

## Synthesis of Azo Carbonates Monomers and Biocompatibility Study of Poly(Azo-Carbonate-Urethane)s.

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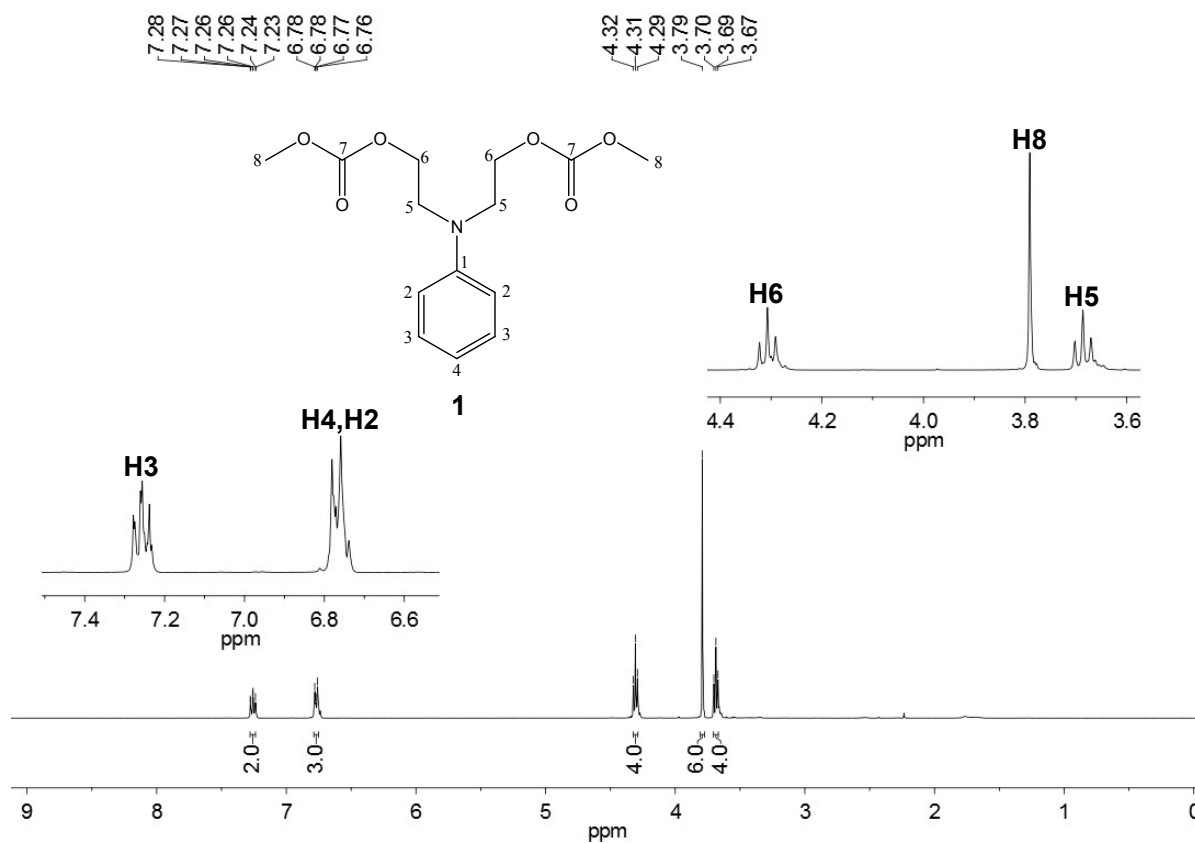
### Supplementary Material

#### Contents:

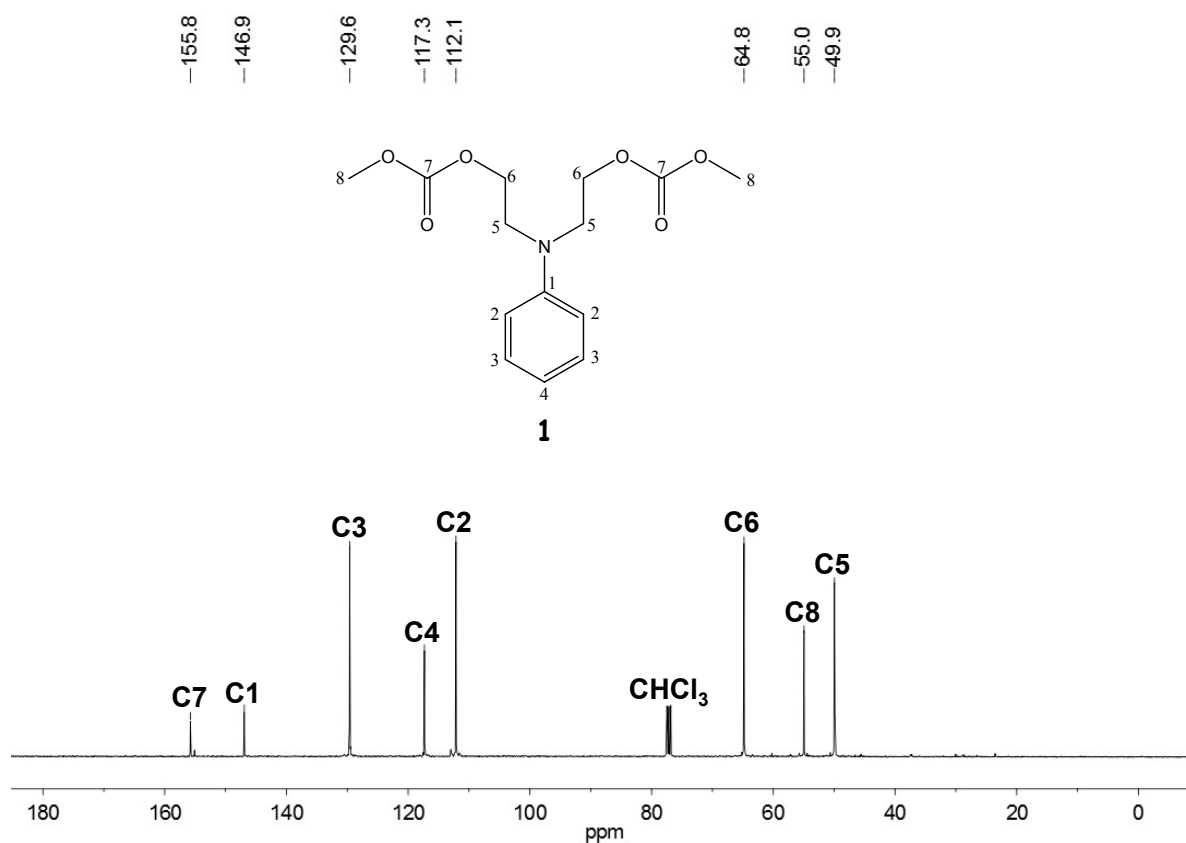
|                |     |
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| 1. NMR .....   | S2  |
| 2. EI-MS.....  | S25 |
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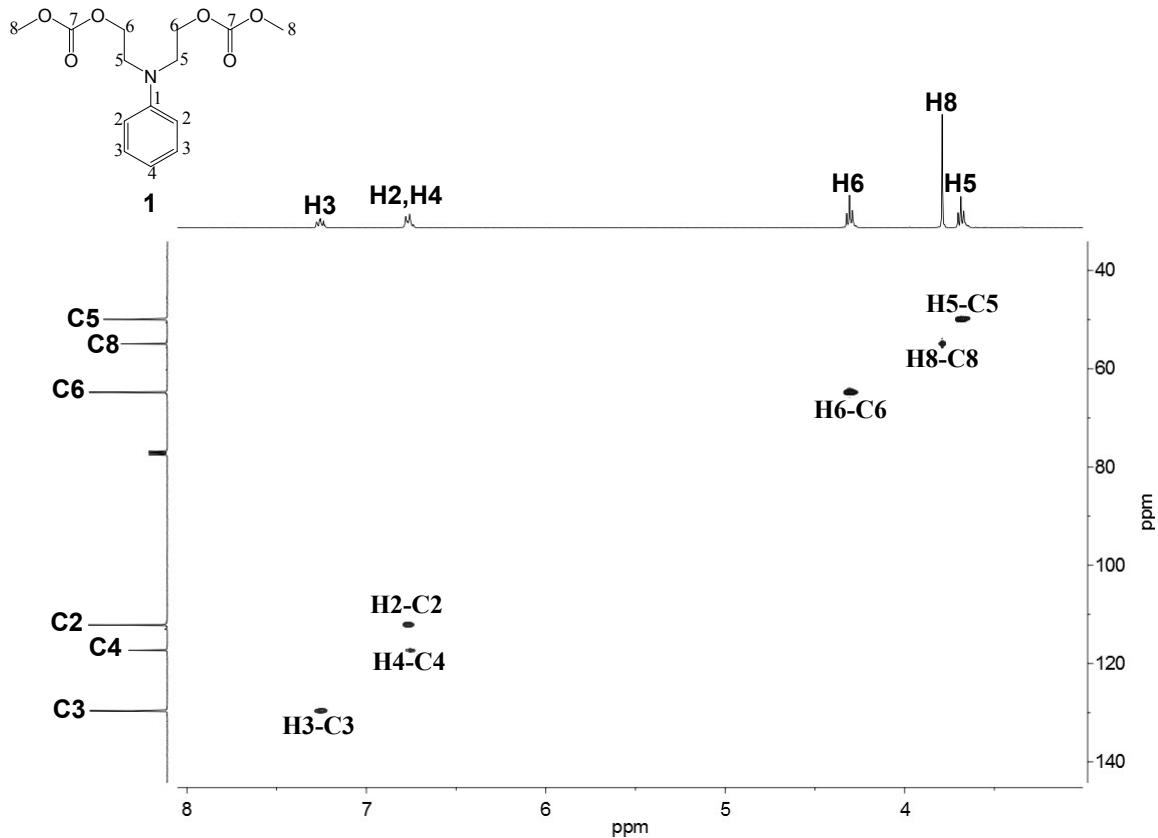
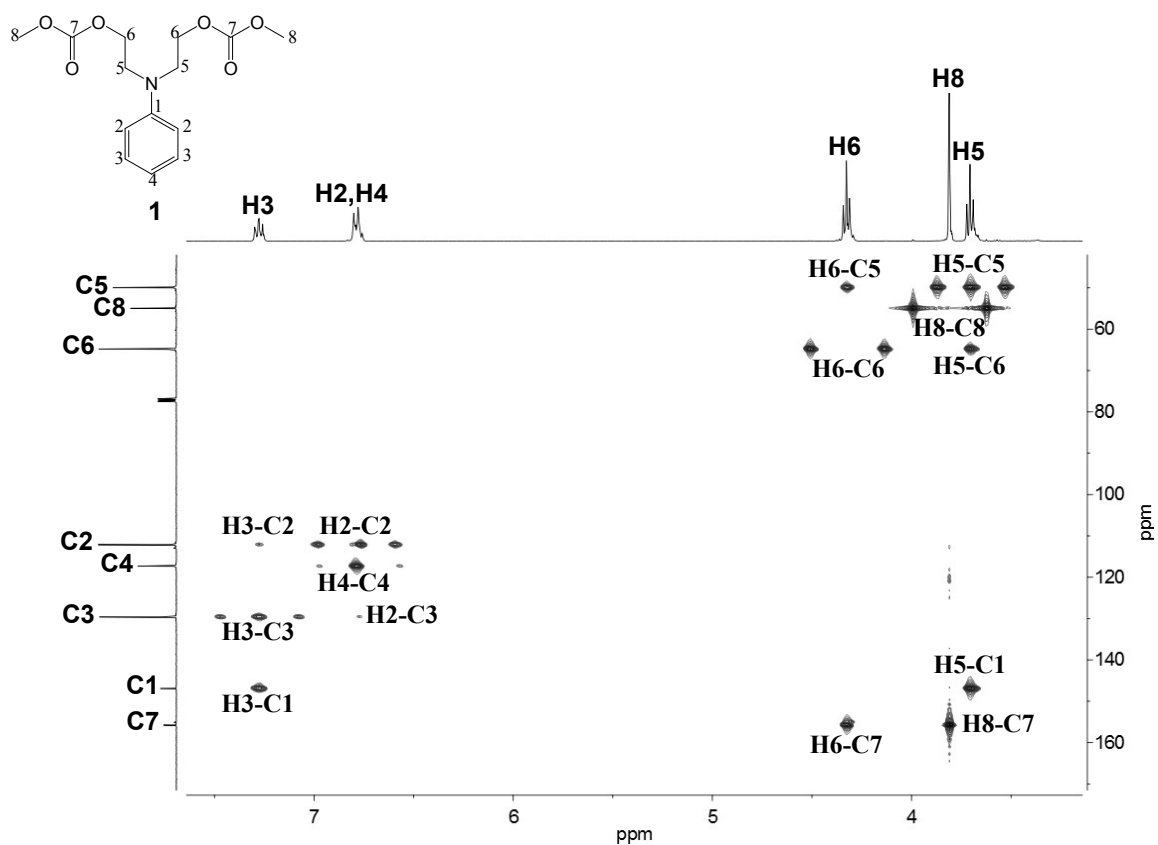
## 1. NMR

**Figure 1.**  $^1\text{H}$  NMR spectrum of compound 1.

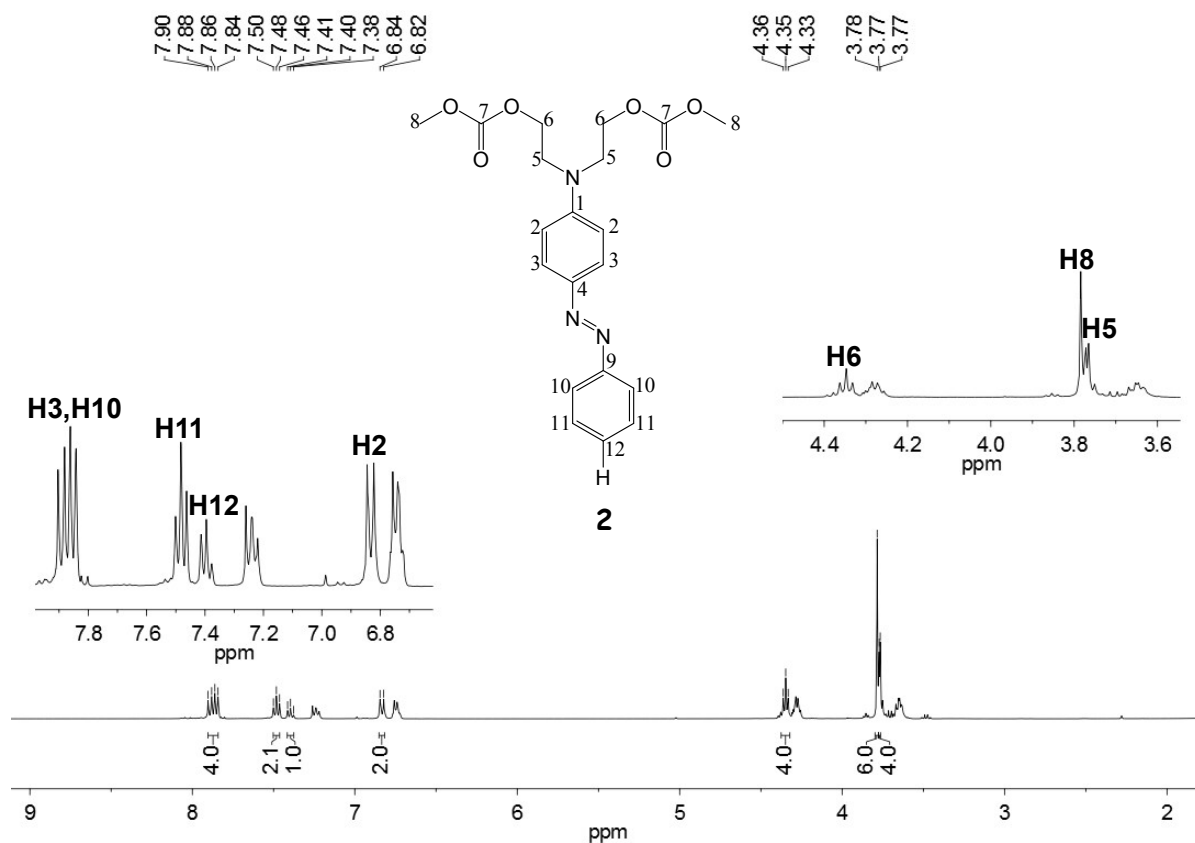


**Figure 2.**  $^{13}\text{C}$  NMR spectrum of compound 1.

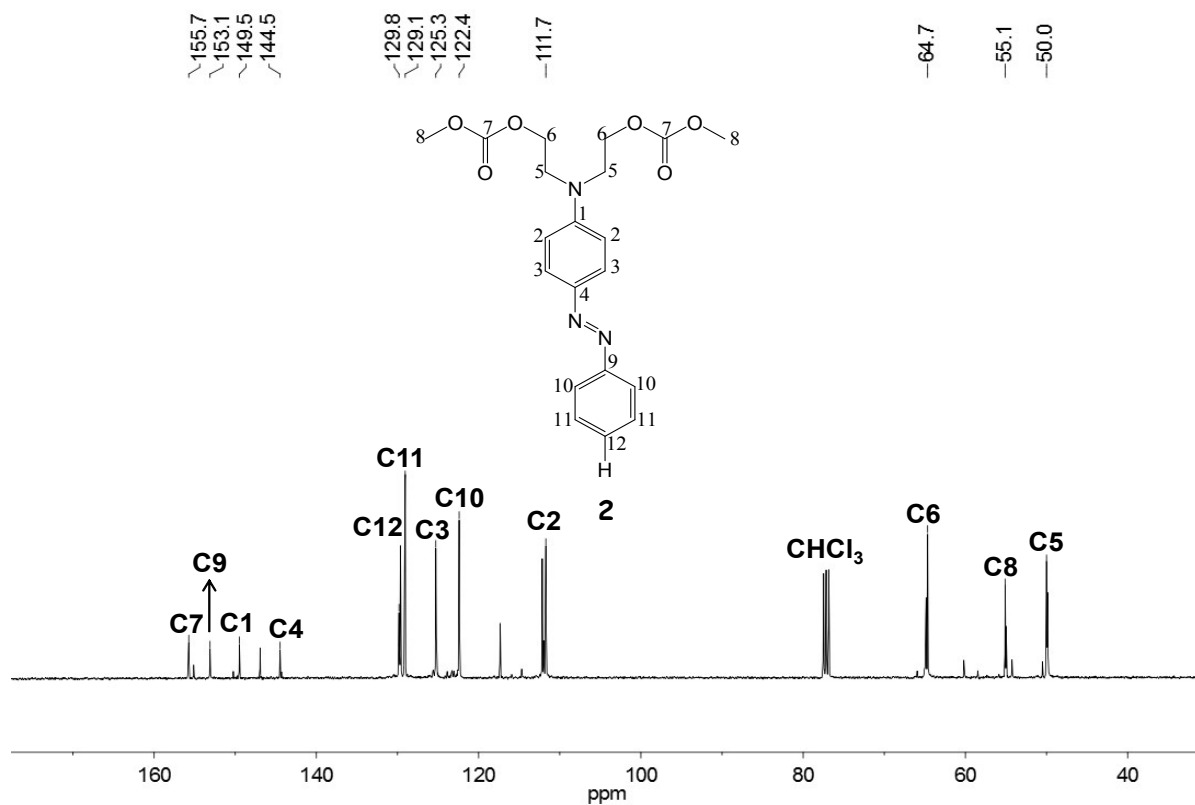


**Figure 3.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 1.**Figure 4.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 1.

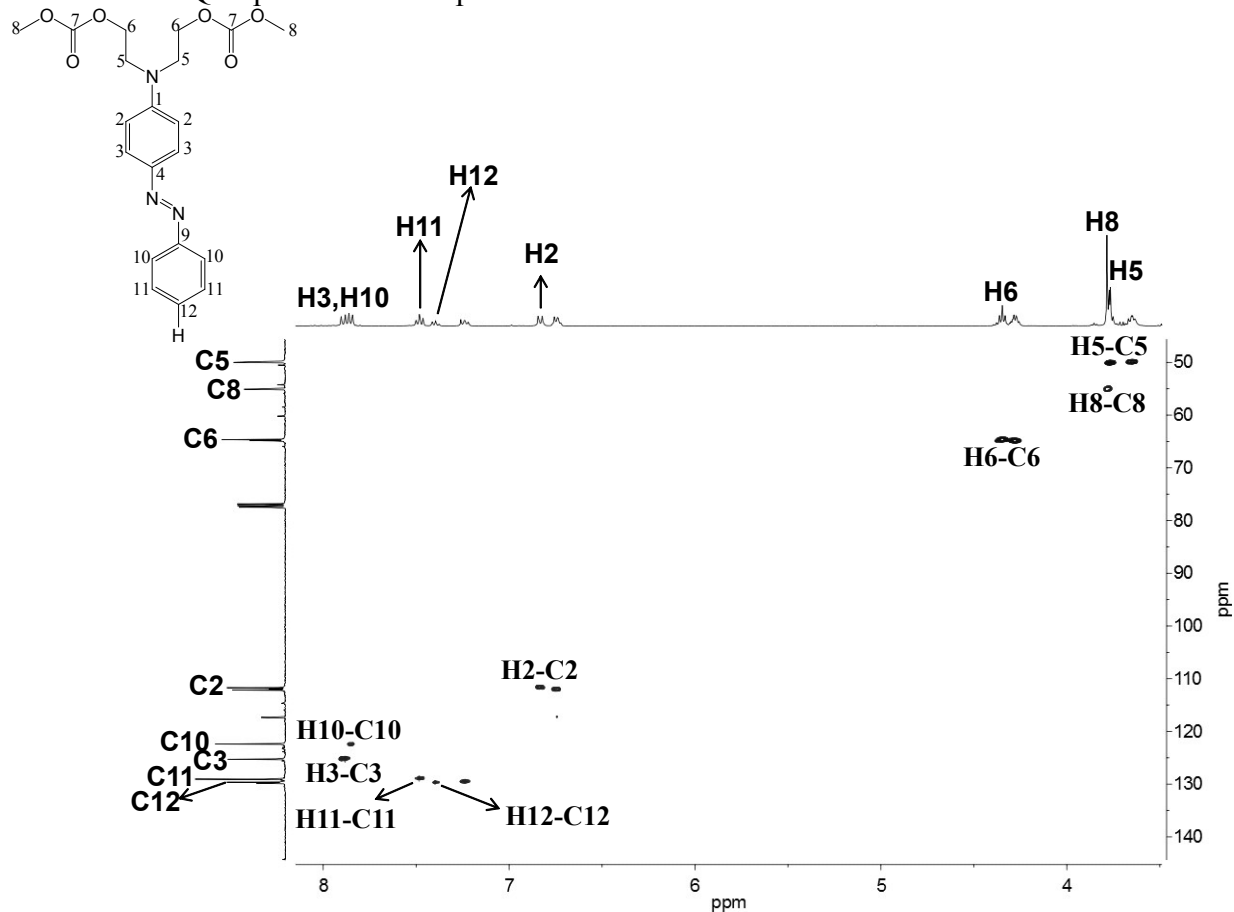
**Figure 5.**  $^1\text{H}$  NMR spectrum of compound 2.



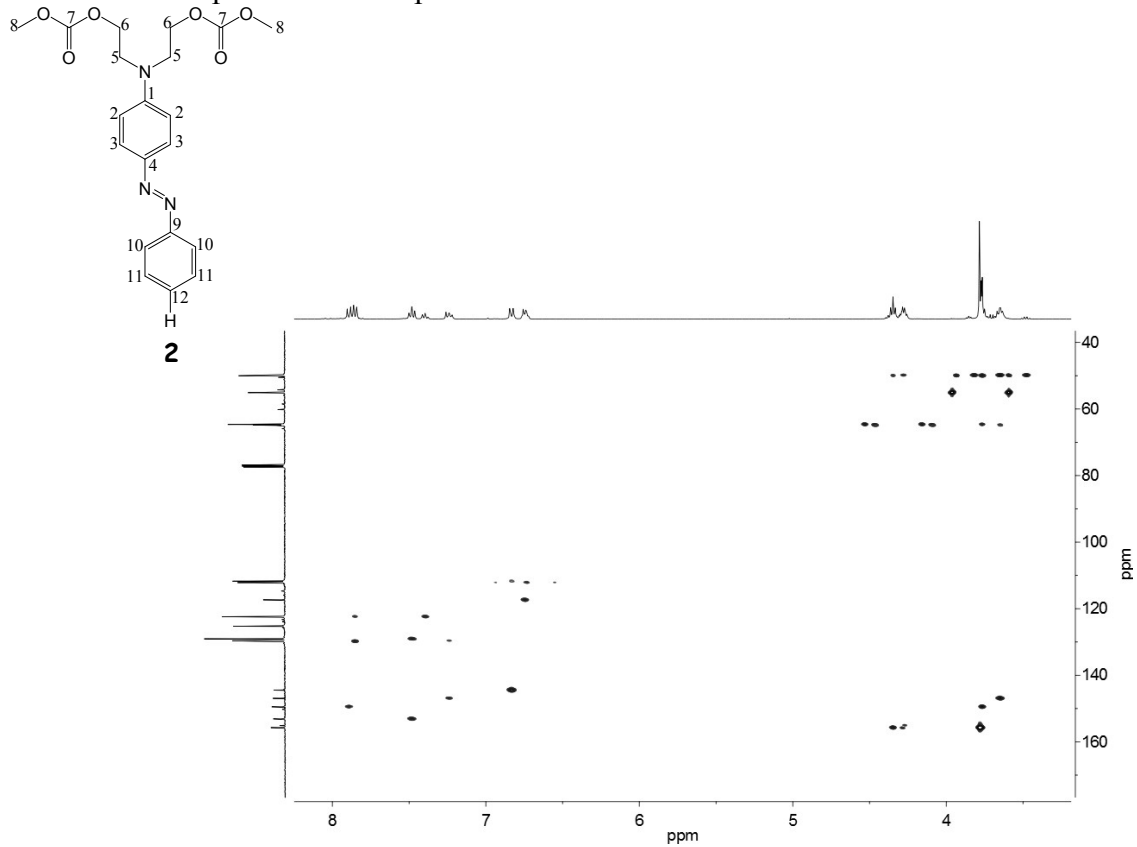
**Figure 6.**  $^{13}\text{C}$  NMR spectrum of compound 2.



