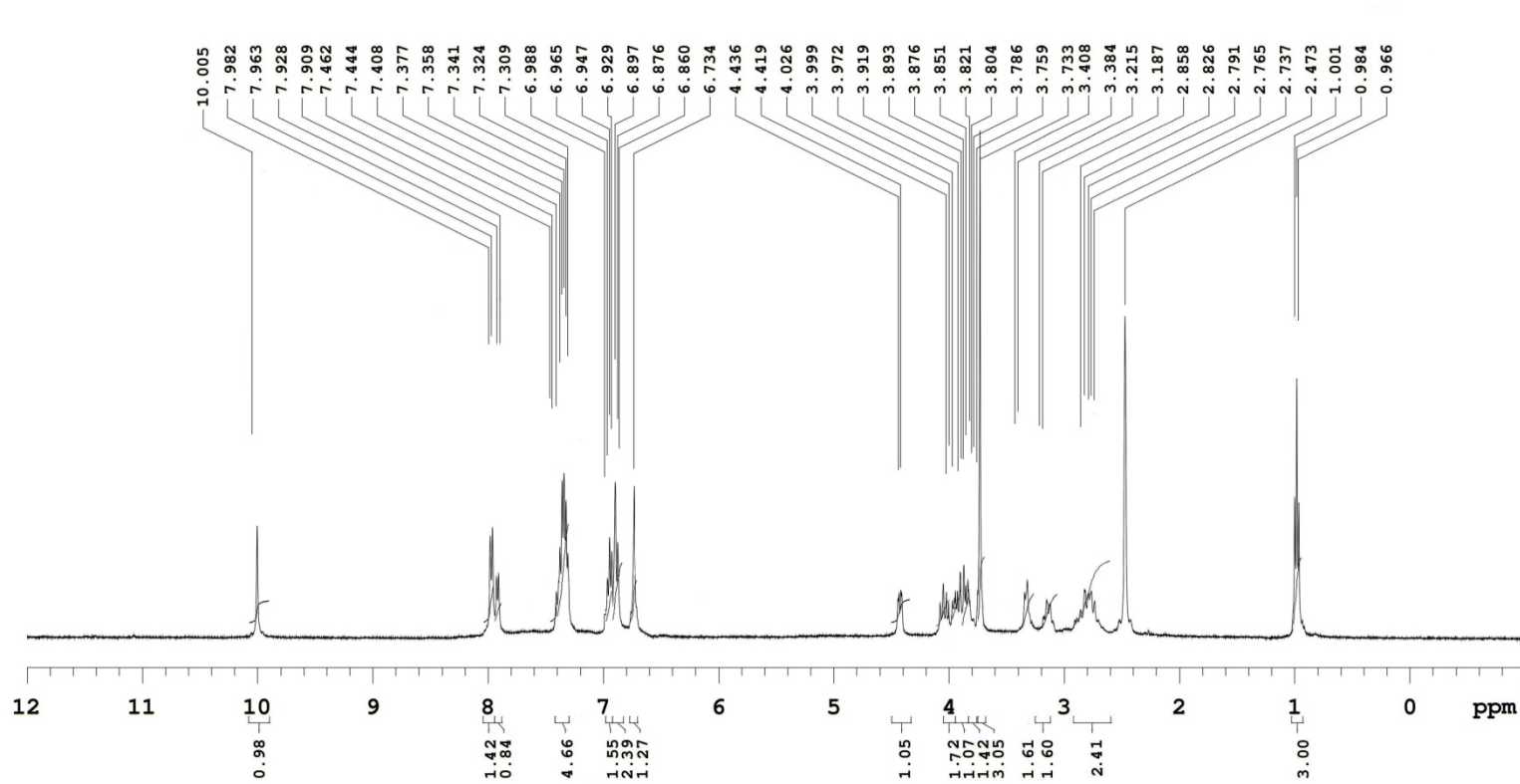
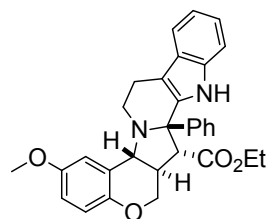


$^{13}\text{C}$  NMR of **4j** in  $\text{CDCl}_3$

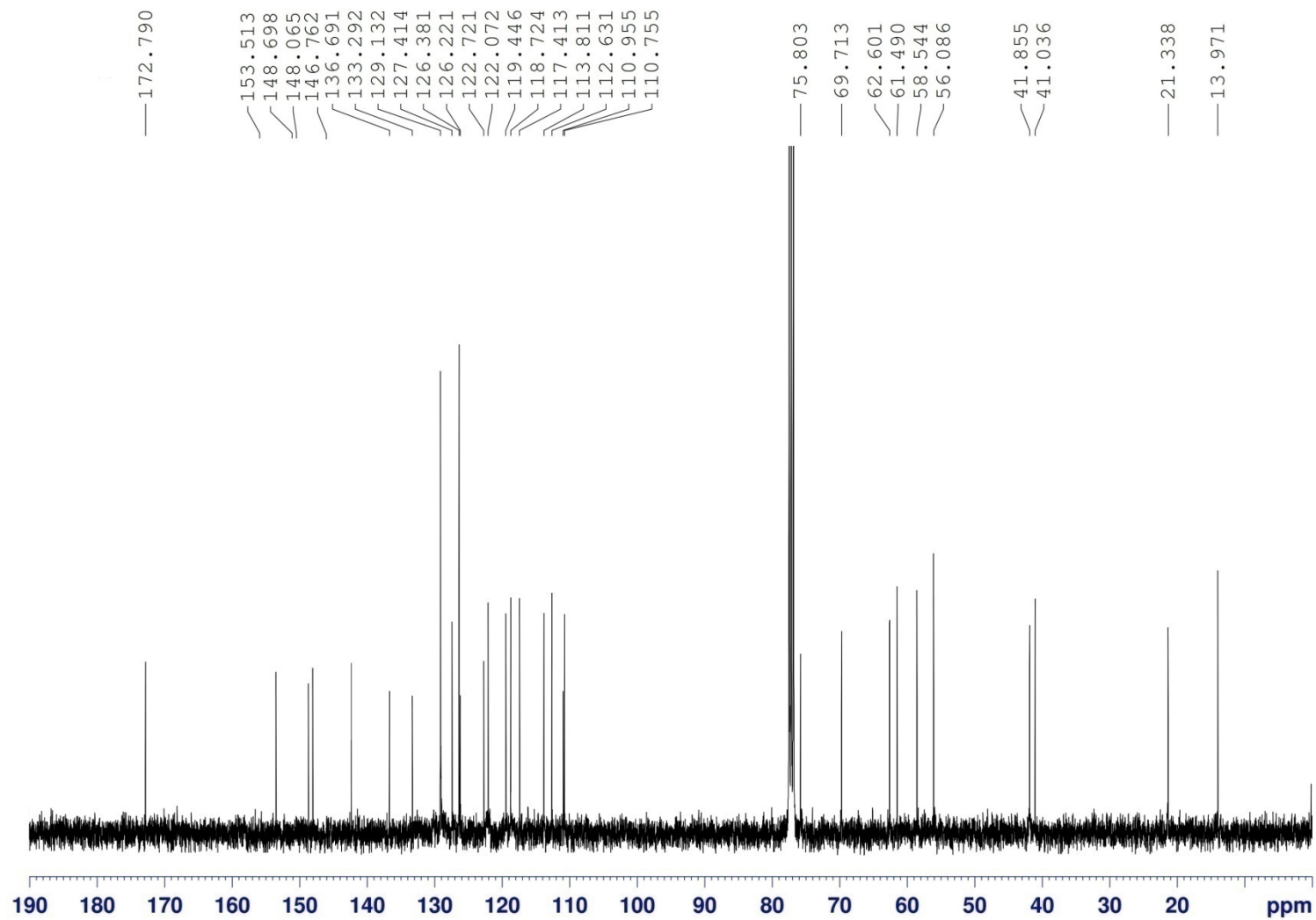
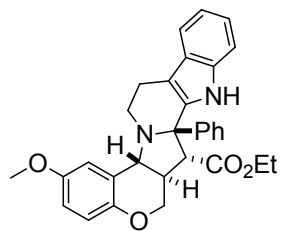