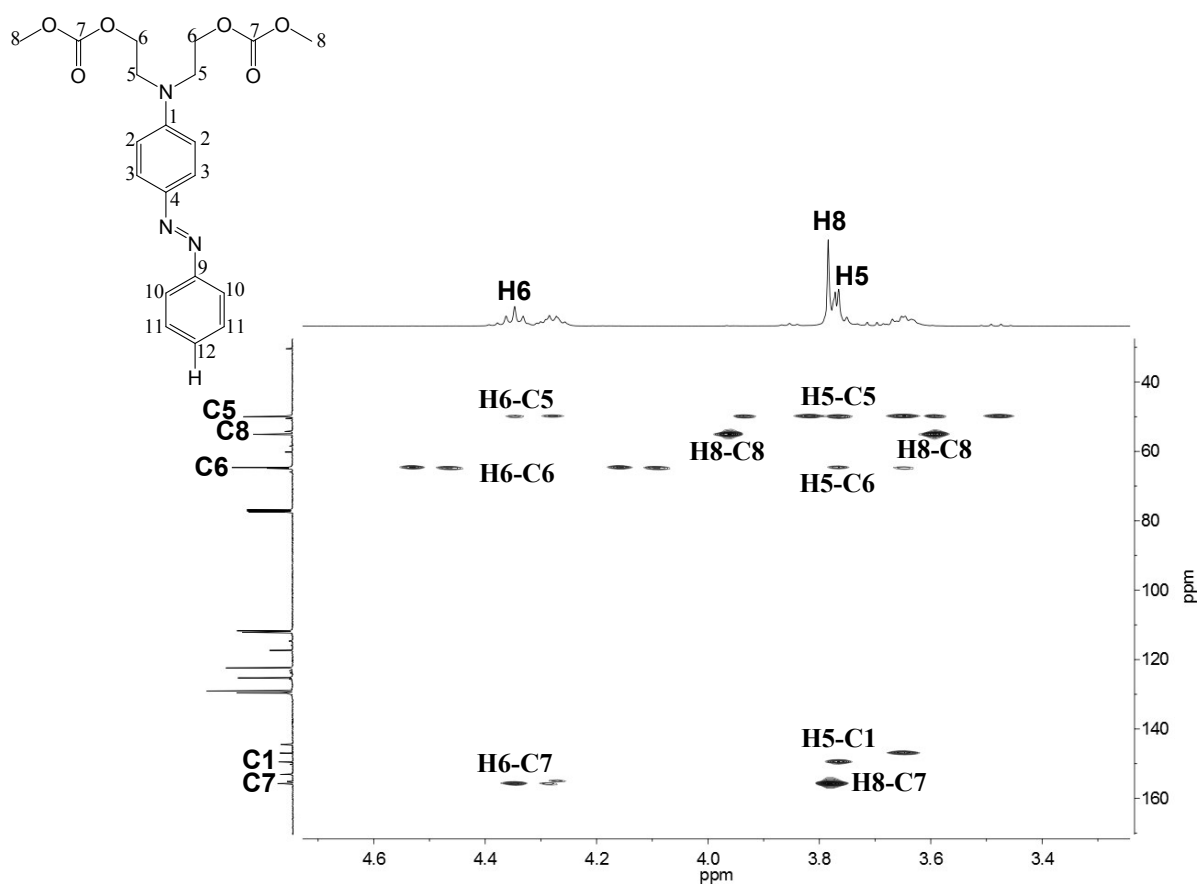
**Figure 7.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 2.



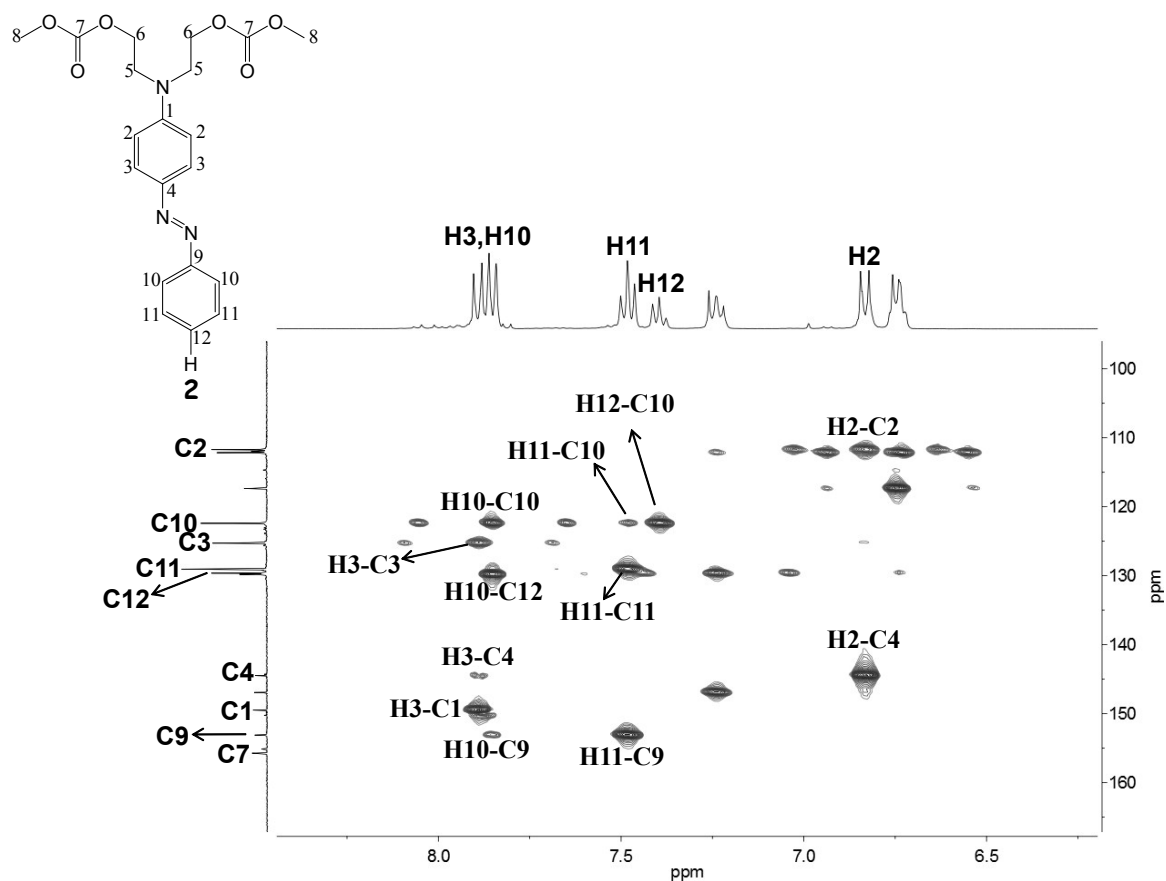
**Figure 8.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 2.



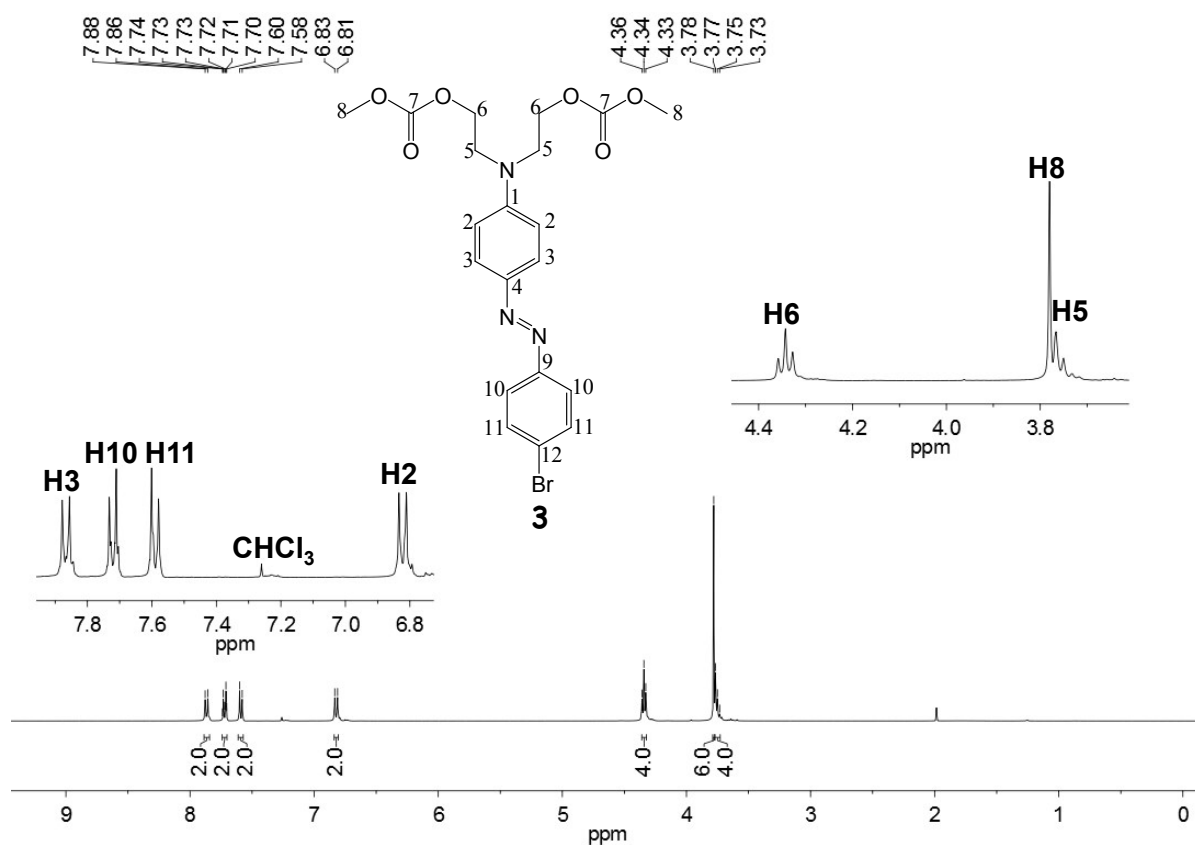
**Figure 9.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 2 (zoom of aliphatic region).



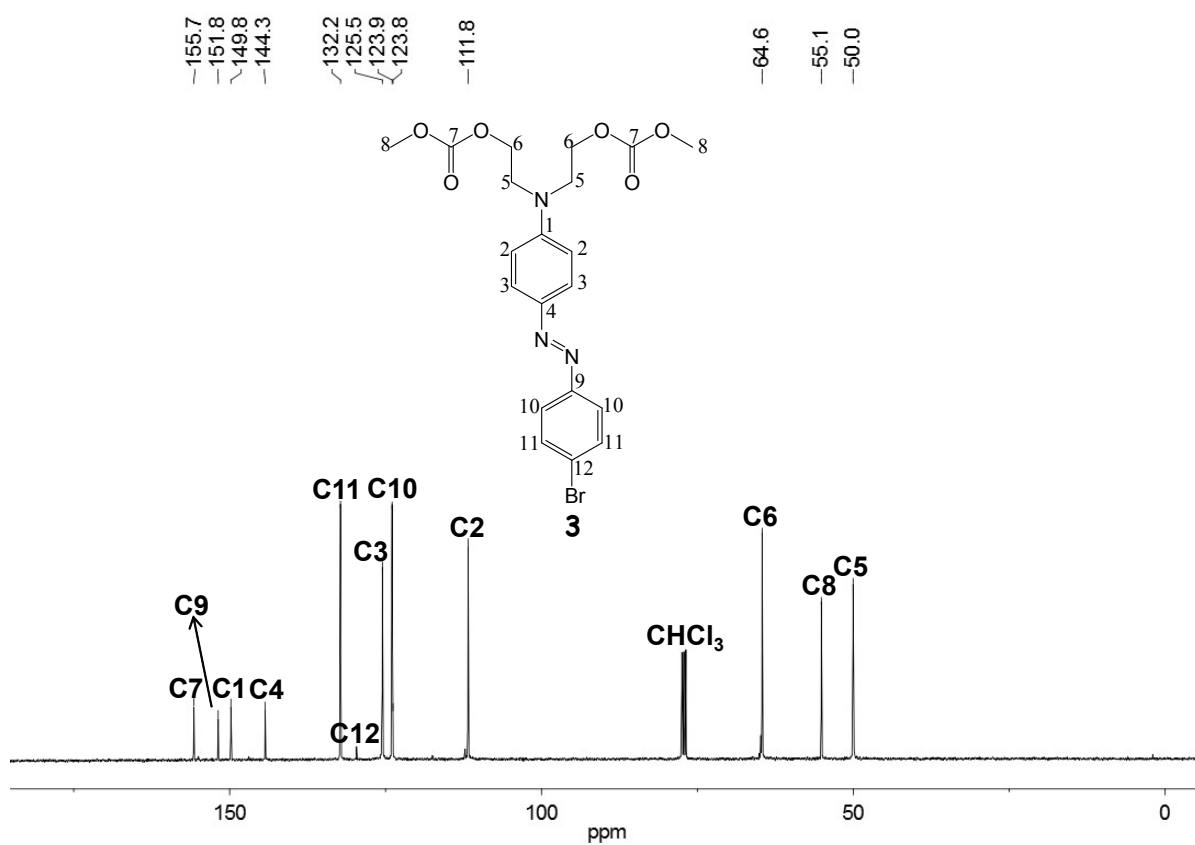
**Figure 10.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 2 (zoom of aromatic region).



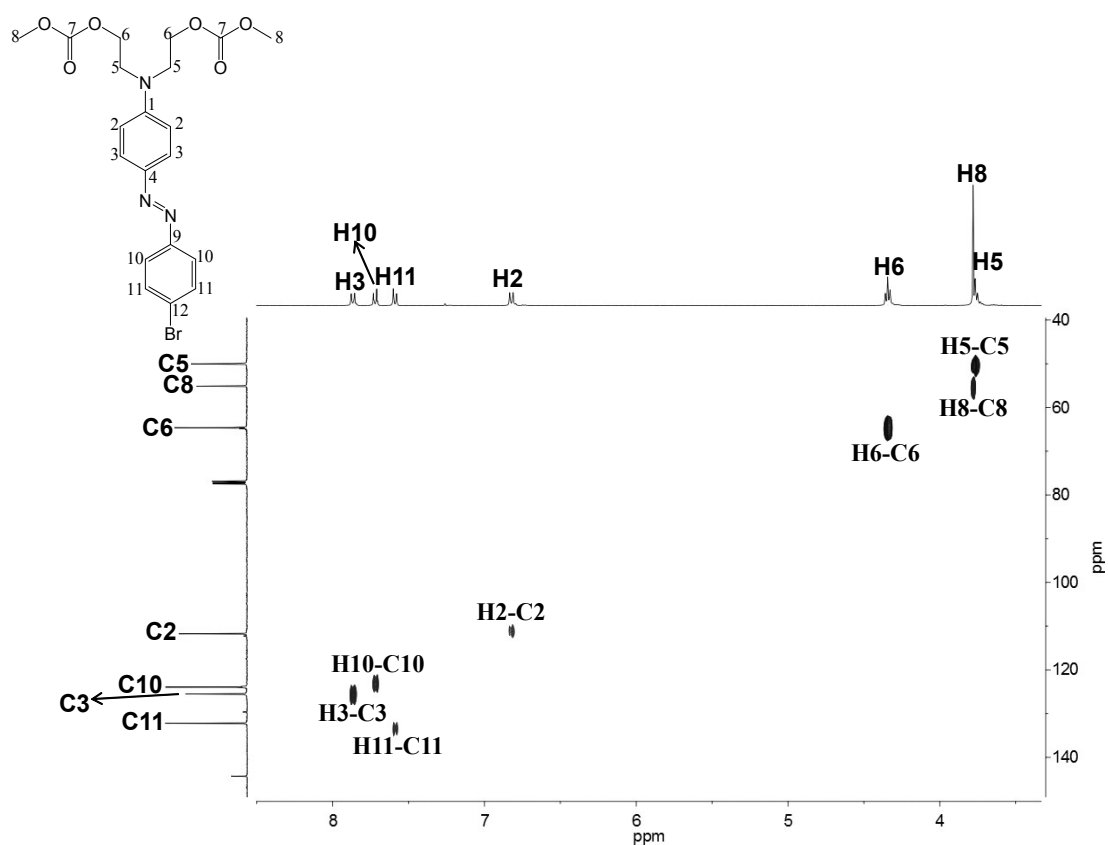
**Figure 11.**  $^1\text{H}$  NMR spectrum of compound 3.



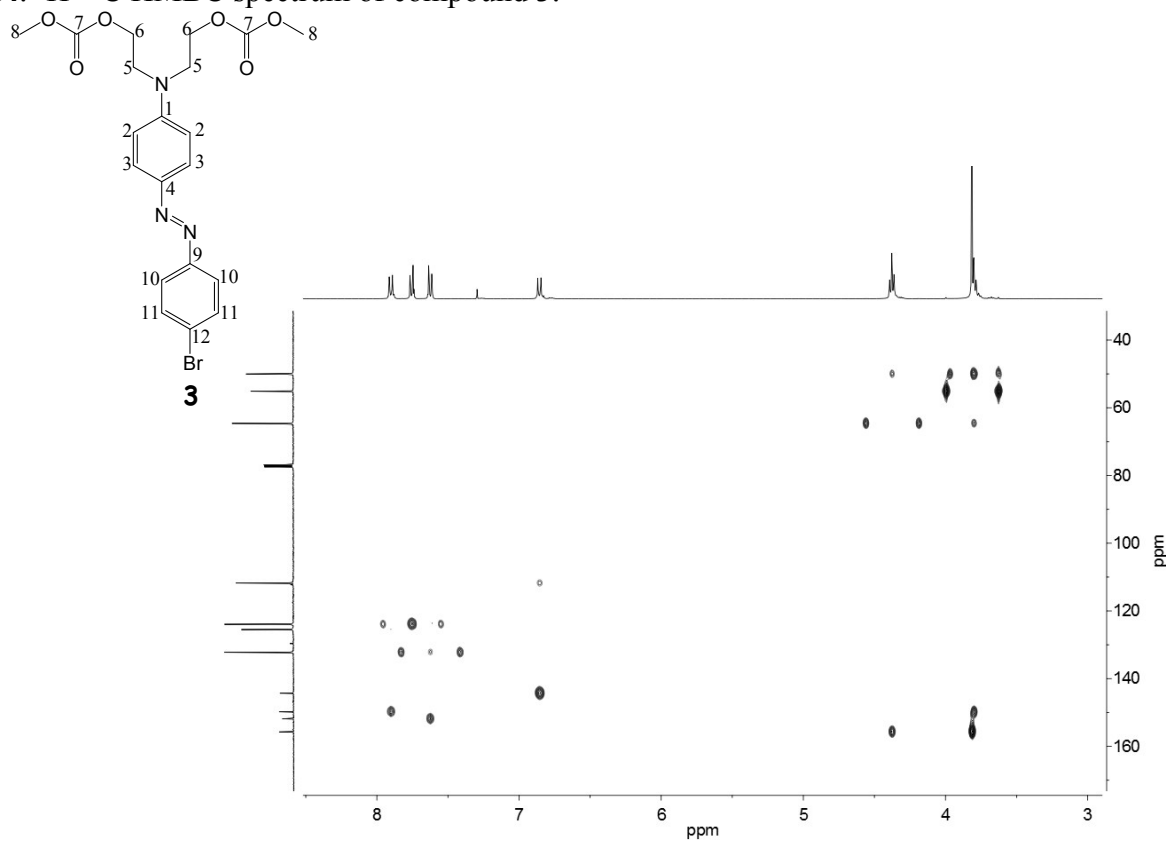
**Figure 12.**  $^{13}\text{C}$  NMR spectrum of compound 3.



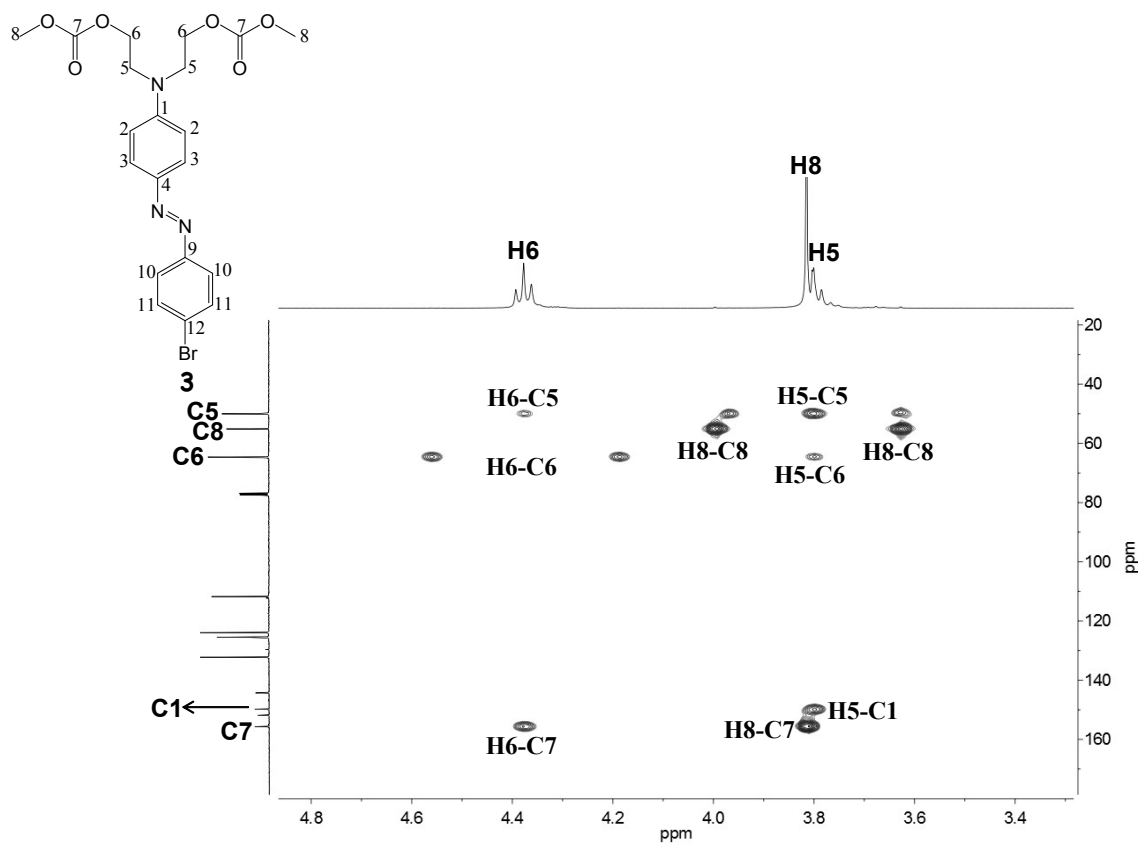
**Figure 13.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 3.



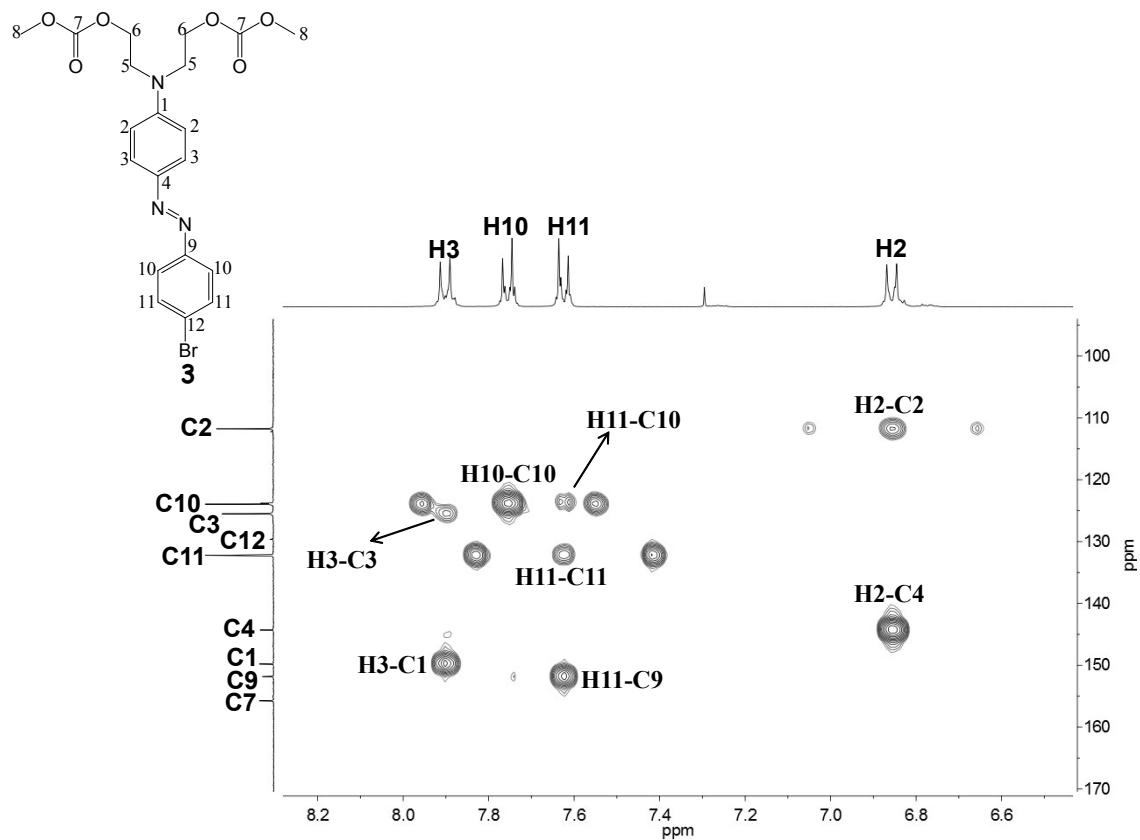
**Figure 14.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 3.



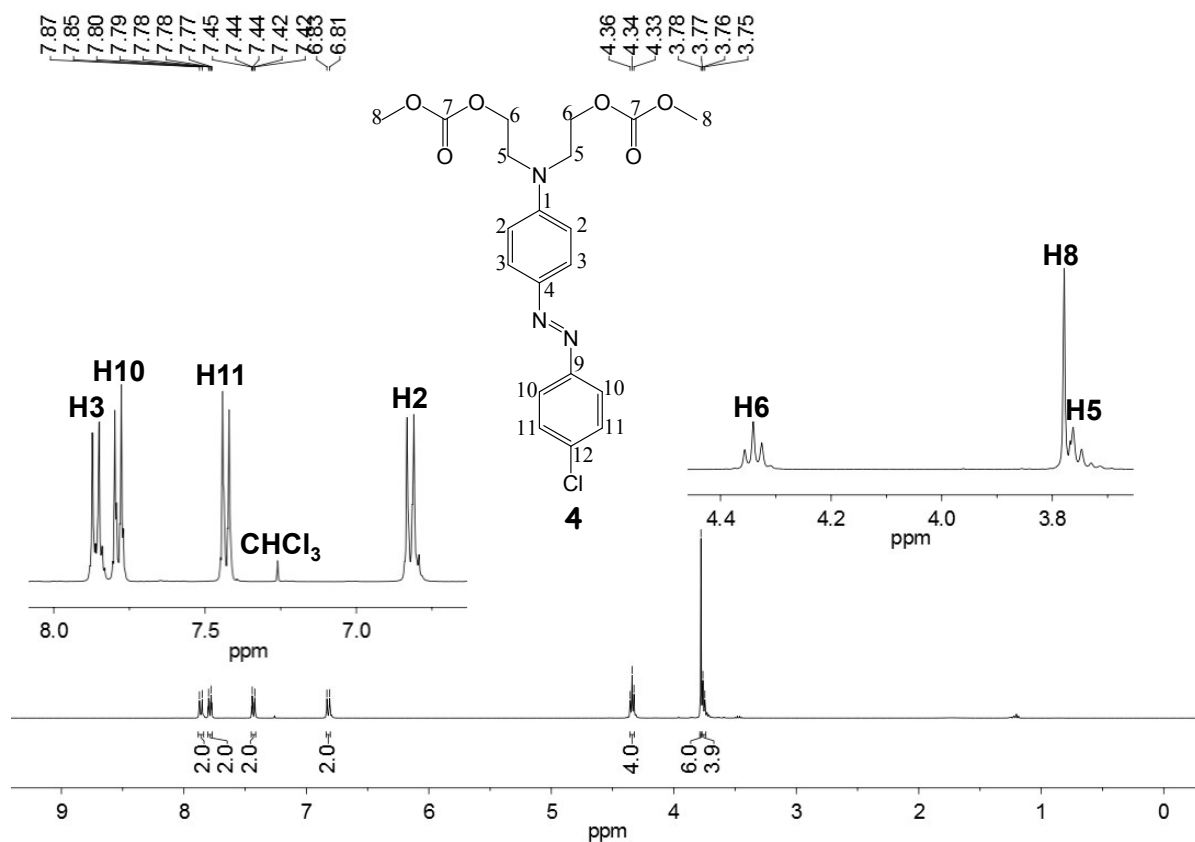
**Figure 15.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 3 (zoom of aliphatic region).



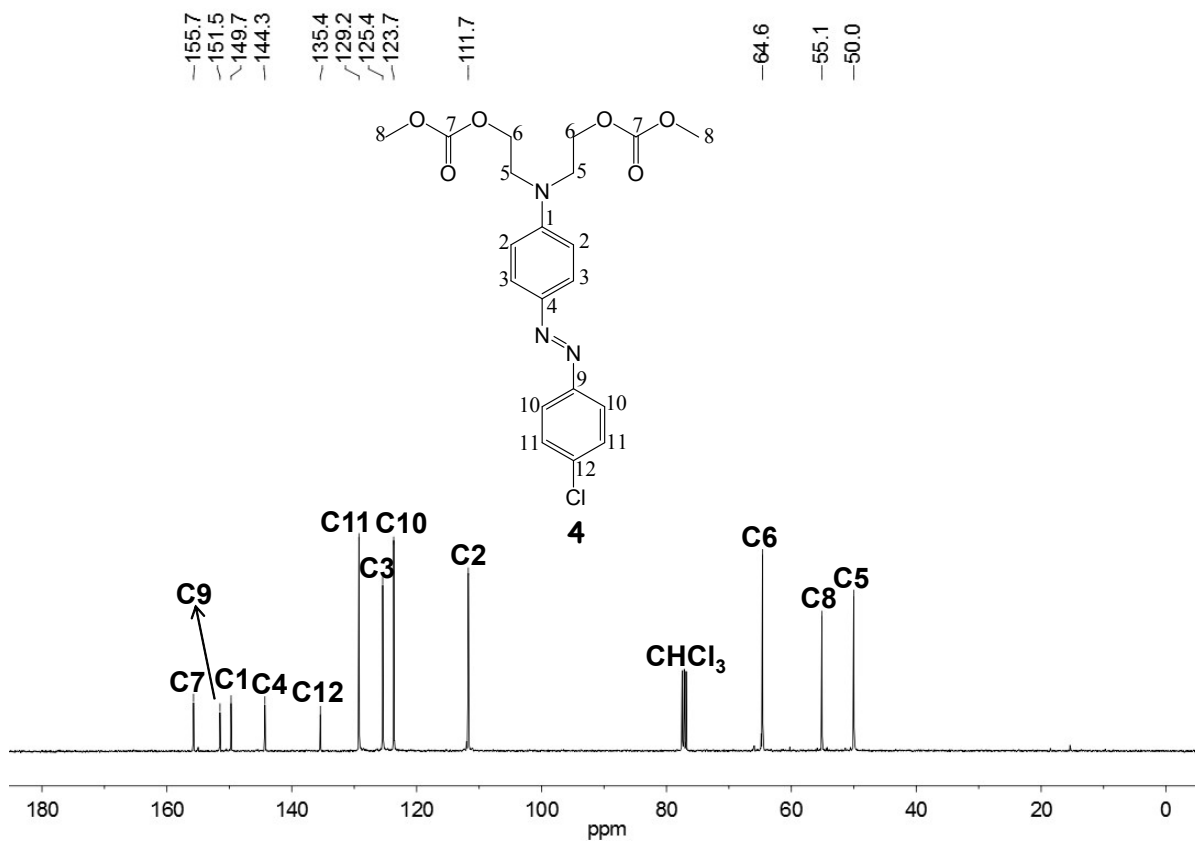
**Figure 16.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 3 (zoom of aromatic region).

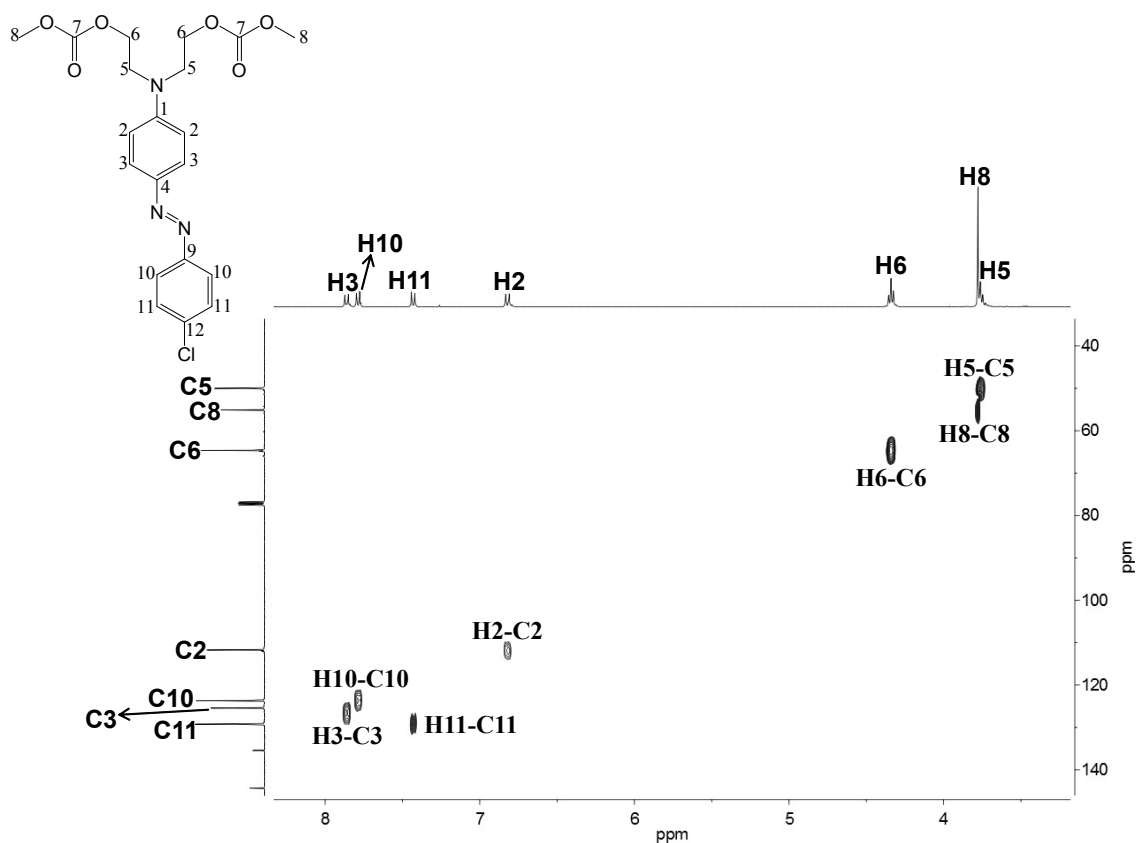
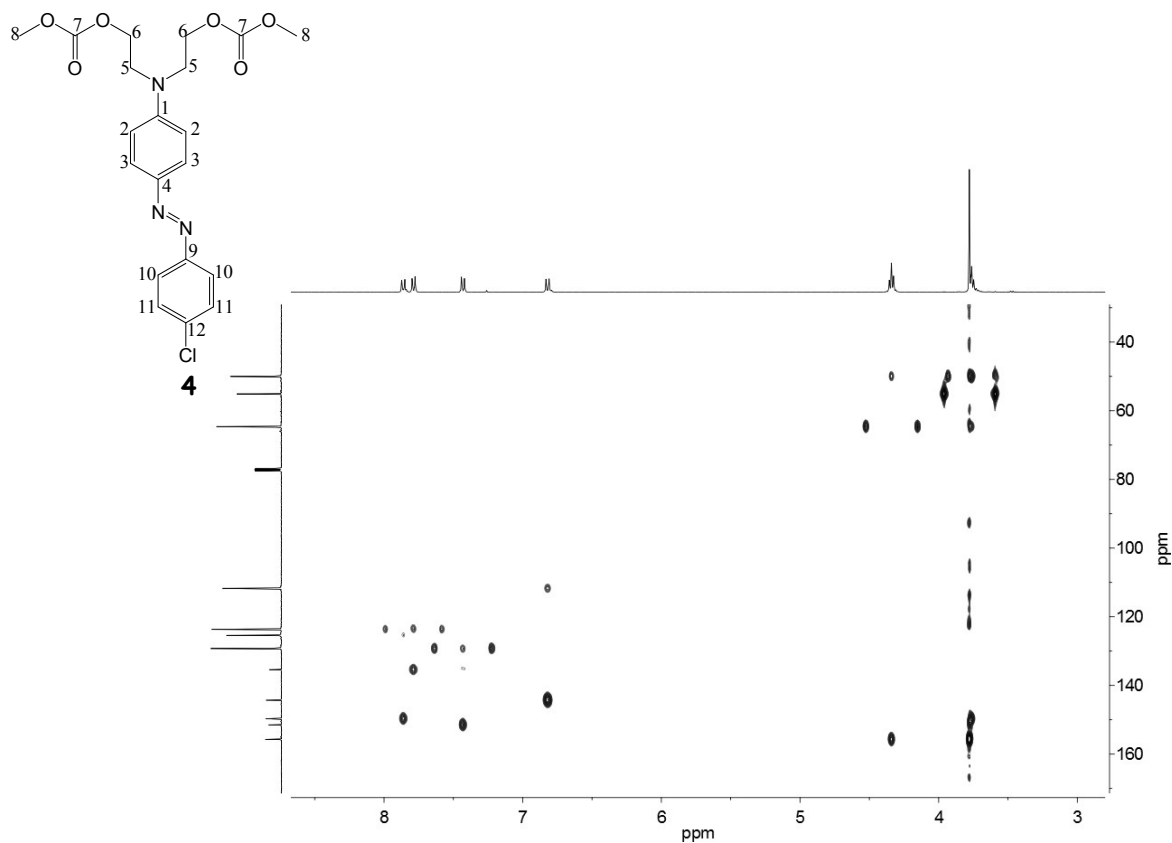


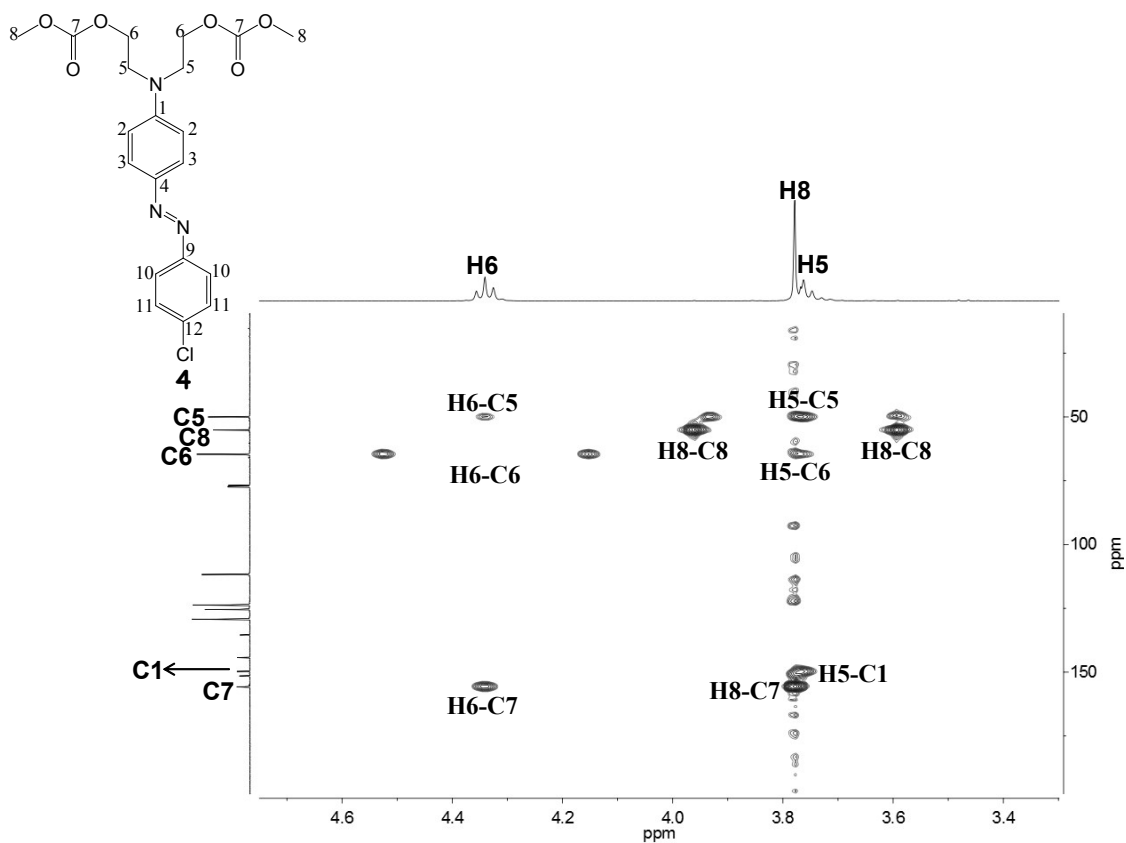
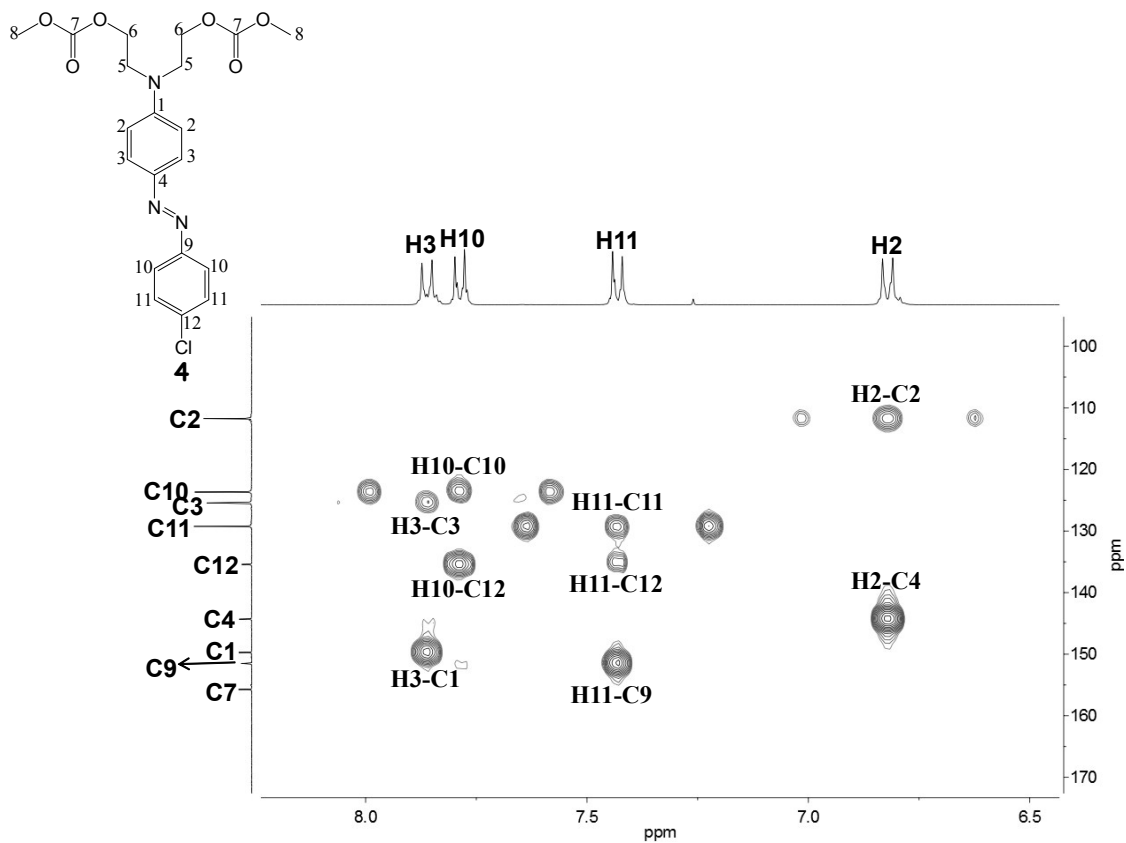
**Figure 17.**  $^1\text{H}$  NMR spectrum of compound 4.

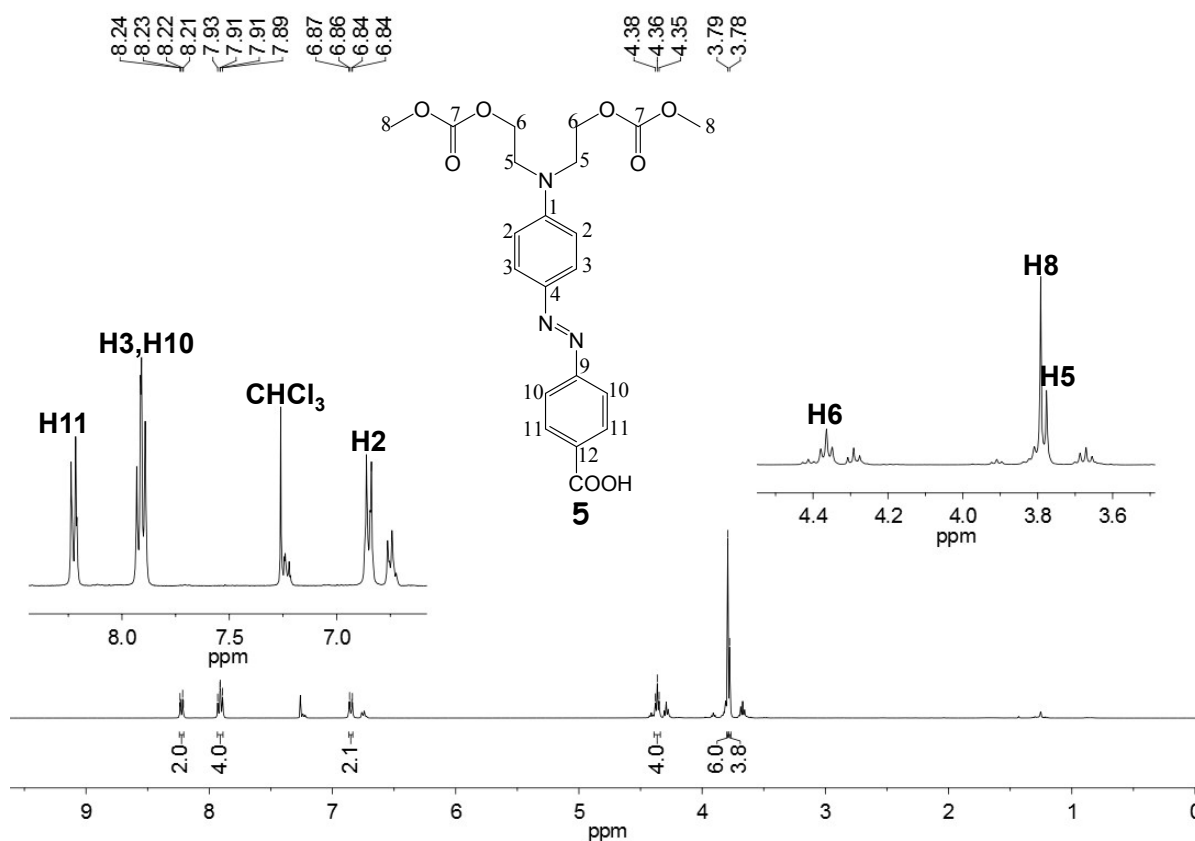
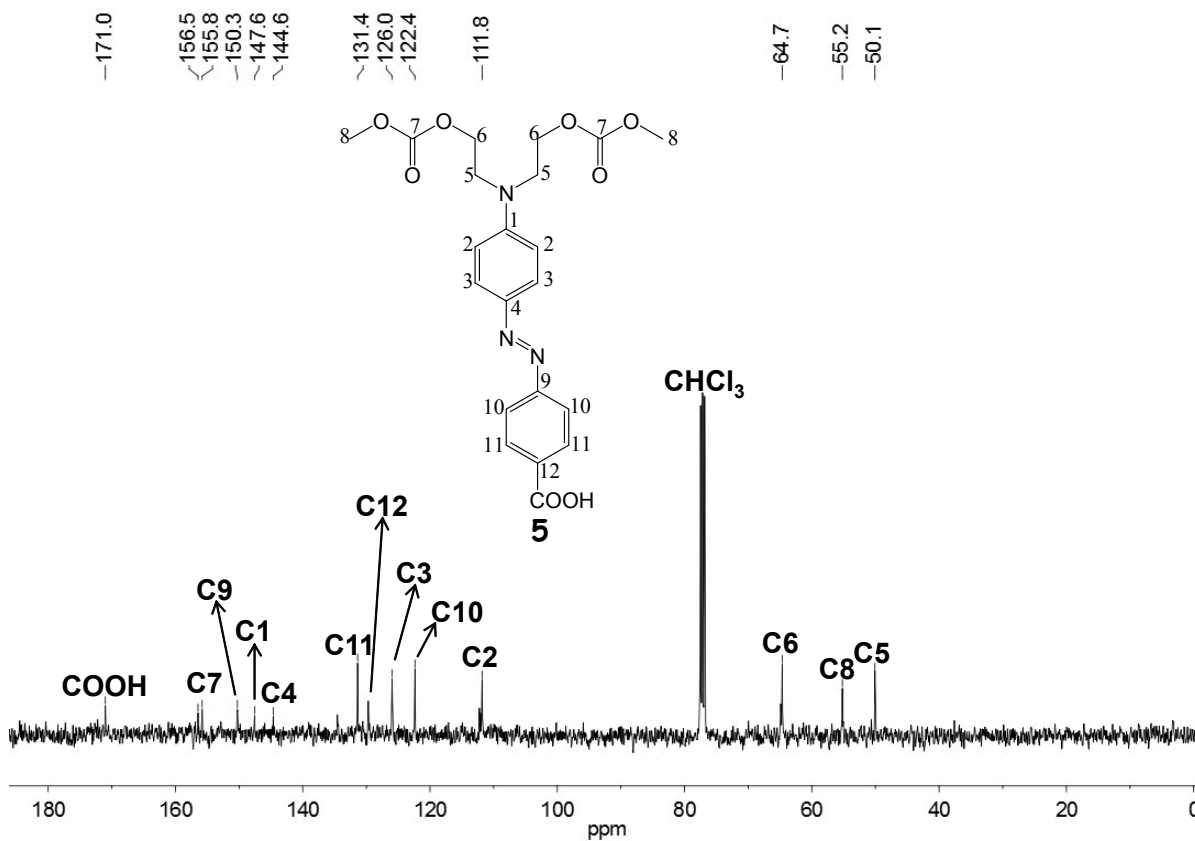