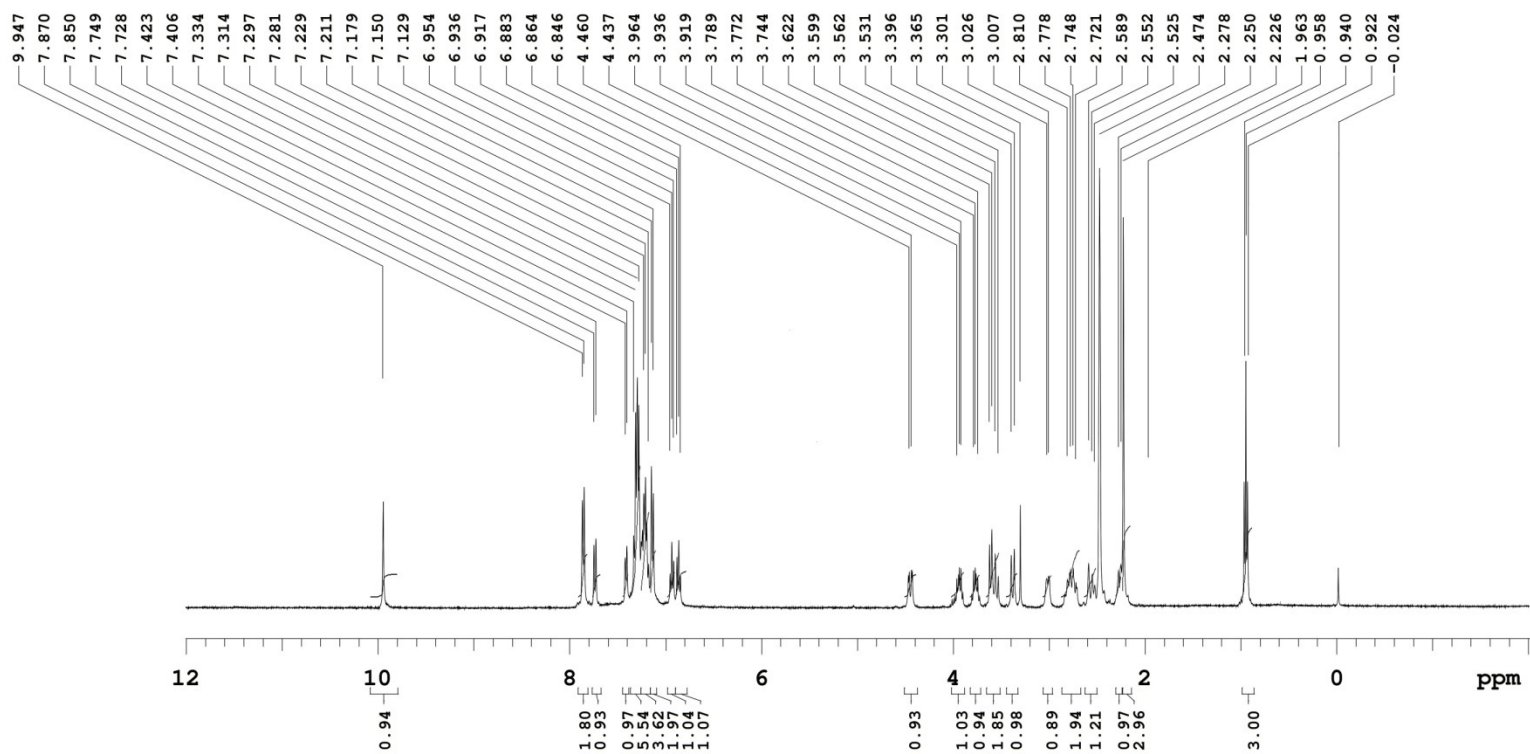
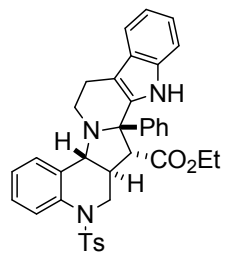
<sup>1</sup>H NMR of **4k** in DMSO-d<sub>6</sub>



<sup>13</sup>C NMR of **4k** in CDCl<sub>3</sub>



<sup>1</sup>H NMR of **4I** in DMSO-d<sub>6</sub>



$^{13}\text{C}$  NMR of **4l** in  $\text{CDCl}_3$