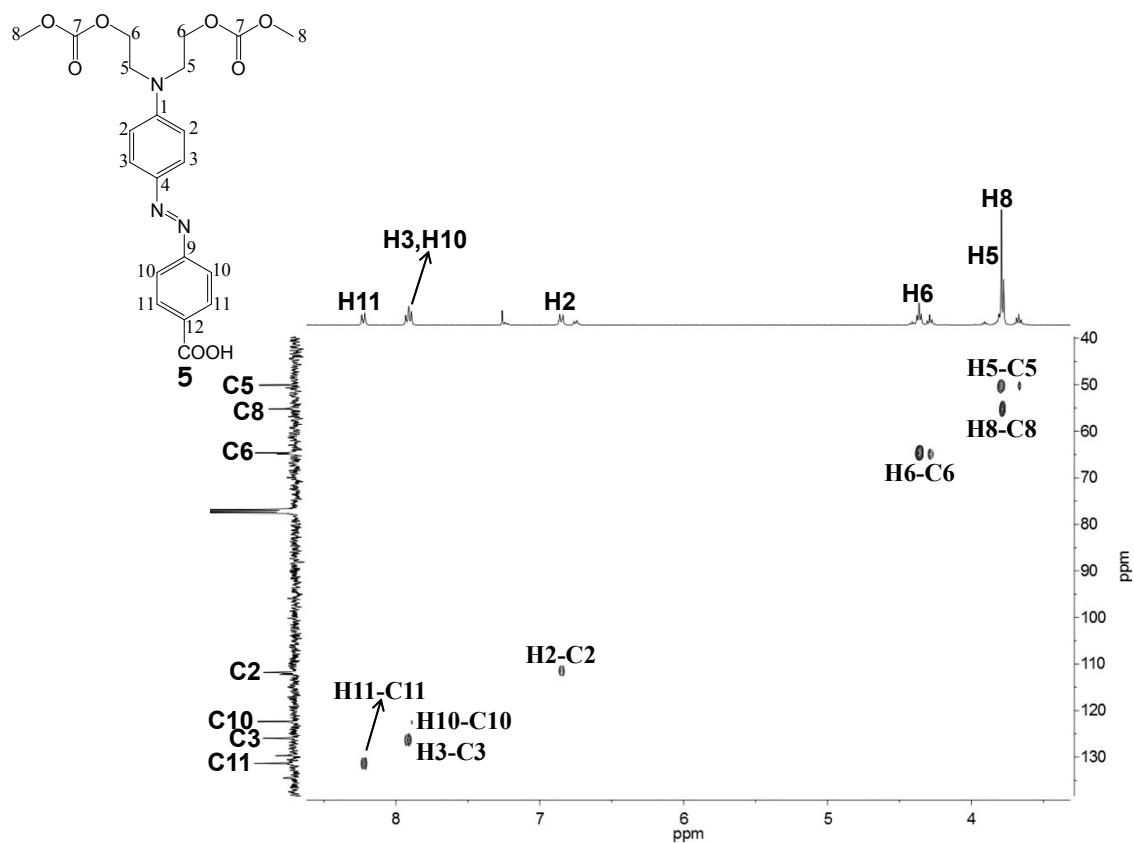
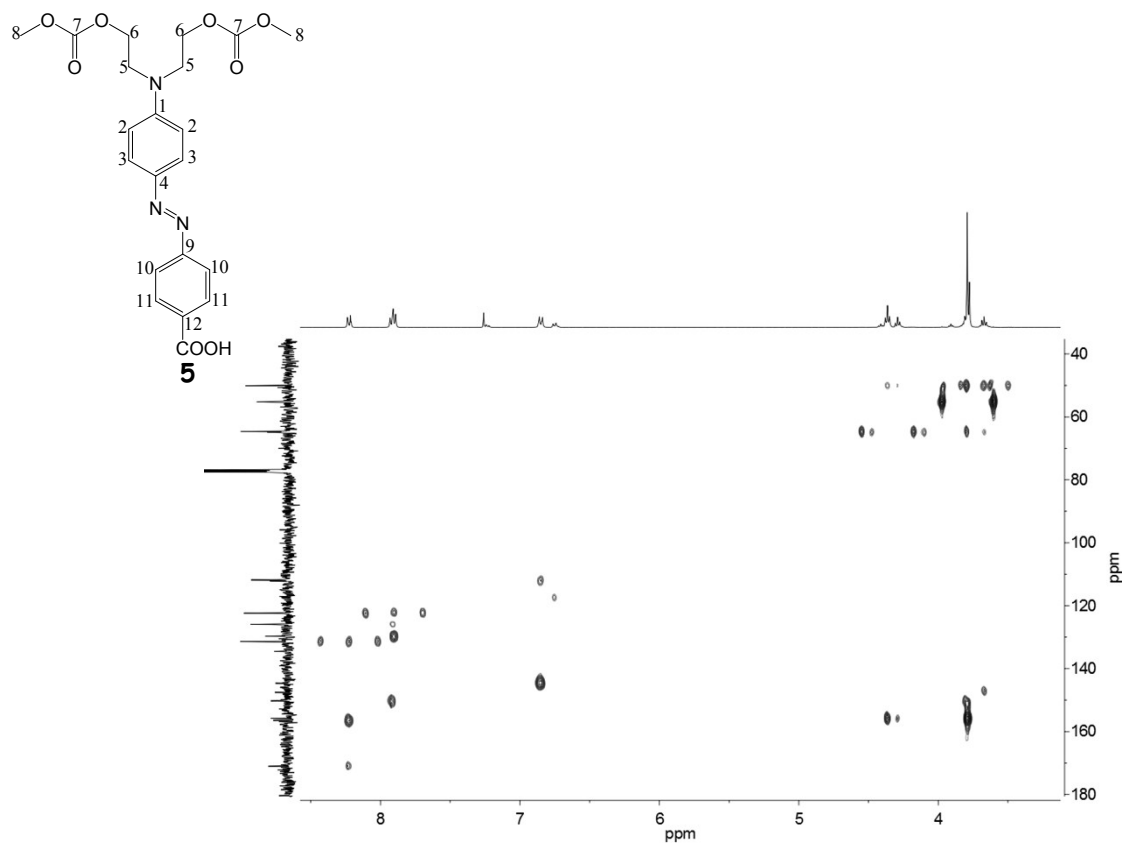
**Figure 18.**  $^{13}\text{C}$  NMR spectrum of compound 4.



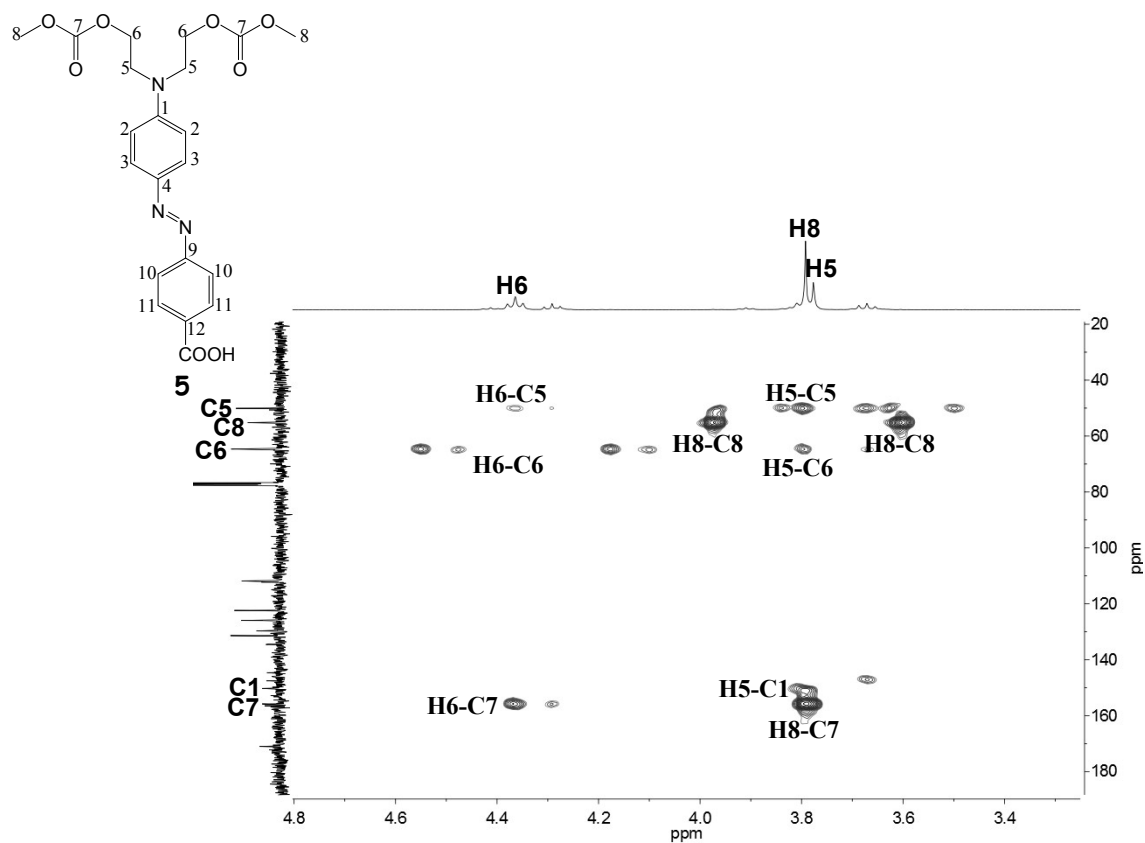
**Figure 19.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 4.**Figure 20.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 4.

**Figure 21.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 4 (zoom of aliphatic region).**Figure 22.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 4 (zoom of aromatic region).

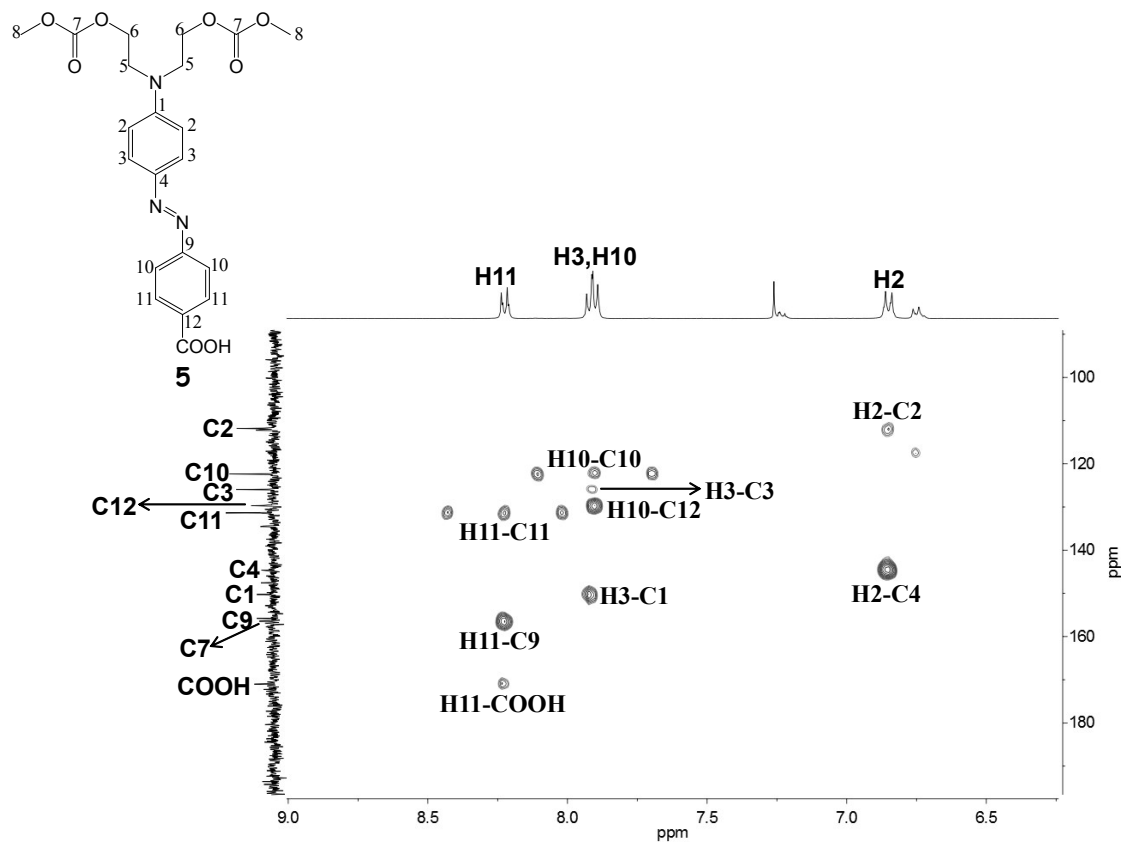
**Figure 23.**  $^1\text{H}$  NMR spectrum of compound 5.**Figure 24.**  $^{13}\text{C}$  NMR spectrum of compound 5.

**Figure 25.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 5.**Figure 26.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 5.

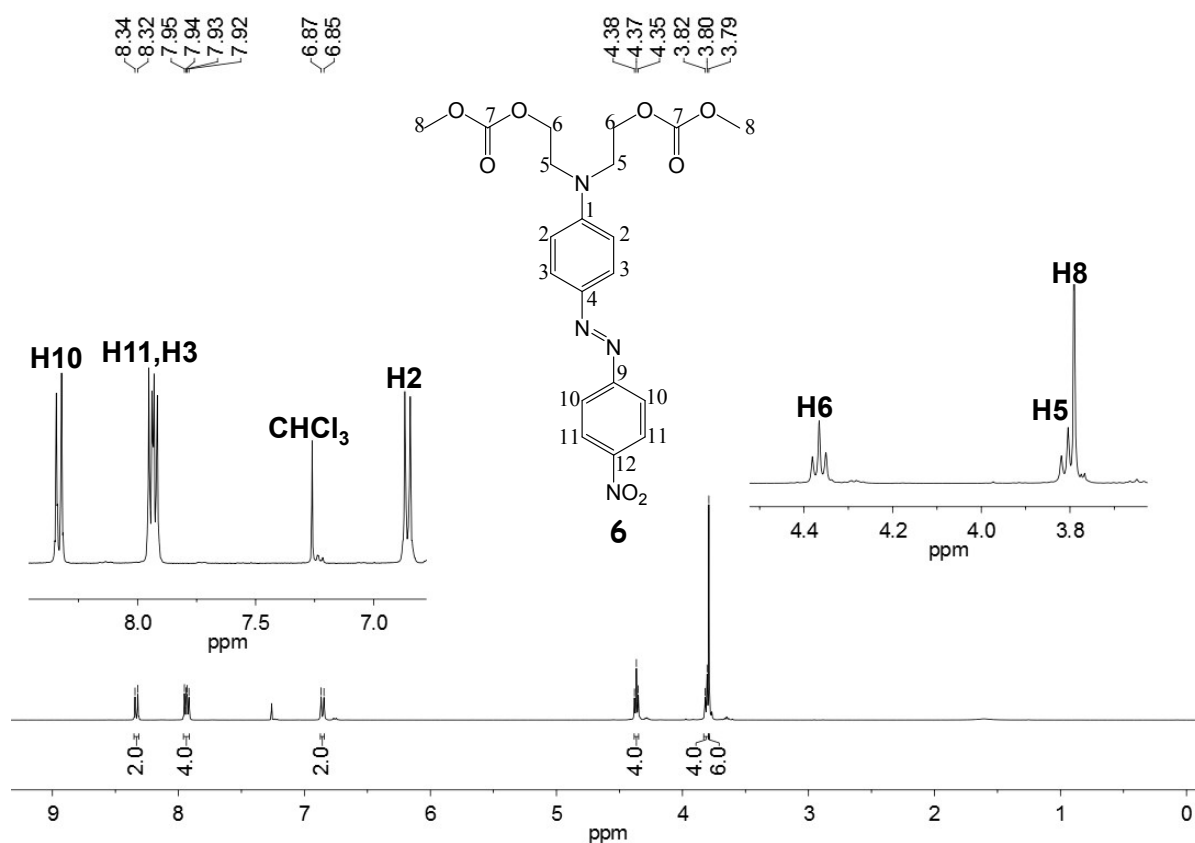
**Figure 27.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 5 (zoom of aliphatic region).



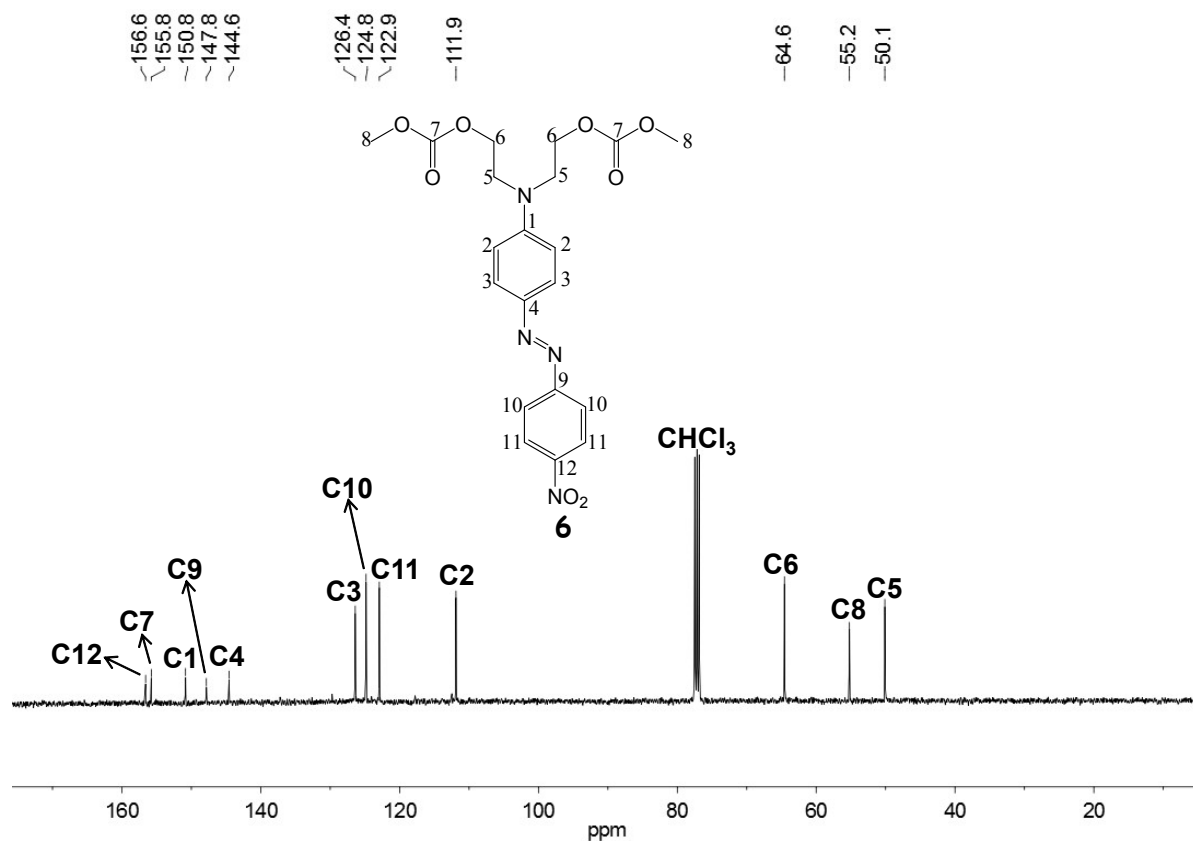
**Figure 28.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 5 (zoom of aromatic region).

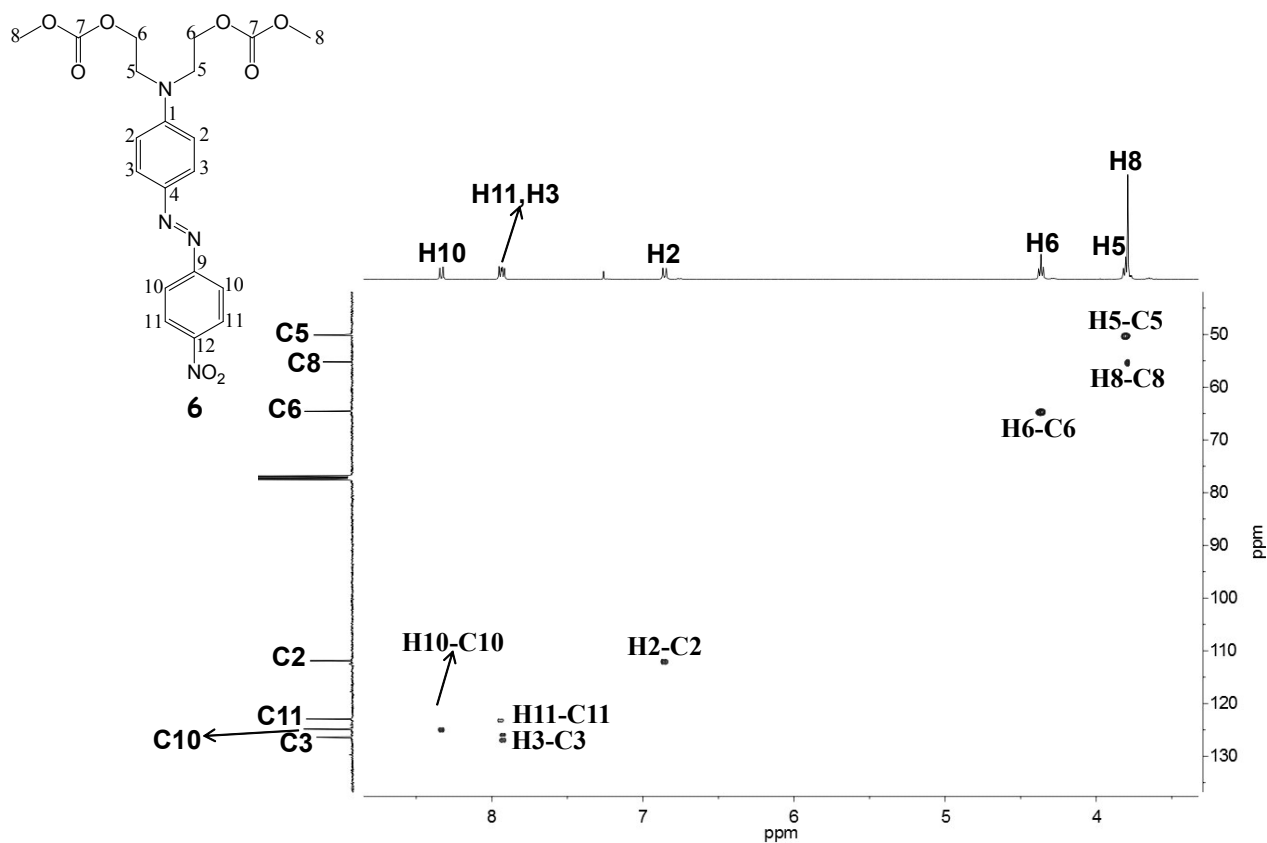
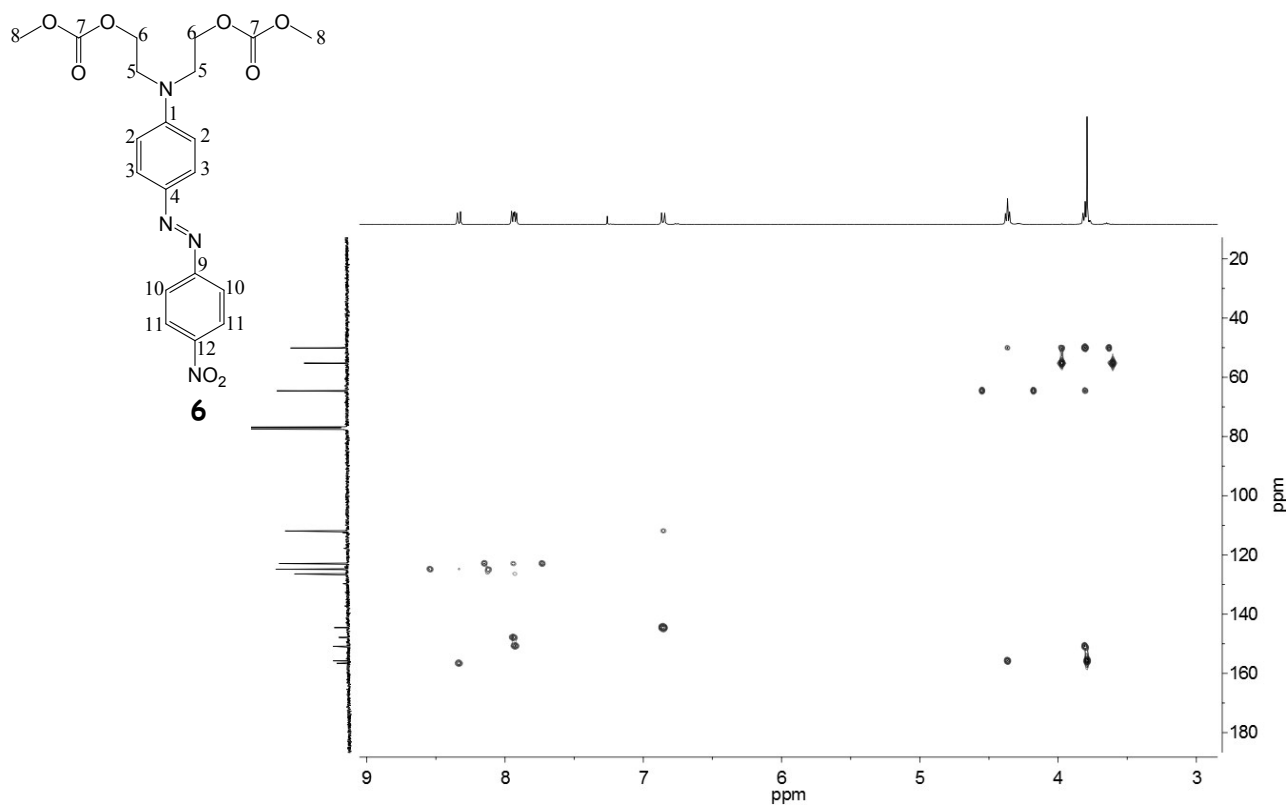


**Figure 29.**  $^1\text{H}$  NMR spectrum of compound 6.

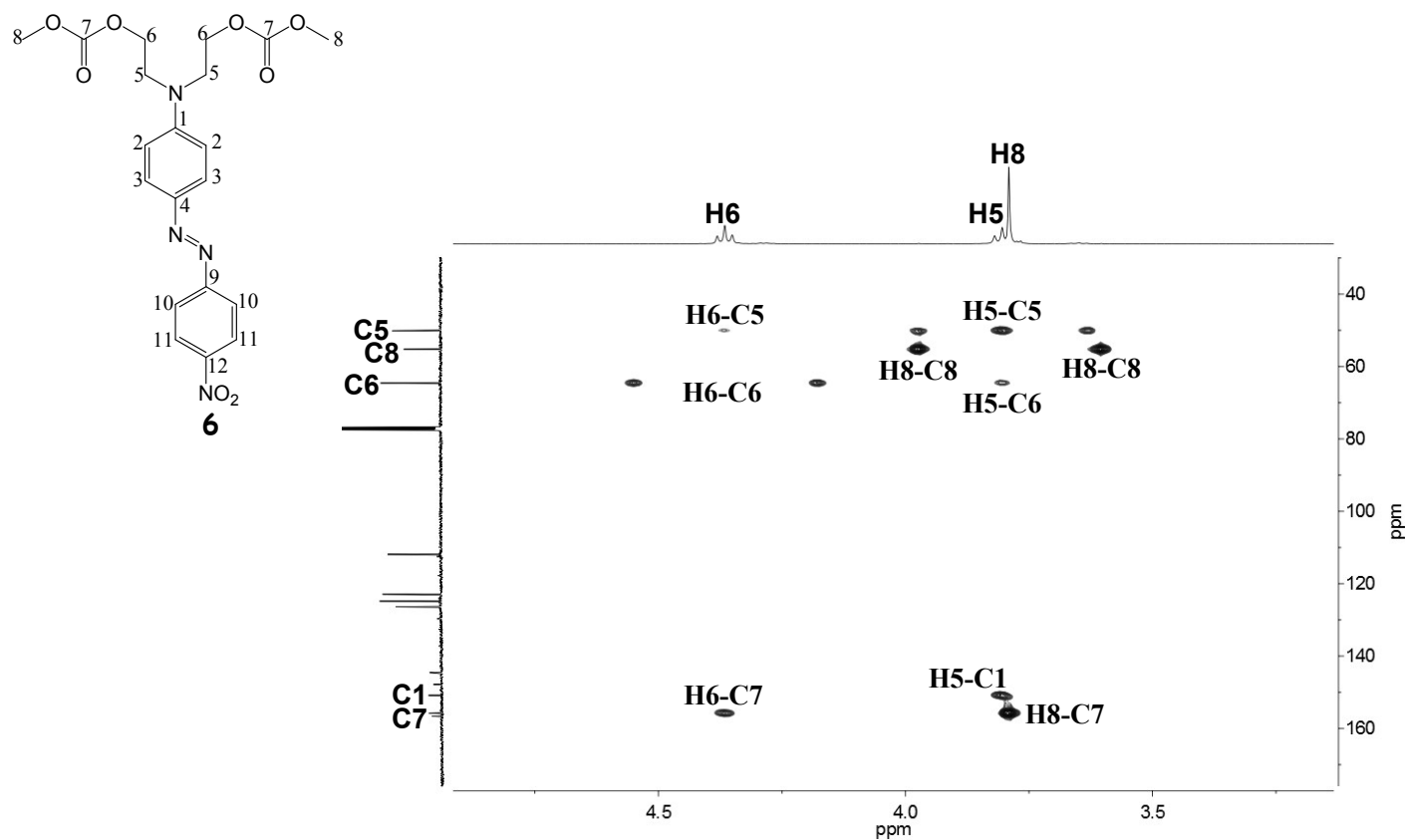


**Figure 30.**  $^{13}\text{C}$  NMR spectrum of compound 6.

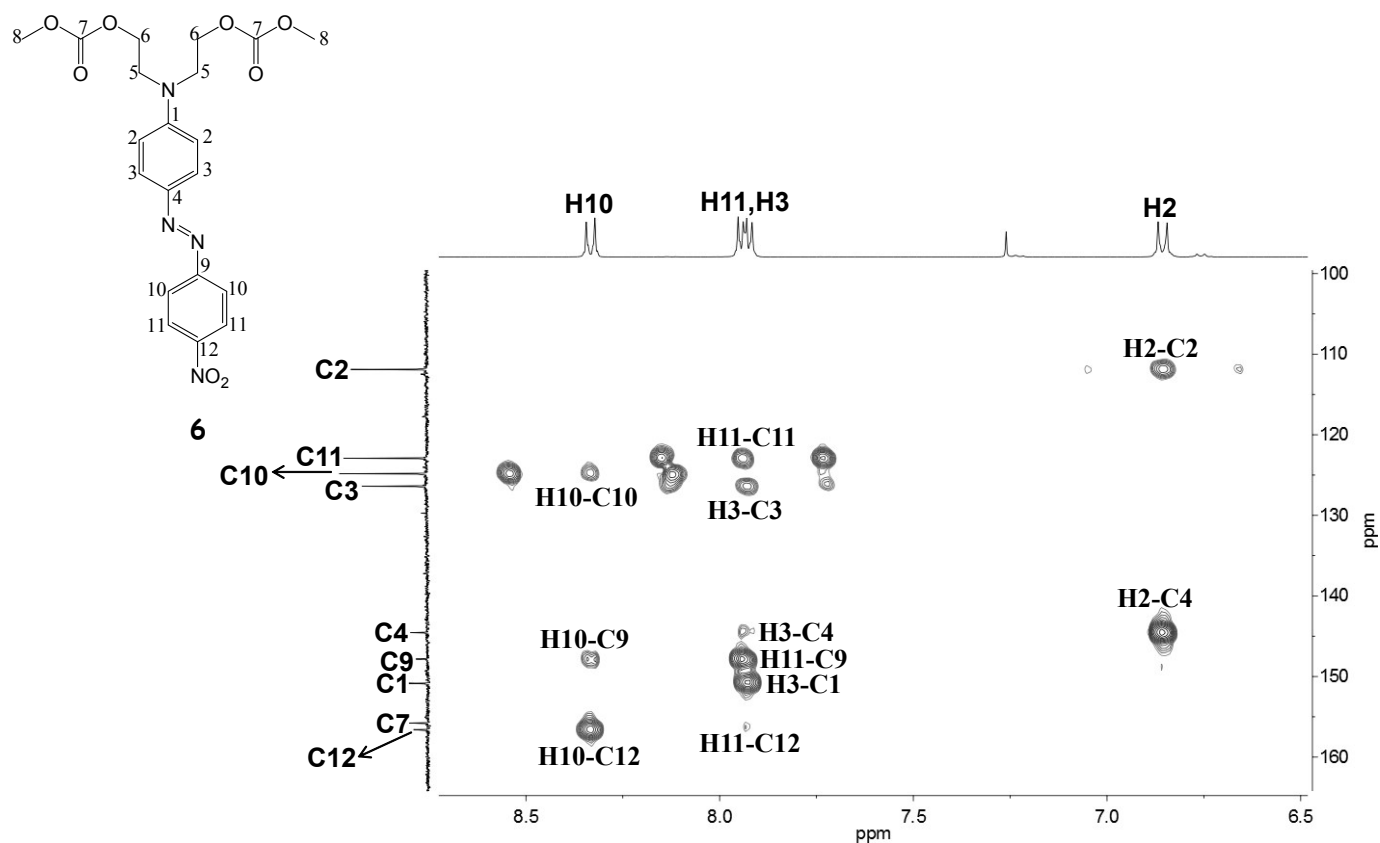


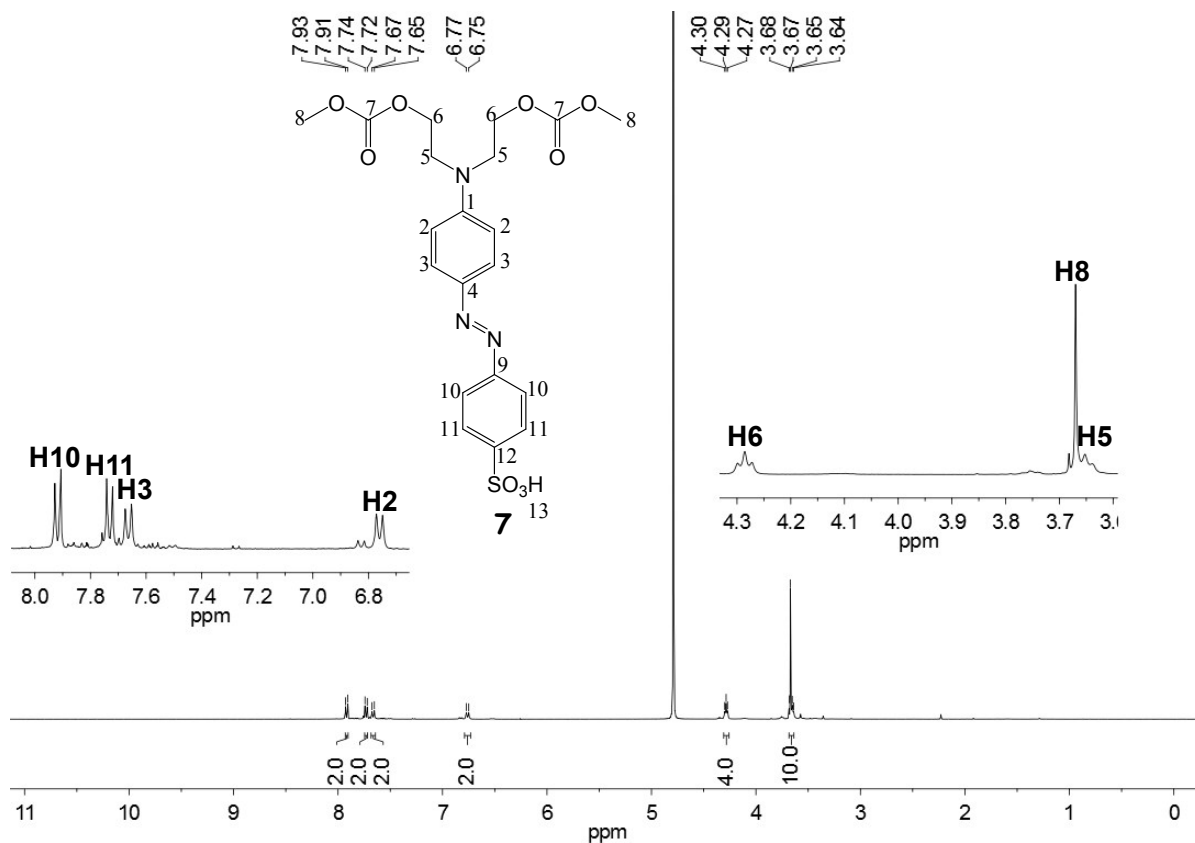
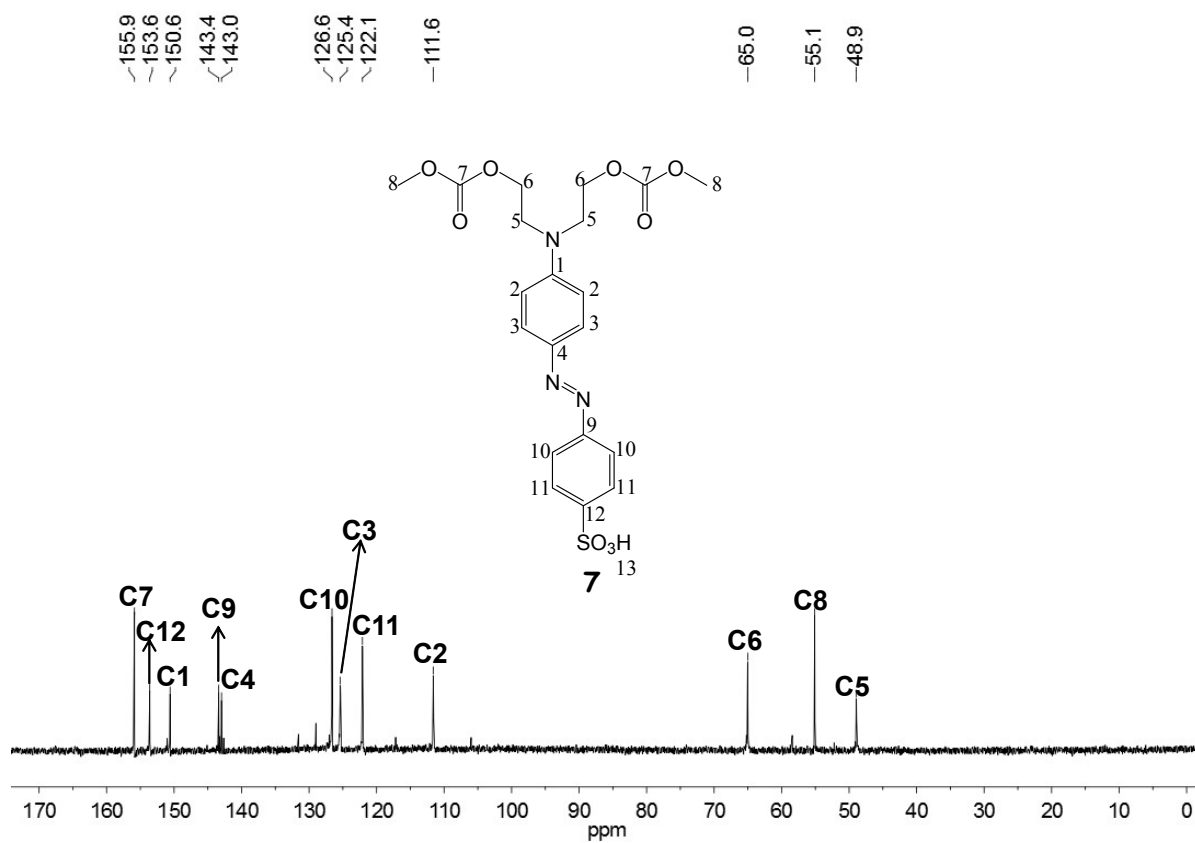
**Figure 31.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 6.**Figure 32.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 6.

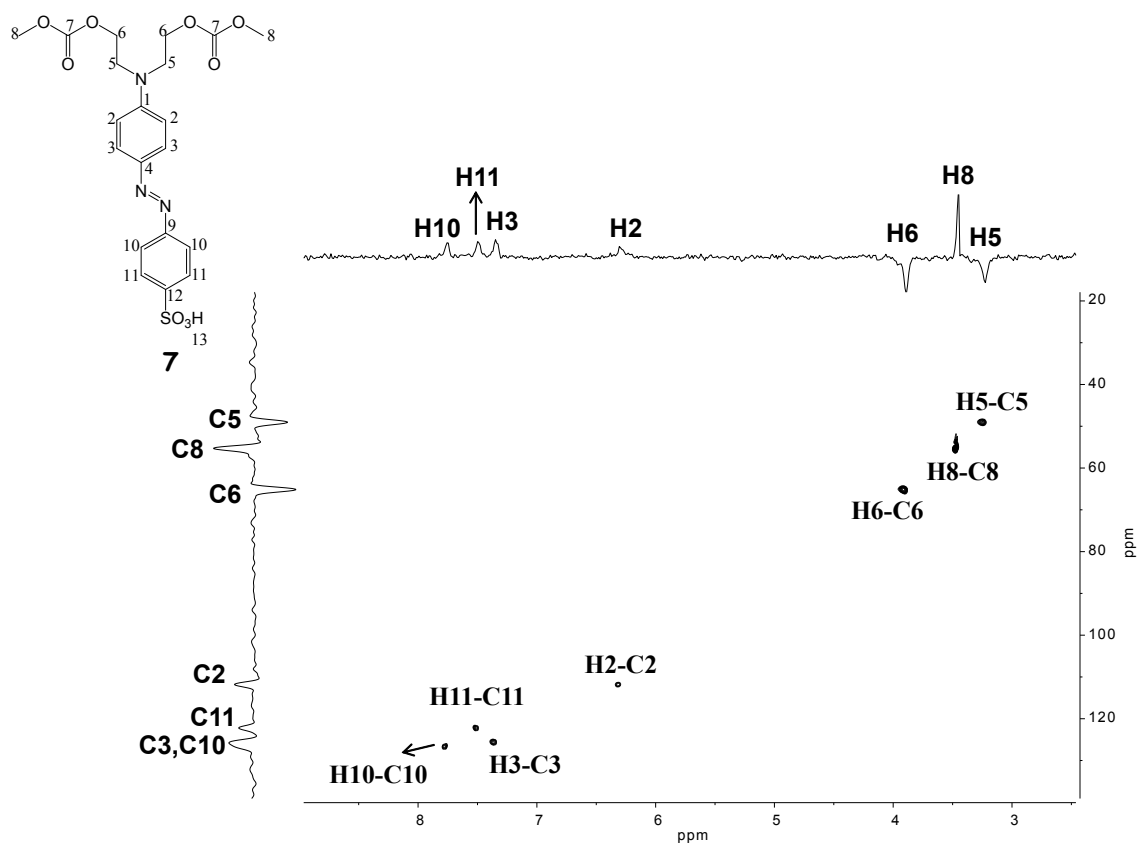
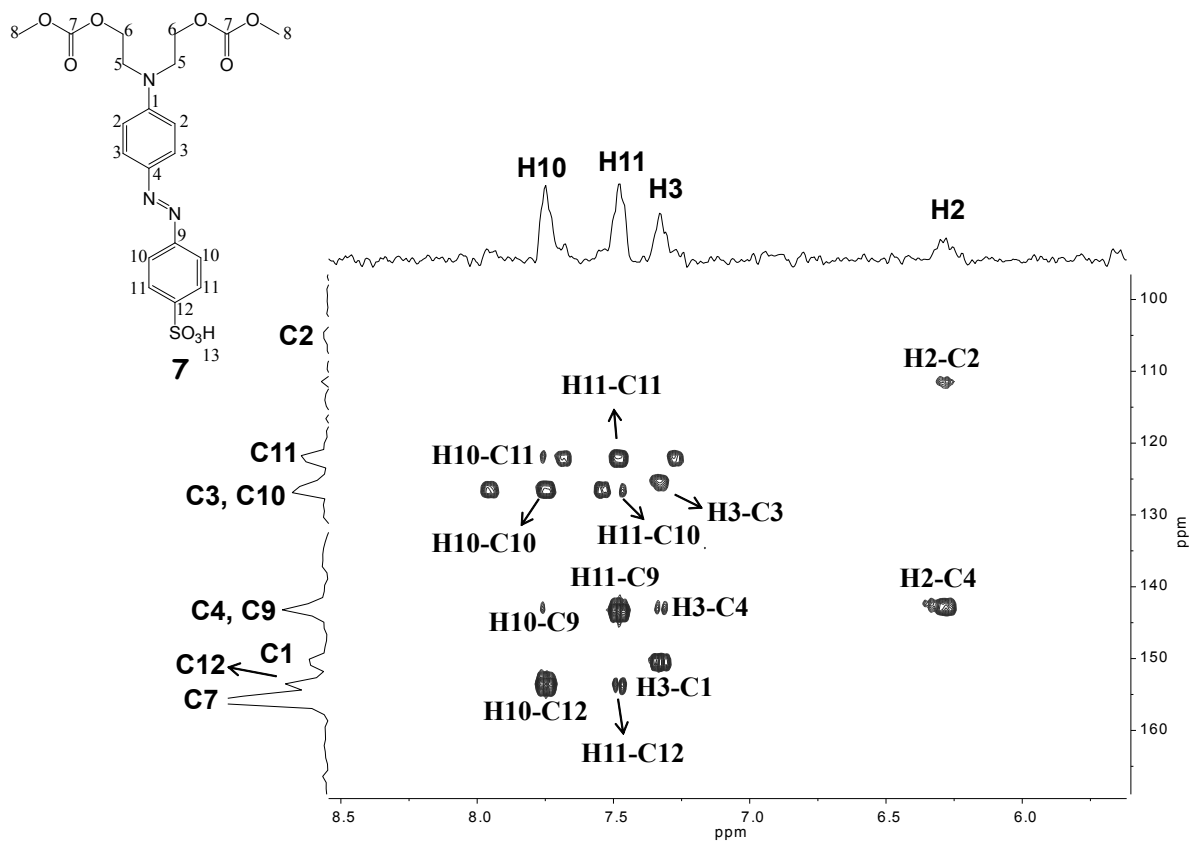
**Figure 33.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 6 (zoom of aliphatic region).

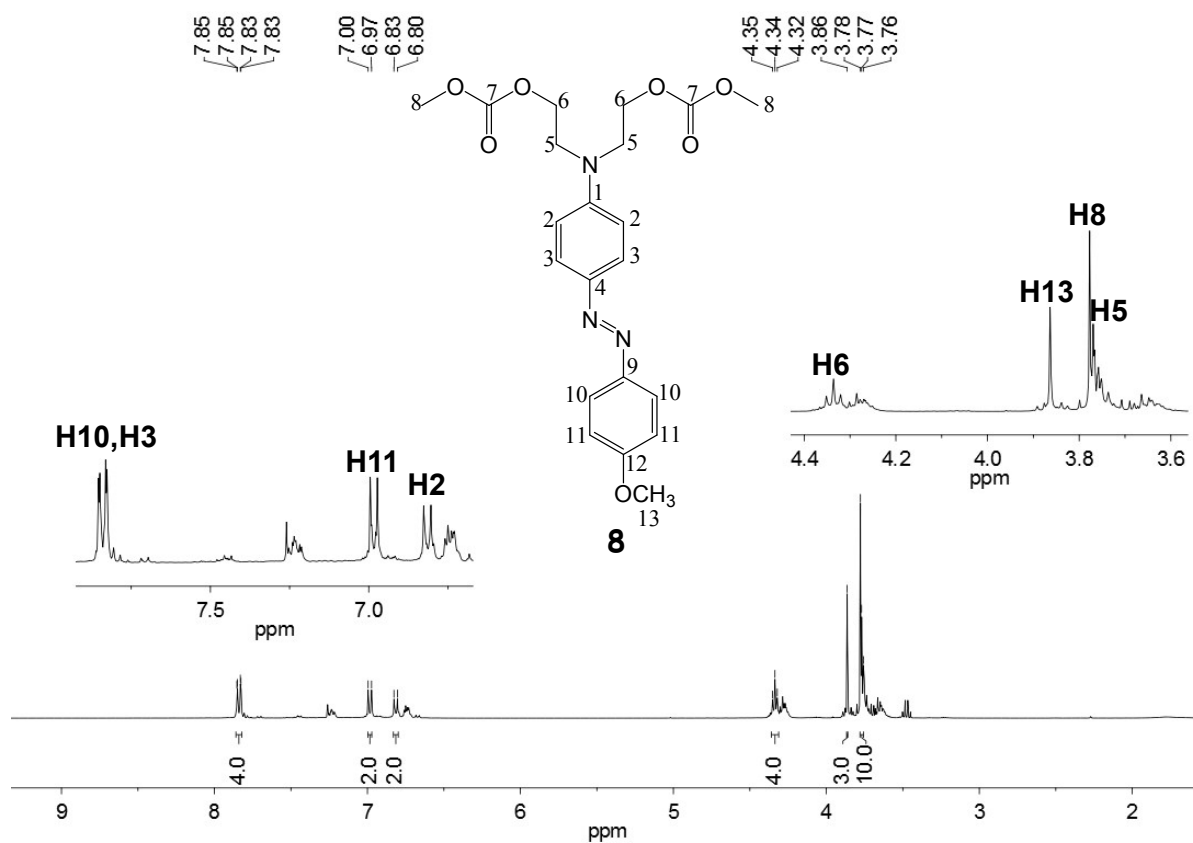
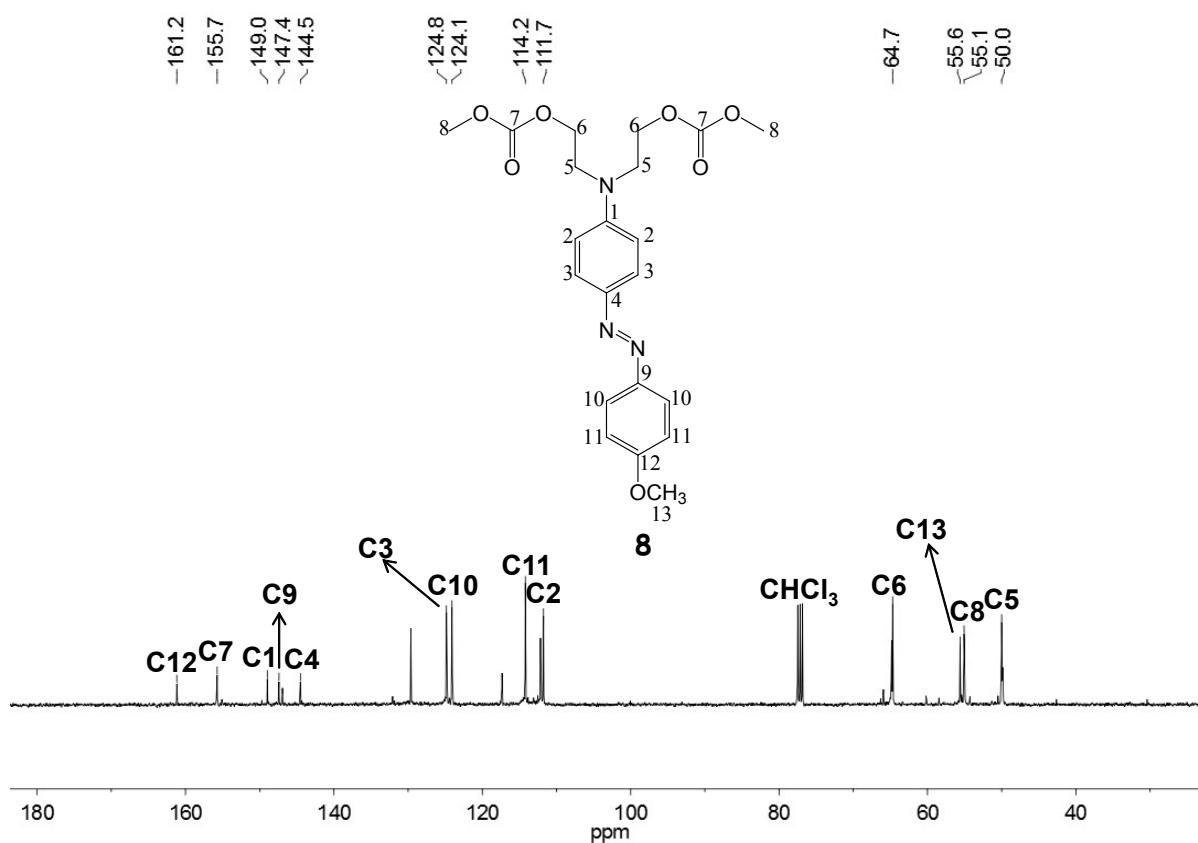


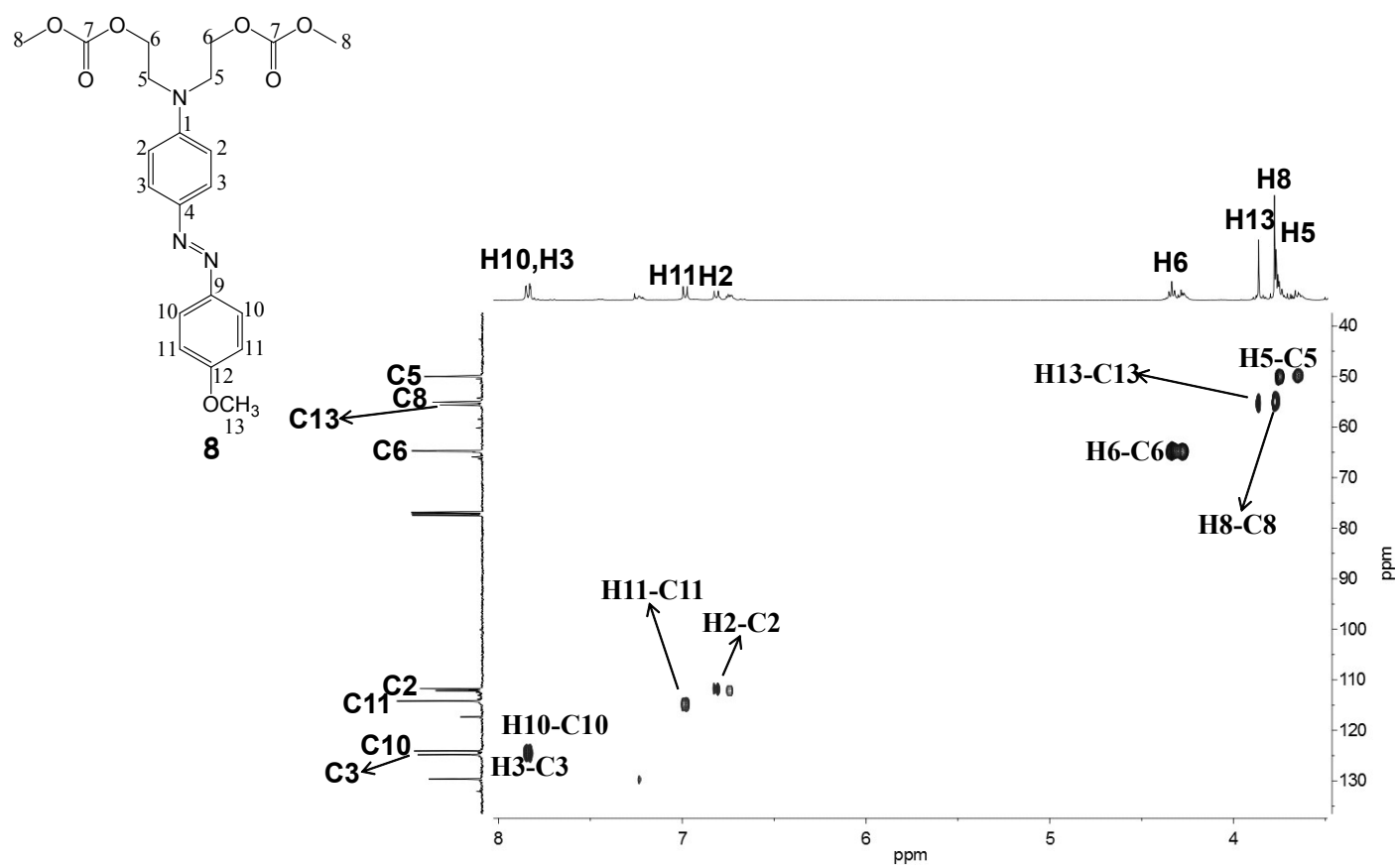
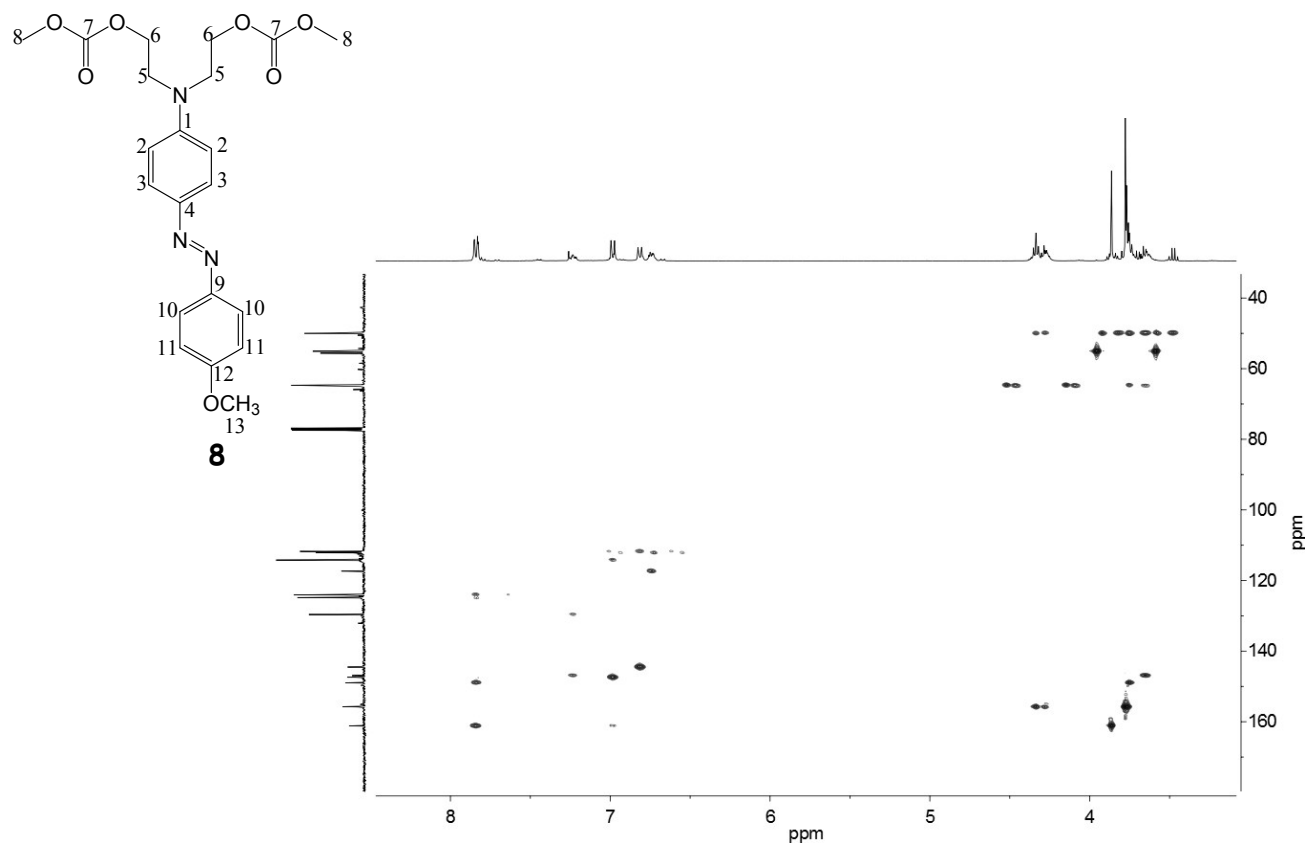
**Figure 34.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 6 (zoom of aromatic region).



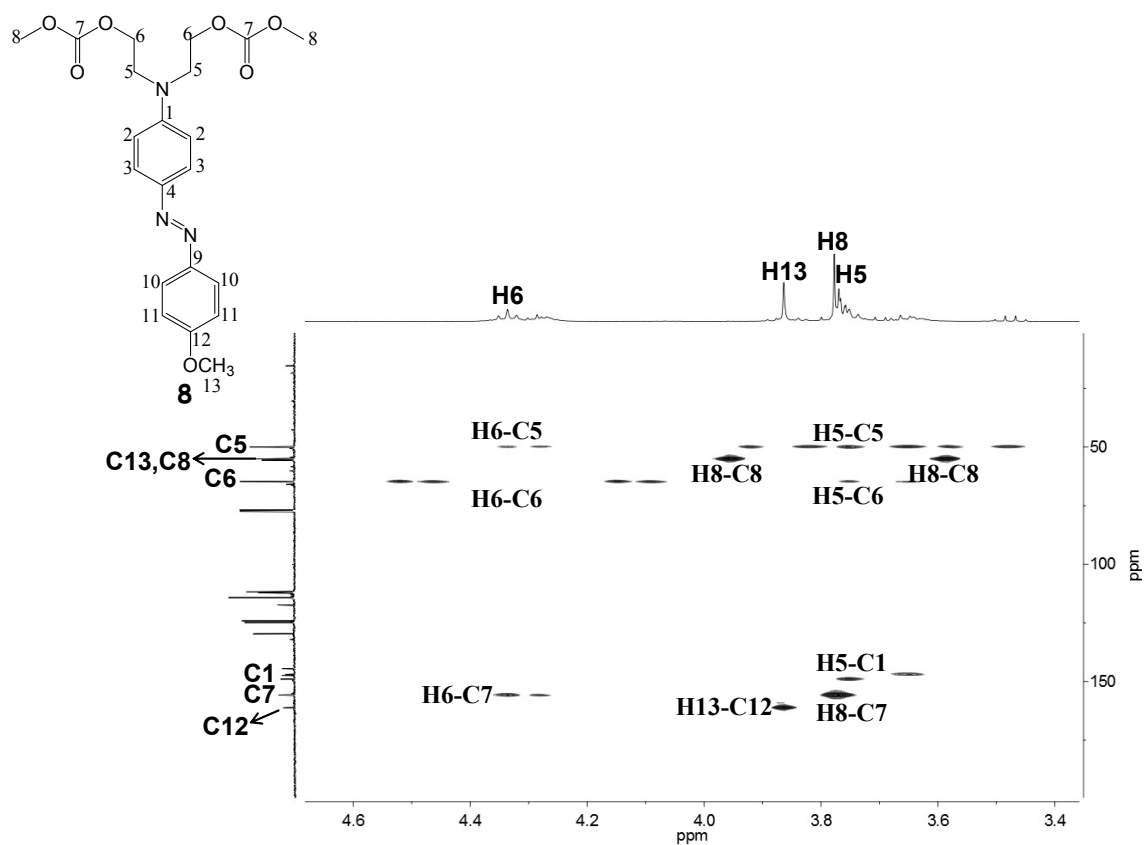
**Figure 35.**  $^1\text{H}$  NMR spectrum of compound 7.**Figure 36.**  $^{13}\text{C}$  NMR spectrum of compound 7.

**Figure 37.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 7.**Figure 38.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 7.

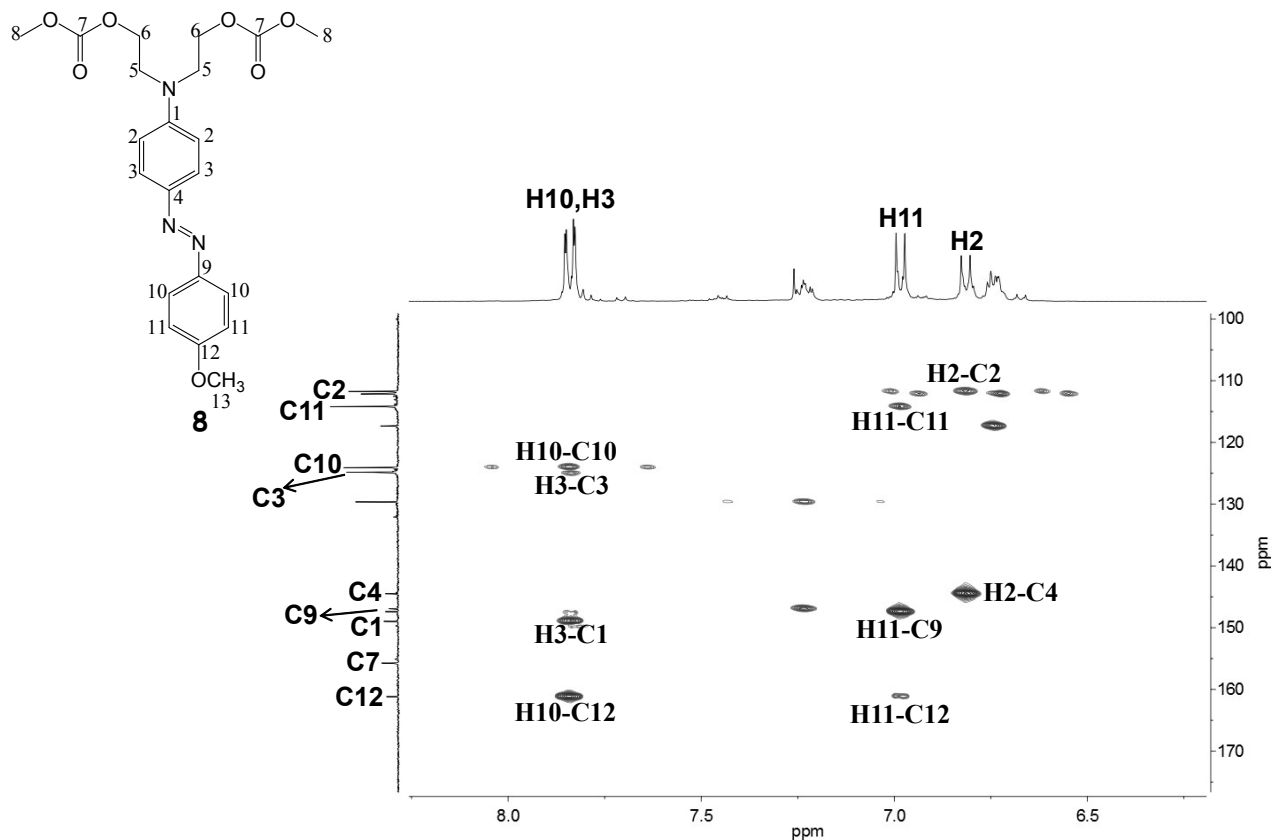
**Figure 39.**  $^1\text{H}$  NMR spectrum of compound 8.**Figure 40.**  $^{13}\text{C}$  NMR spectrum of compound 8.

**Figure 41.**  $^1\text{H}$ - $^{13}\text{C}$  HSQC spectrum of compound 8.**Figure 42.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 8.

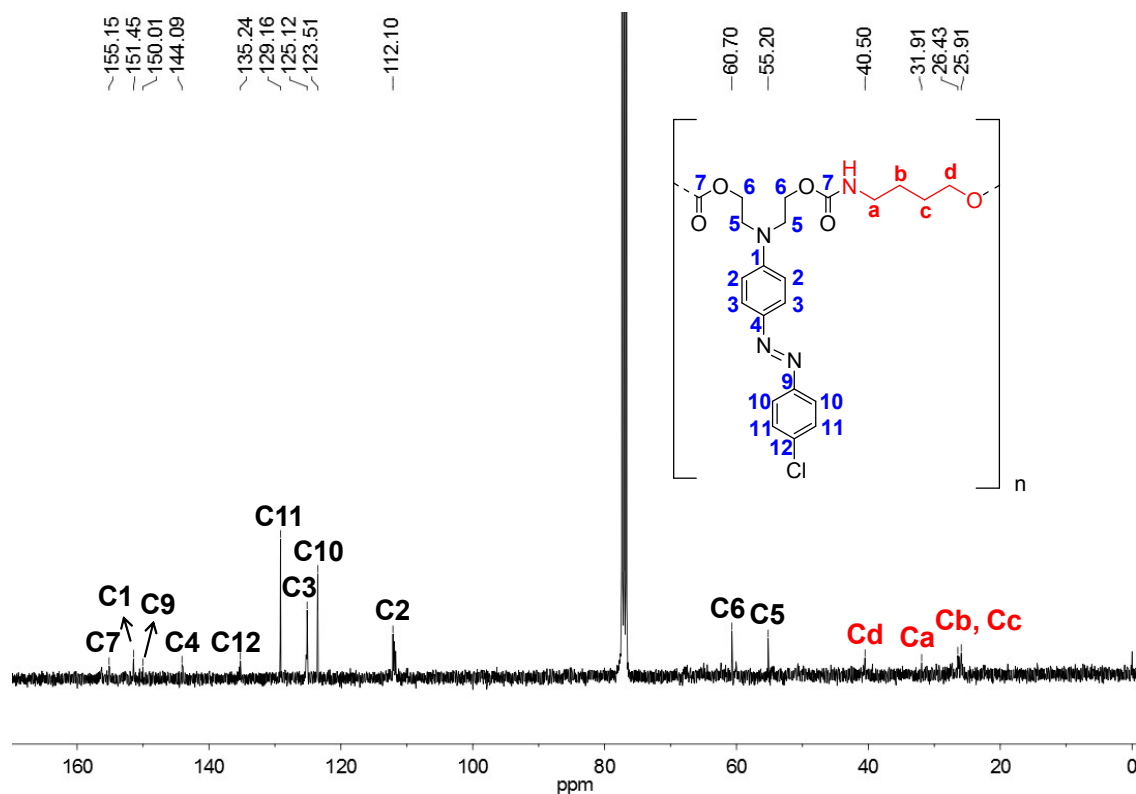
**Figure 43.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 8 (zoom of aliphatic region).



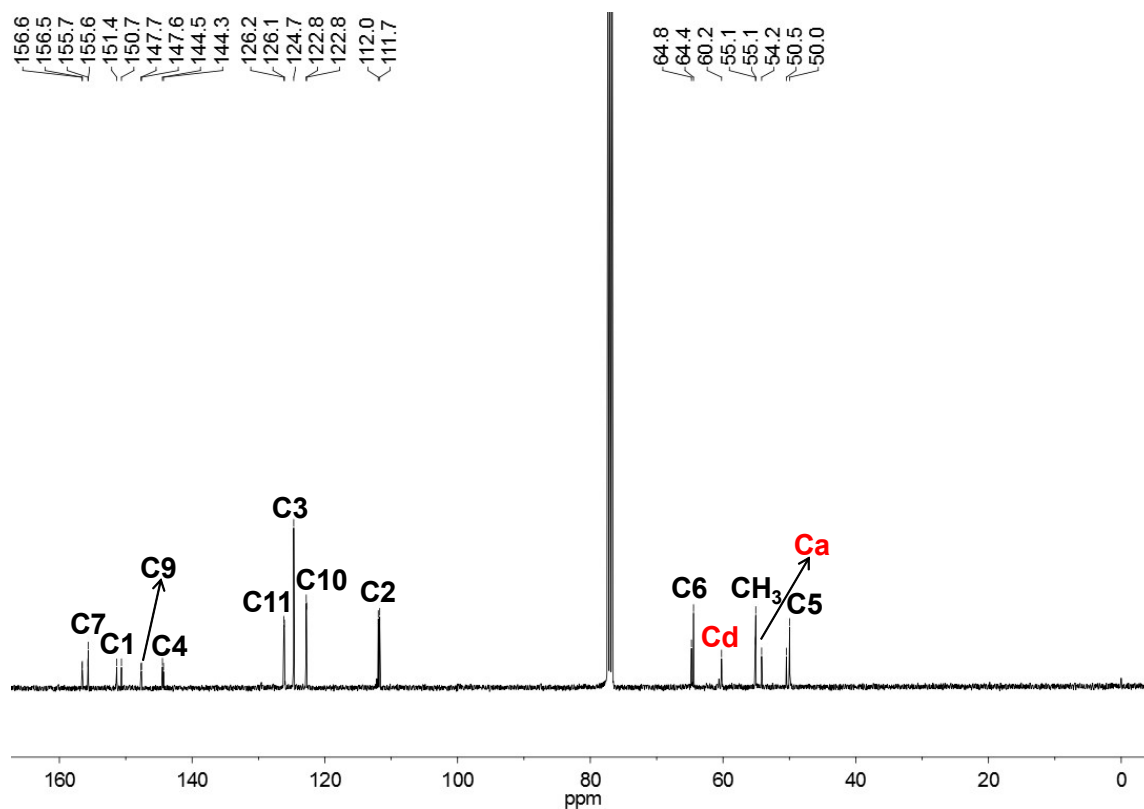
**Figure 44.**  $^1\text{H}$ - $^{13}\text{C}$  HMBC spectrum of compound 8 (zoom of aromatic region).



**Figure 45.**  $^{13}\text{C}$  NMR spectrum of compound PCU 1.



**Figure 46.**  $^{13}\text{C}$  NMR spectrum of compound PCU 2.



## 2. EI-MS

Figure 47. EI-MS spectrum of compound 1.

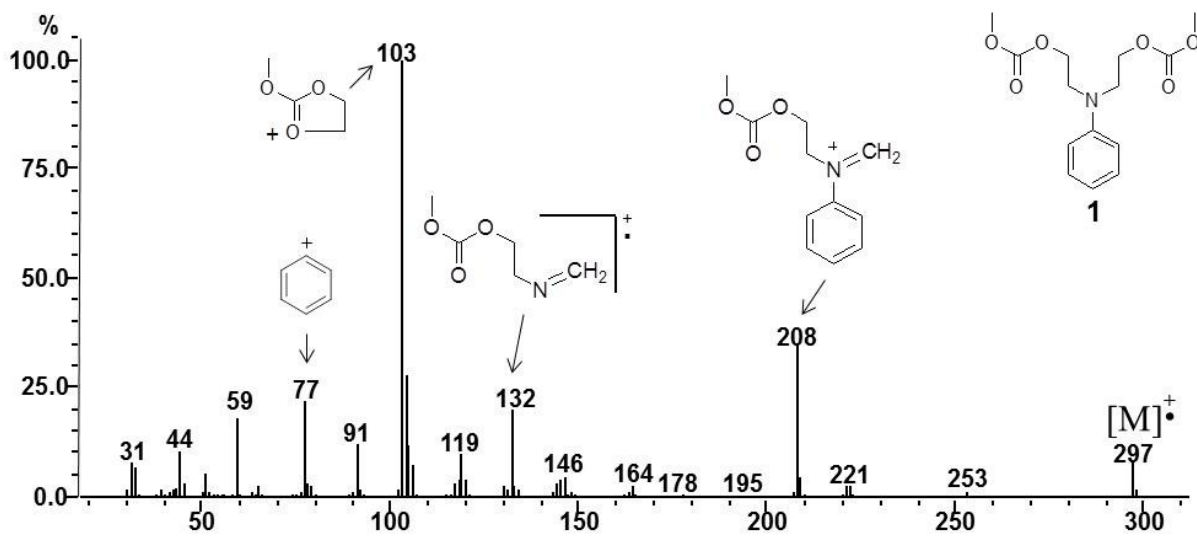


Figure 48. EI-MS spectrum of compound 2.

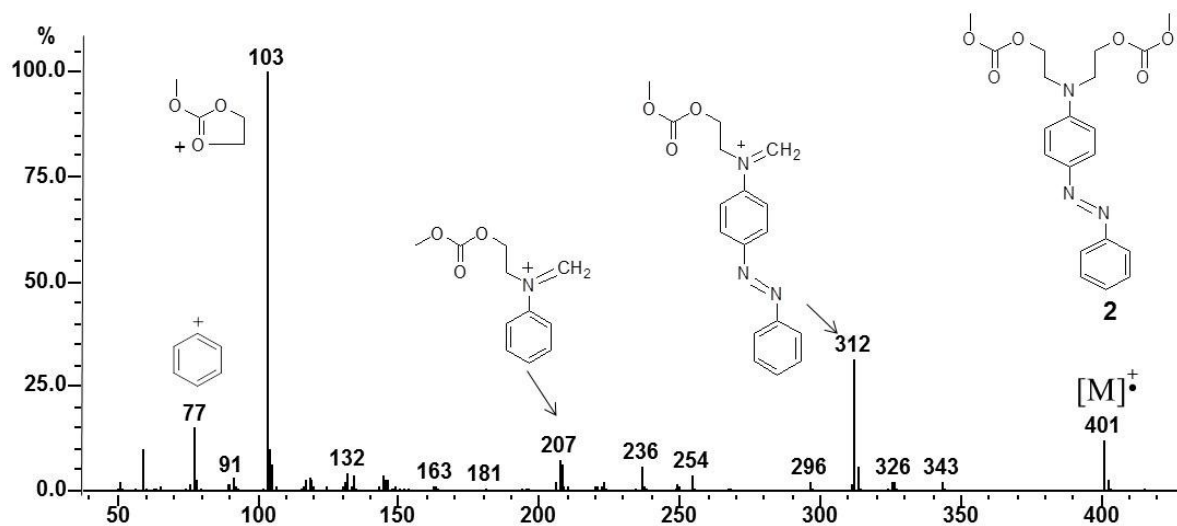
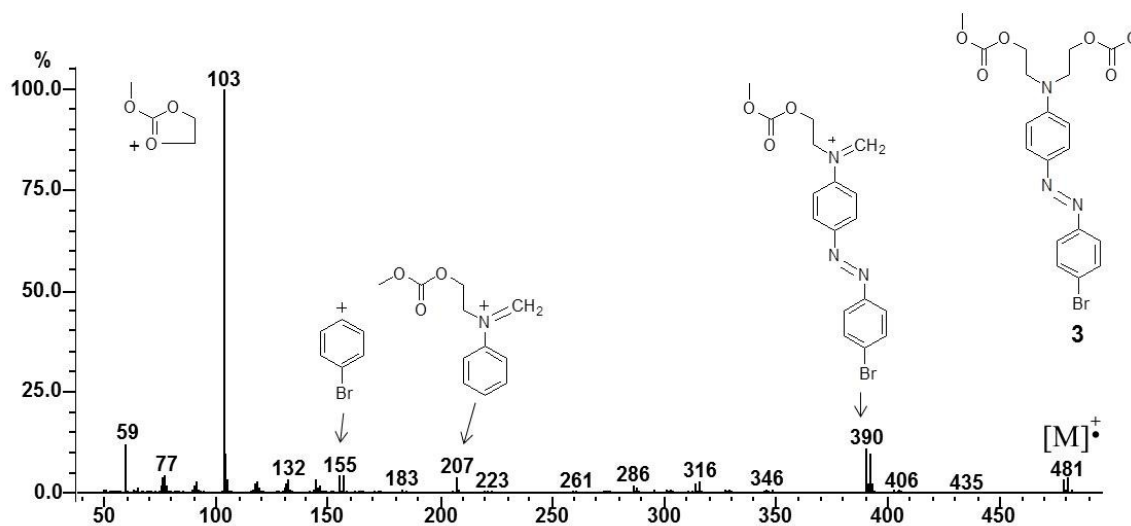
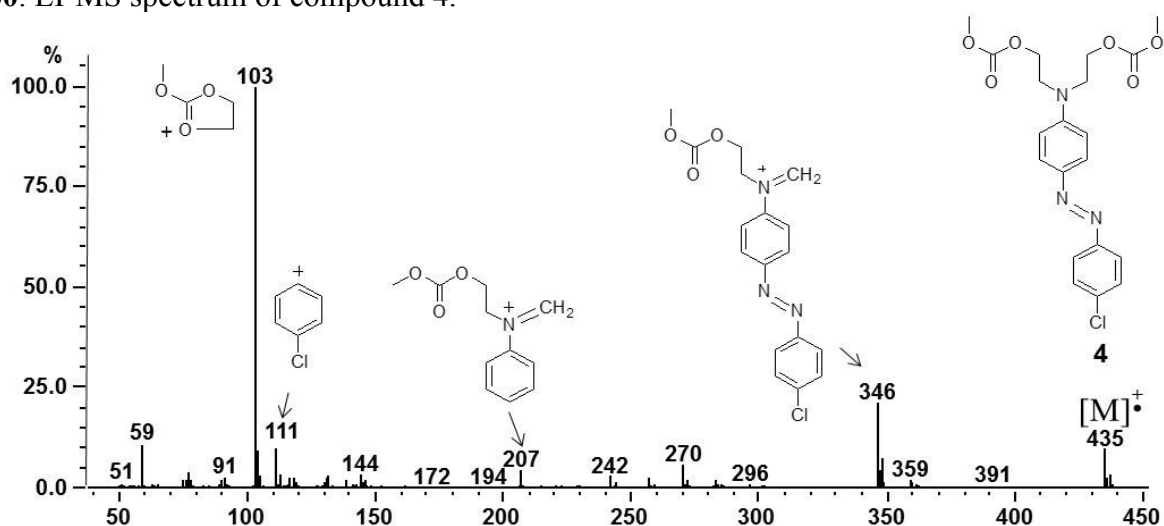
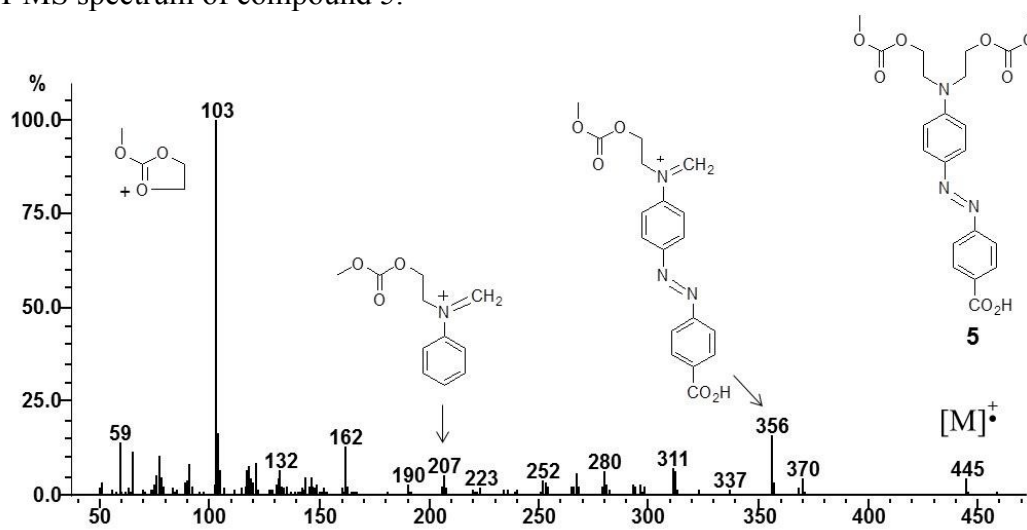
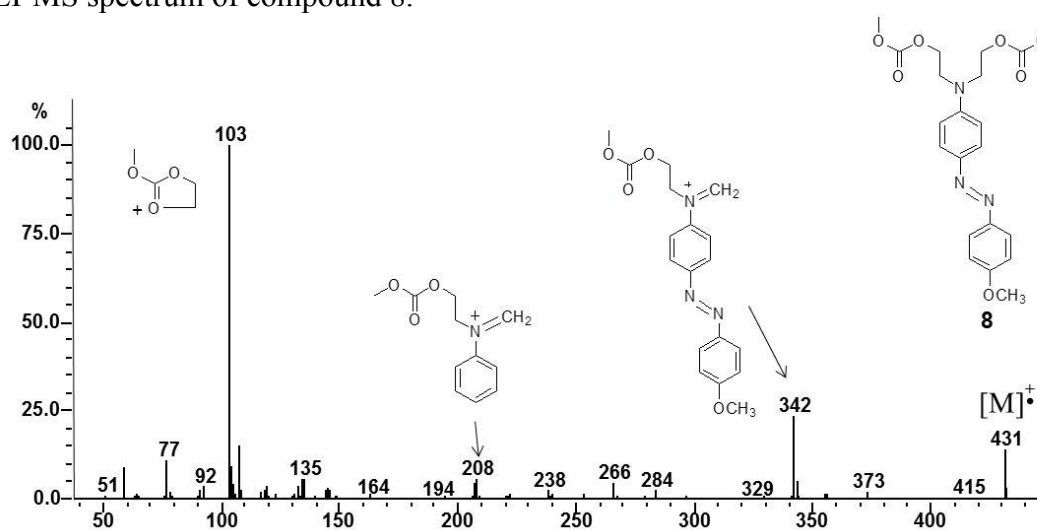


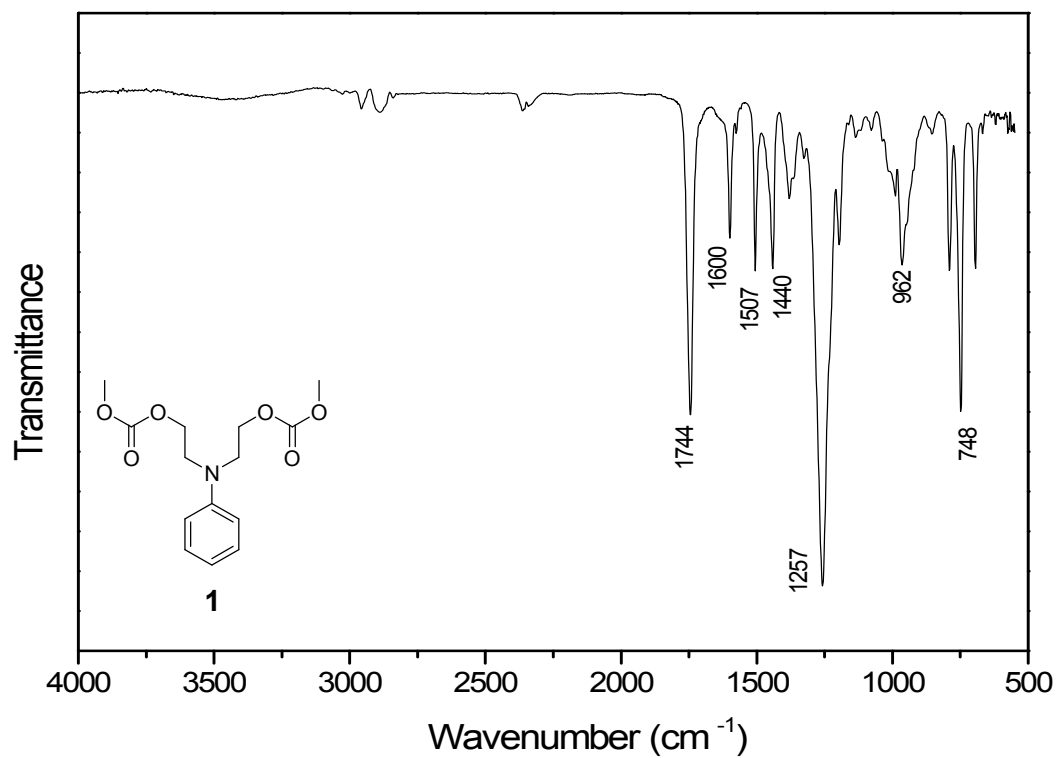
Figure 49. EI-MS spectrum of compound 3.



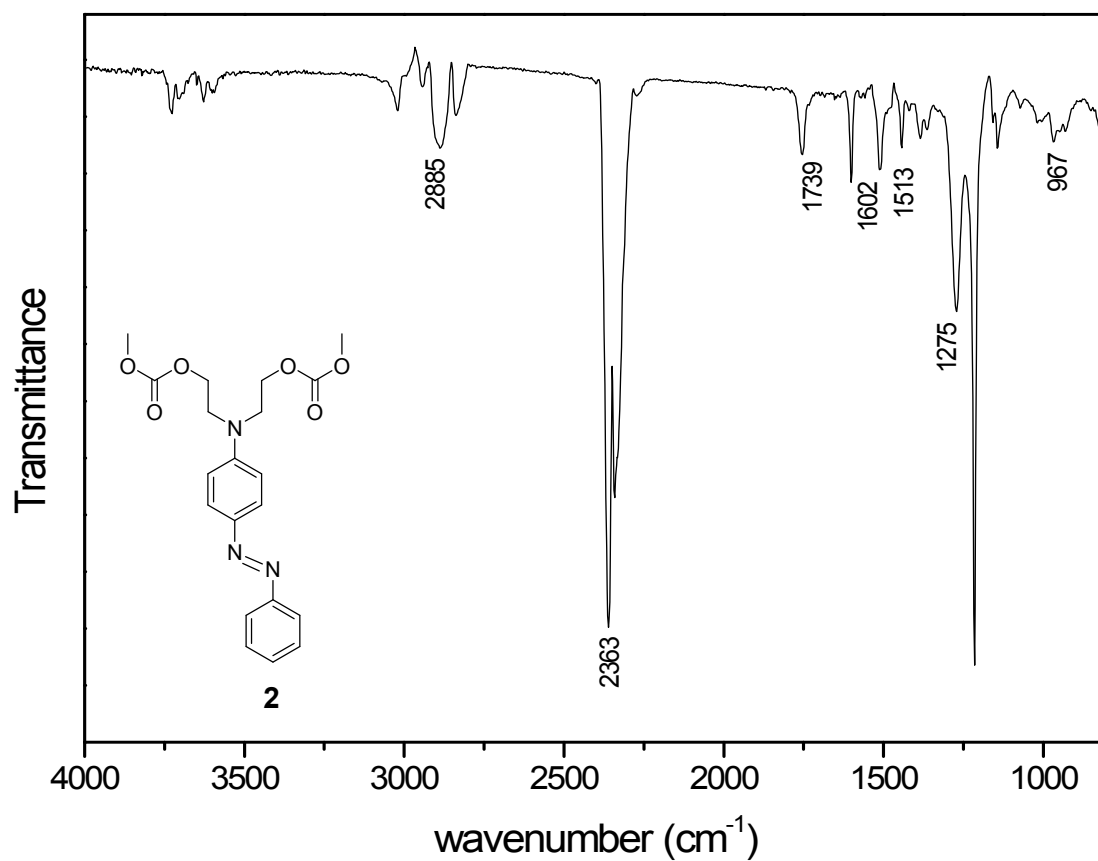
**Figure 50.** EI-MS spectrum of compound 4.**Figure 51.** EI-MS spectrum of compound 5.**Figure 52.** EI-MS spectrum of compound 8.

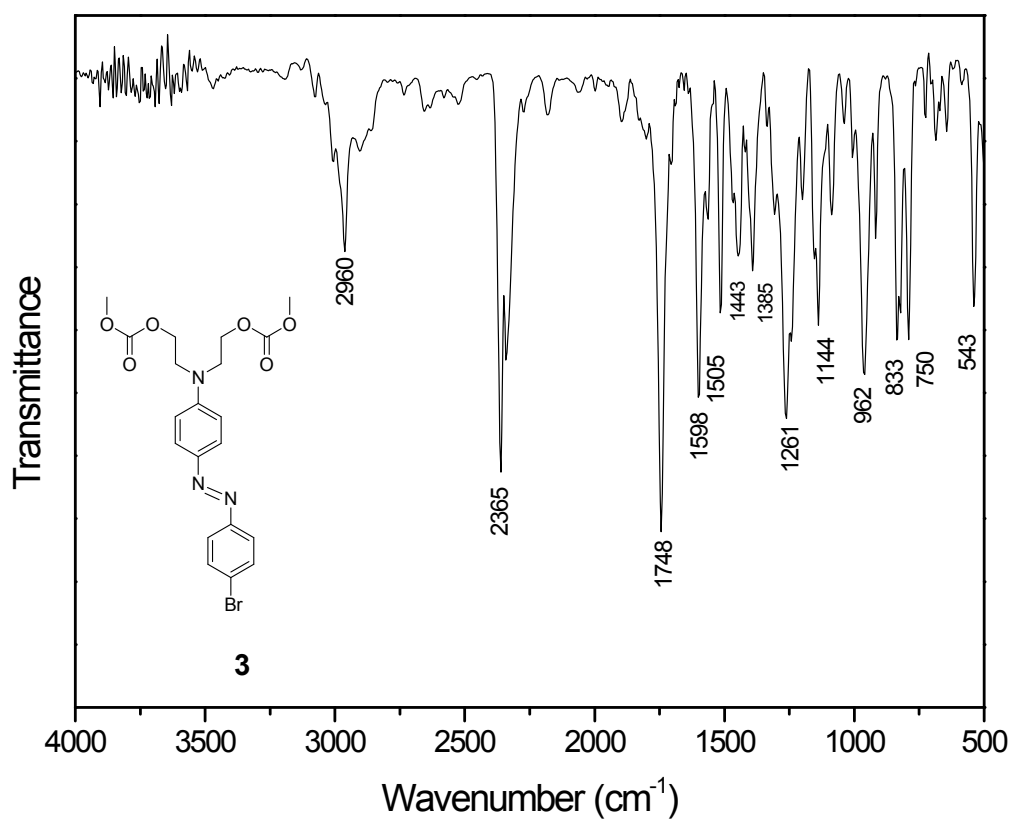
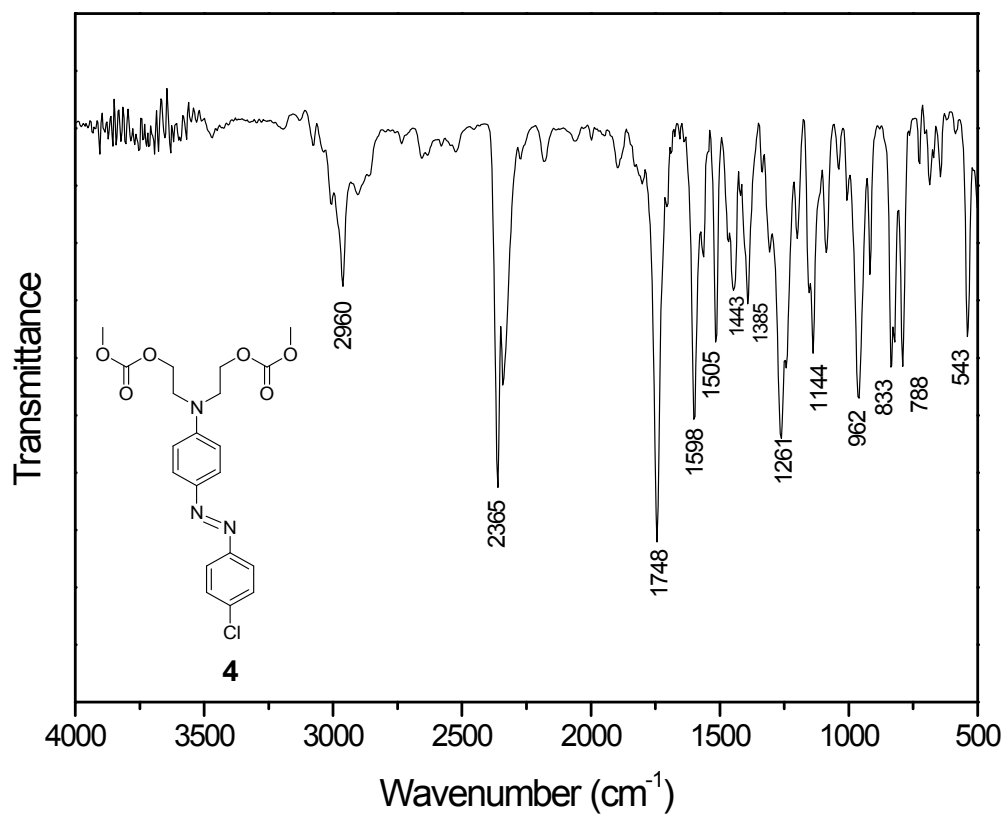
### 3. FT-IR

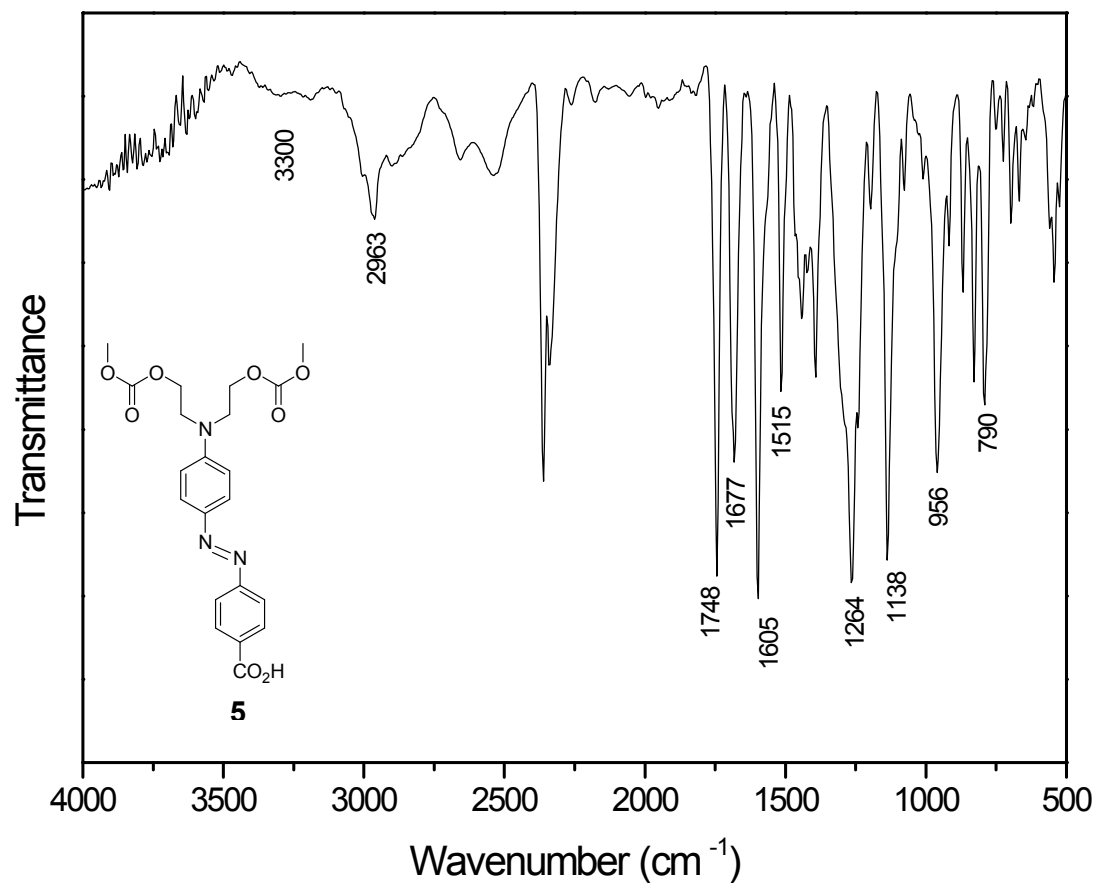
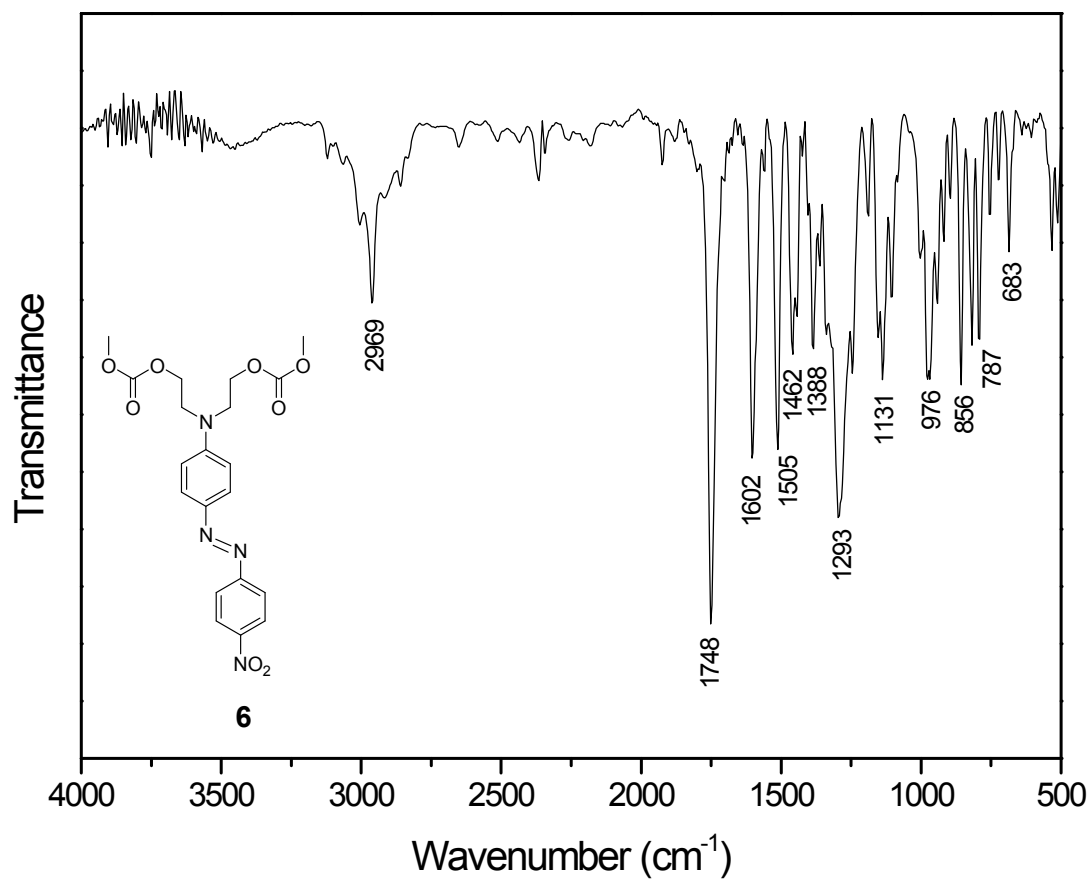
**Figure 53.** FT-IR spectrum of compound 1 in KBr pellet.

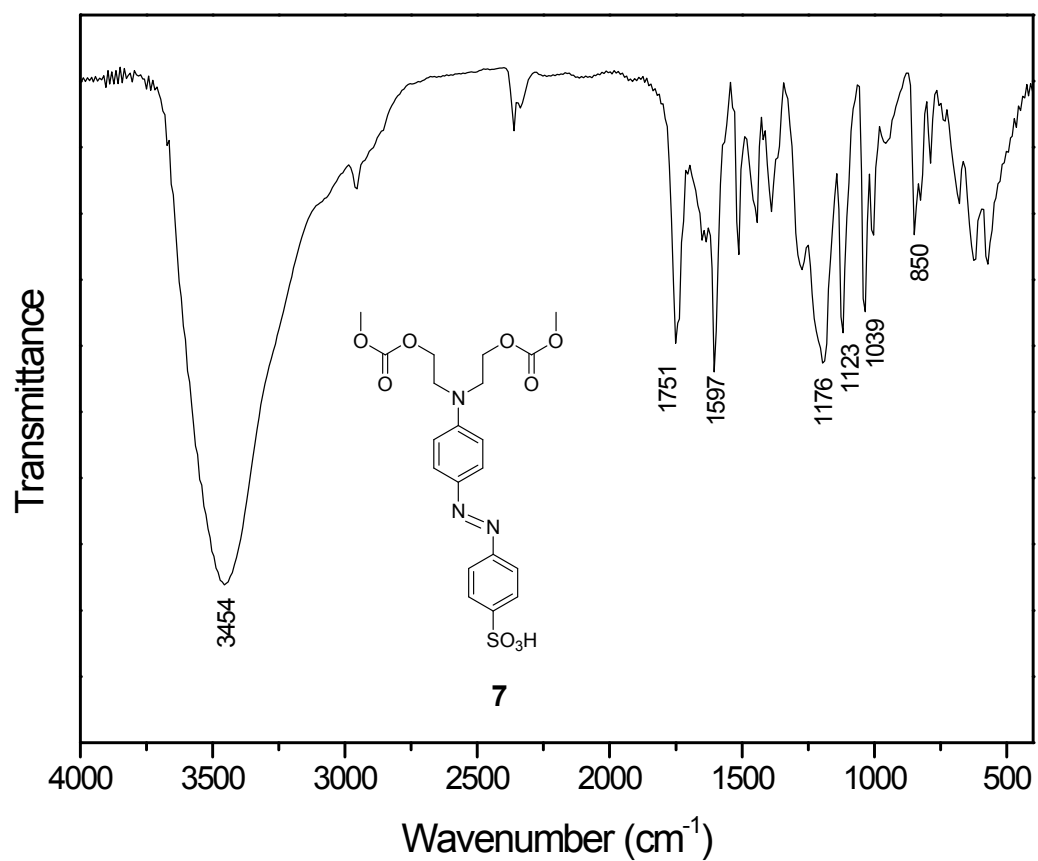
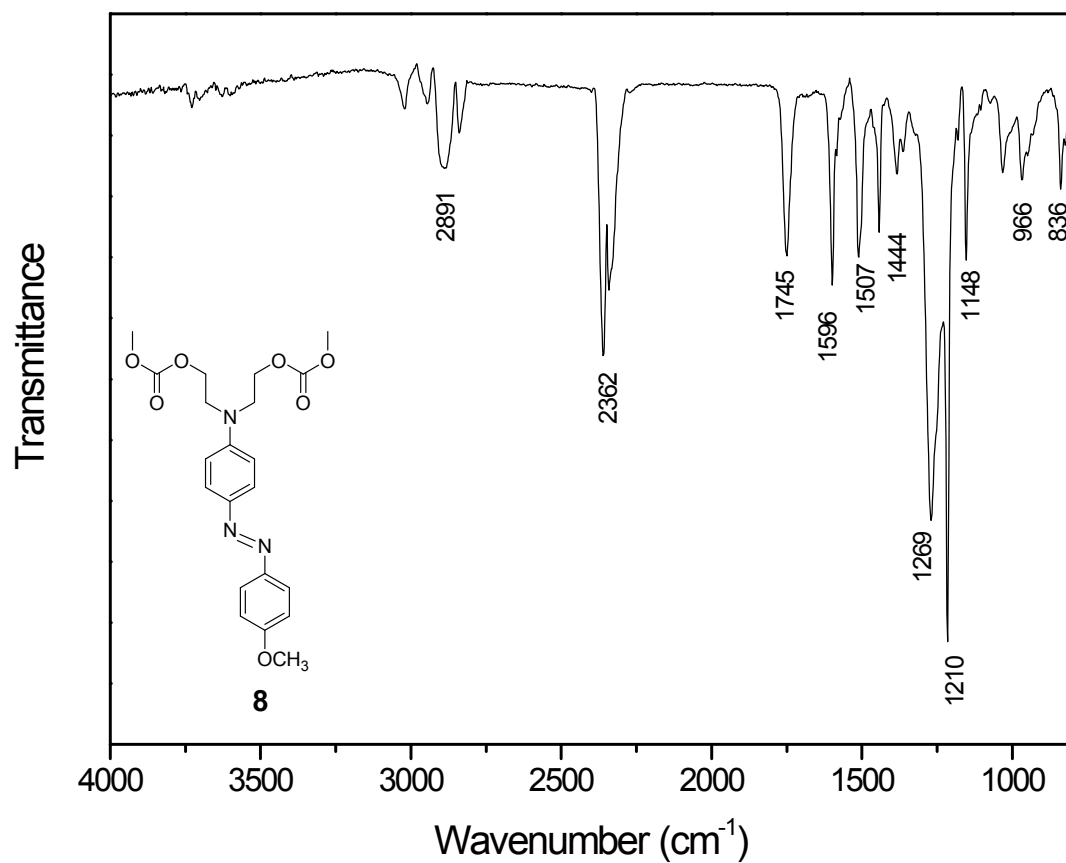


**Figure 54.** FT-IR spectrum of compound 2 in KBr pellet.

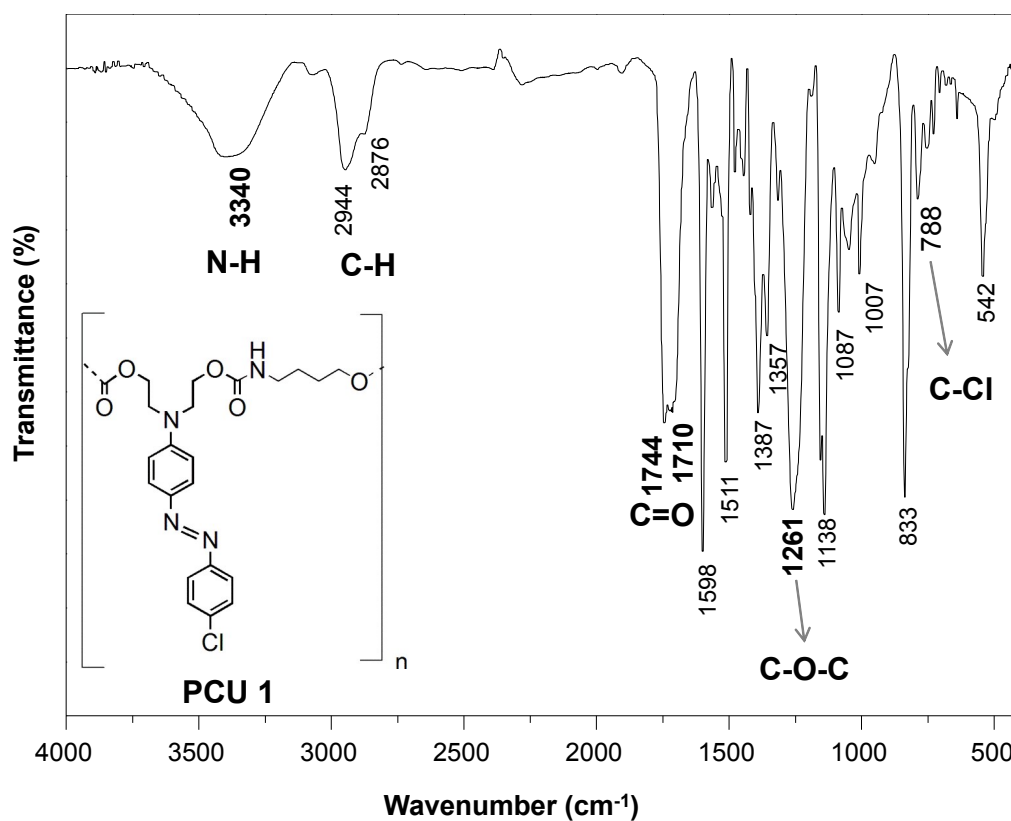


**Figure 55.** FT-IR spectrum of compound 3 in KBr pellet.**Figure 56.** FT-IR spectrum of compound 4 in KBr pellet.

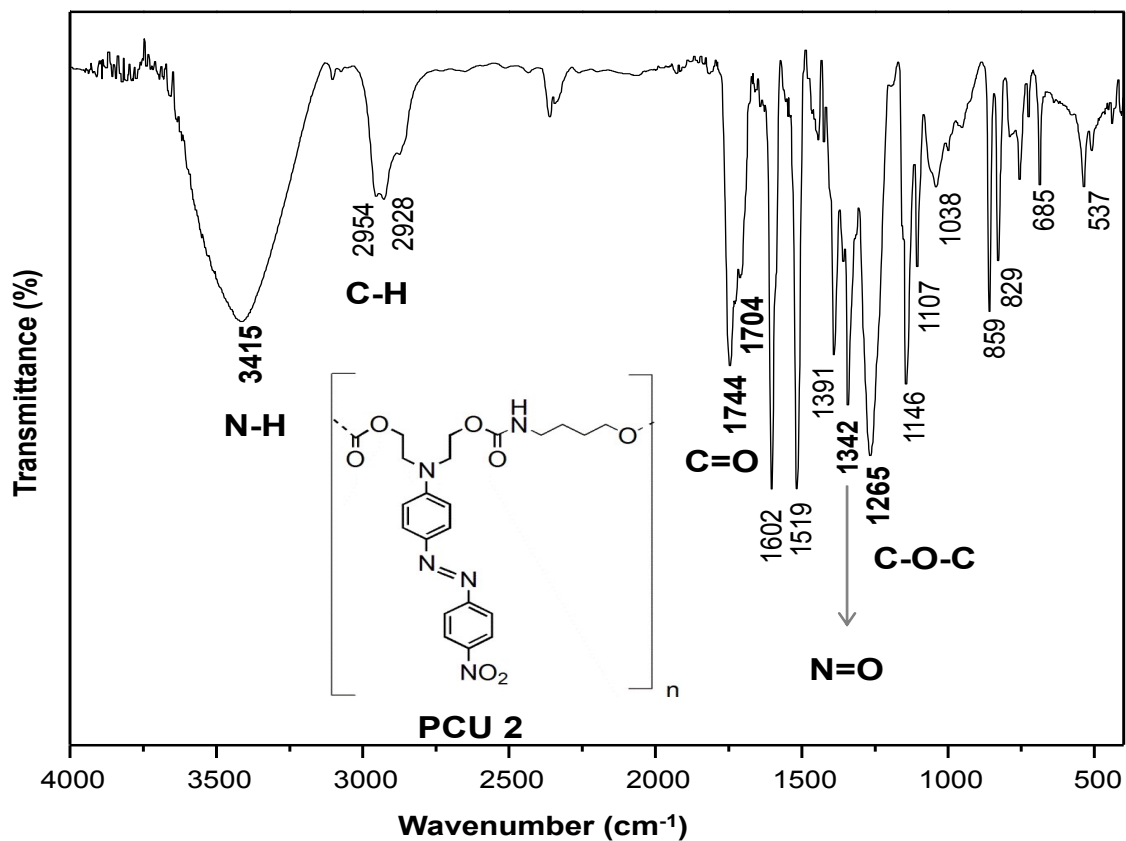
**Figure 57.** FT-IR spectrum of compound 5 in KBr pellet.**Figure 58.** FT-IR spectrum of compound 6 in KBr pellet.

**Figure 59.** FT-IR spectrum of compound 7 in KBr pellet.**Figure 60.** FT-IR spectrum of compound 8 in KBr pellet.

**Figure 61.** FT-IR spectrum of PCU 1 in KBr pellet.

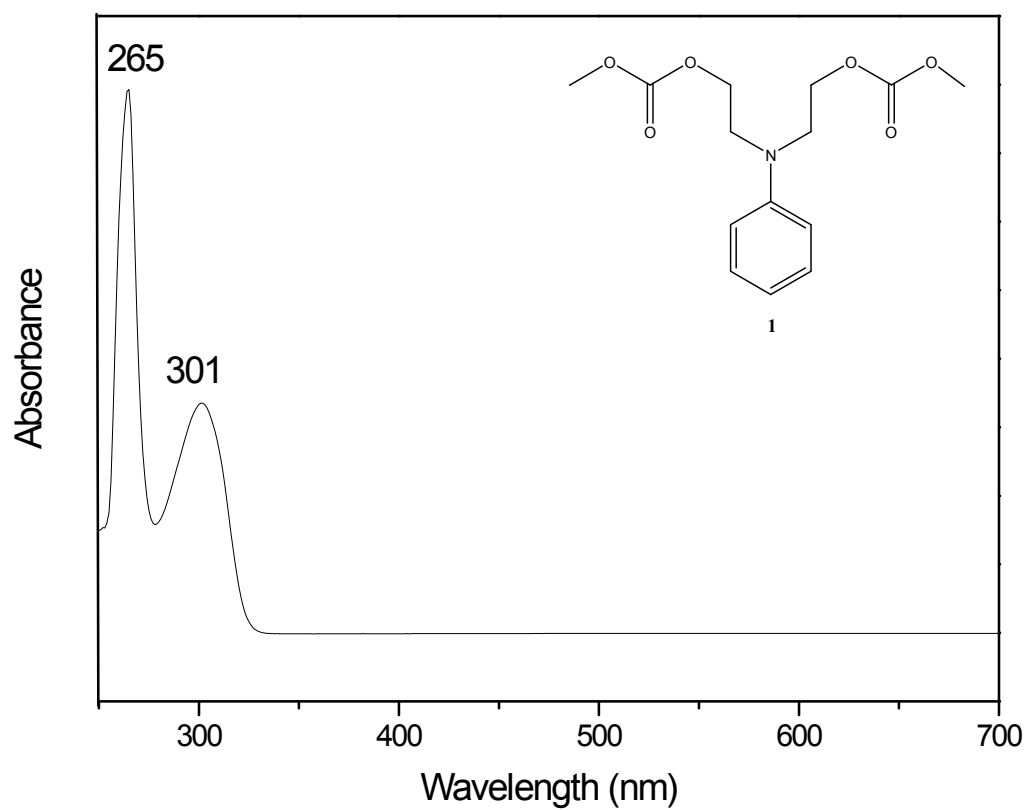


**Figure 62.** FT-IR spectrum of PCU 2 in KBr pellet.

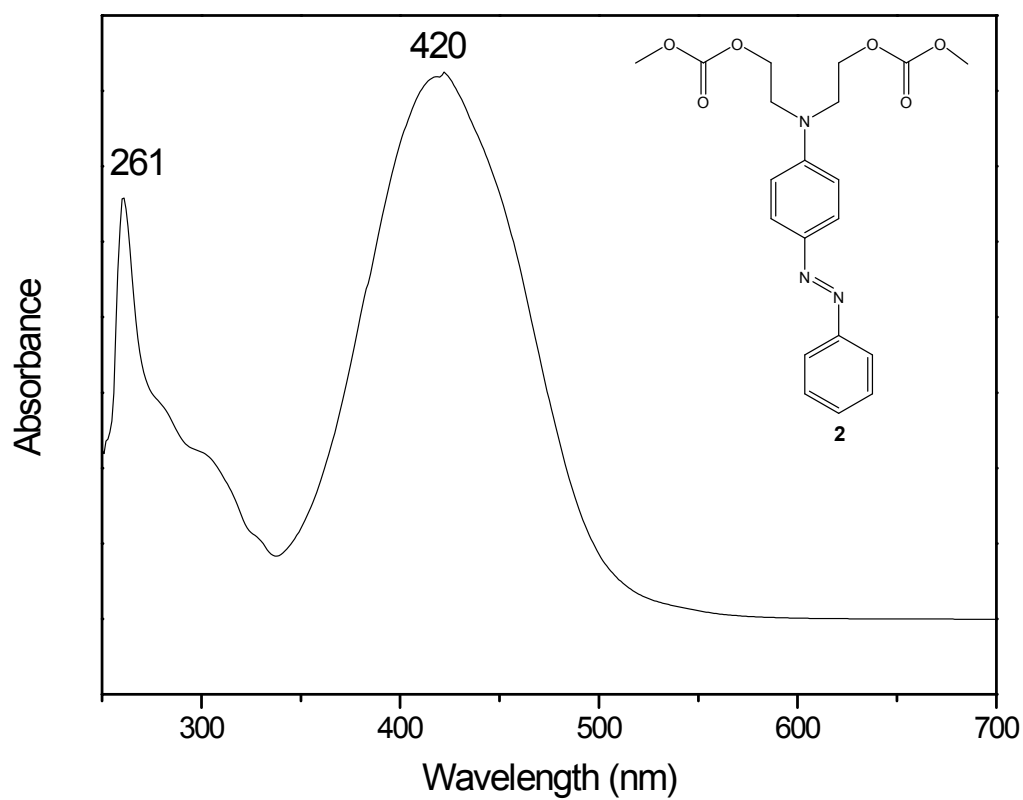


#### 4. UV-Vis

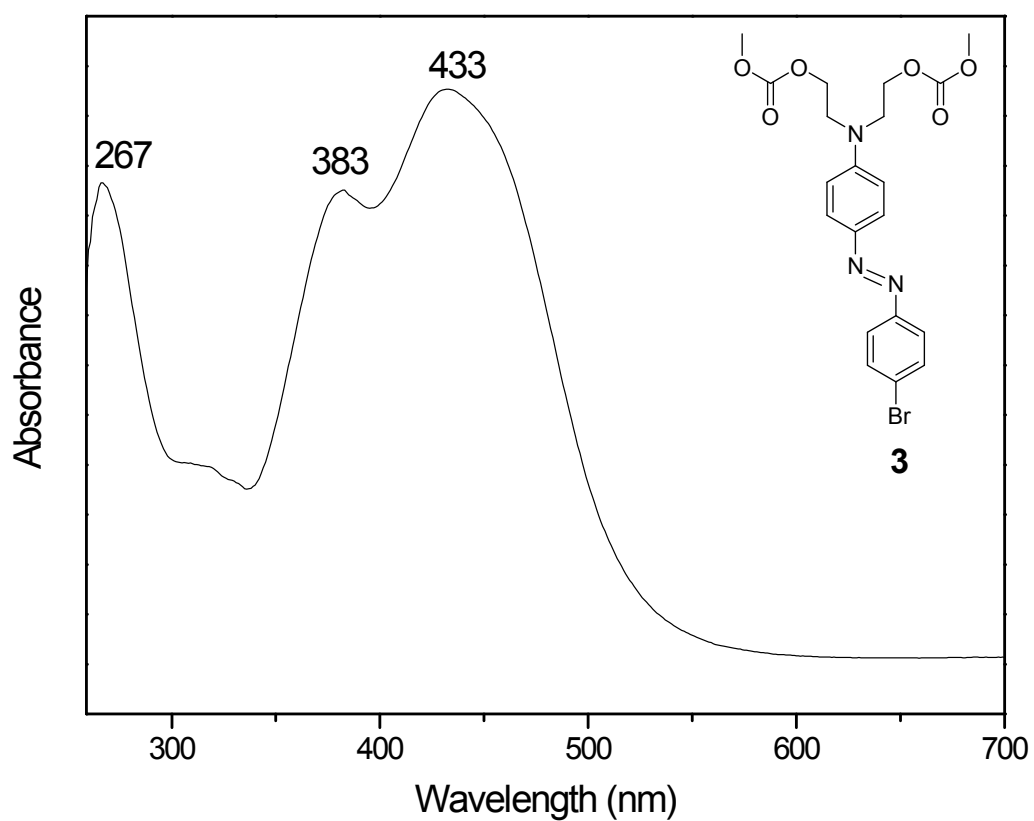
**Figure 63.** UV-Vis spectrum of compound 1 in DMSO.



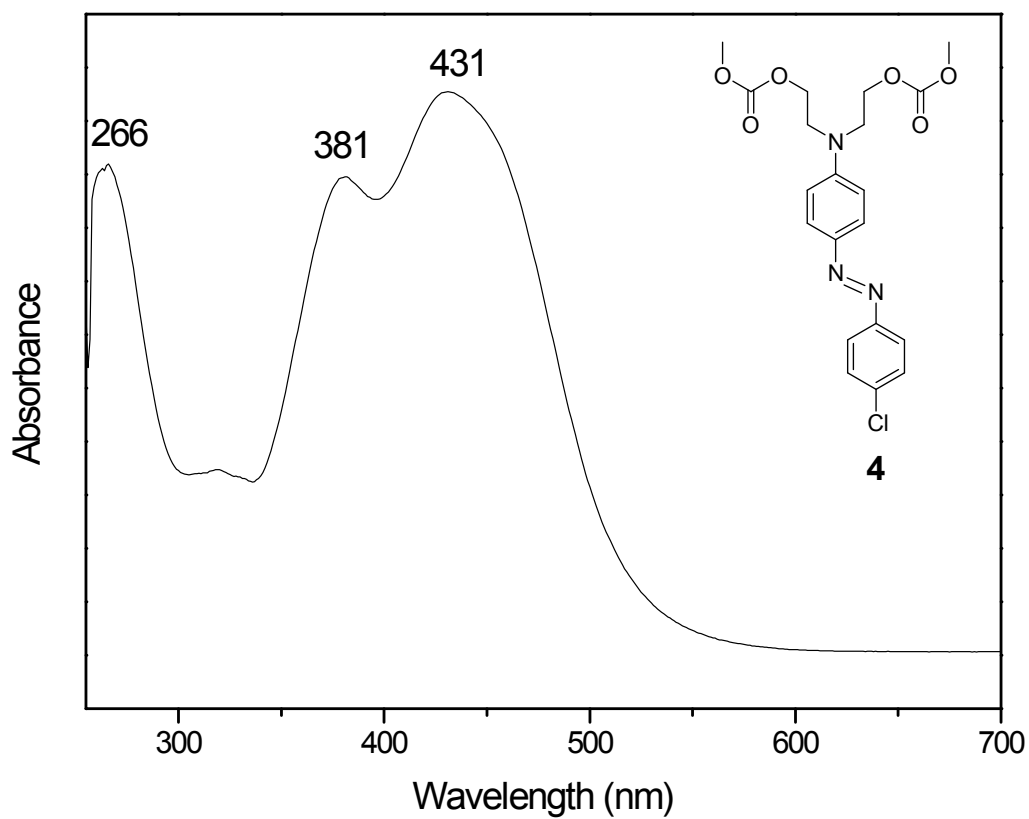
**Figure 64.** UV-Vis spectrum of compound 2 in DMSO.



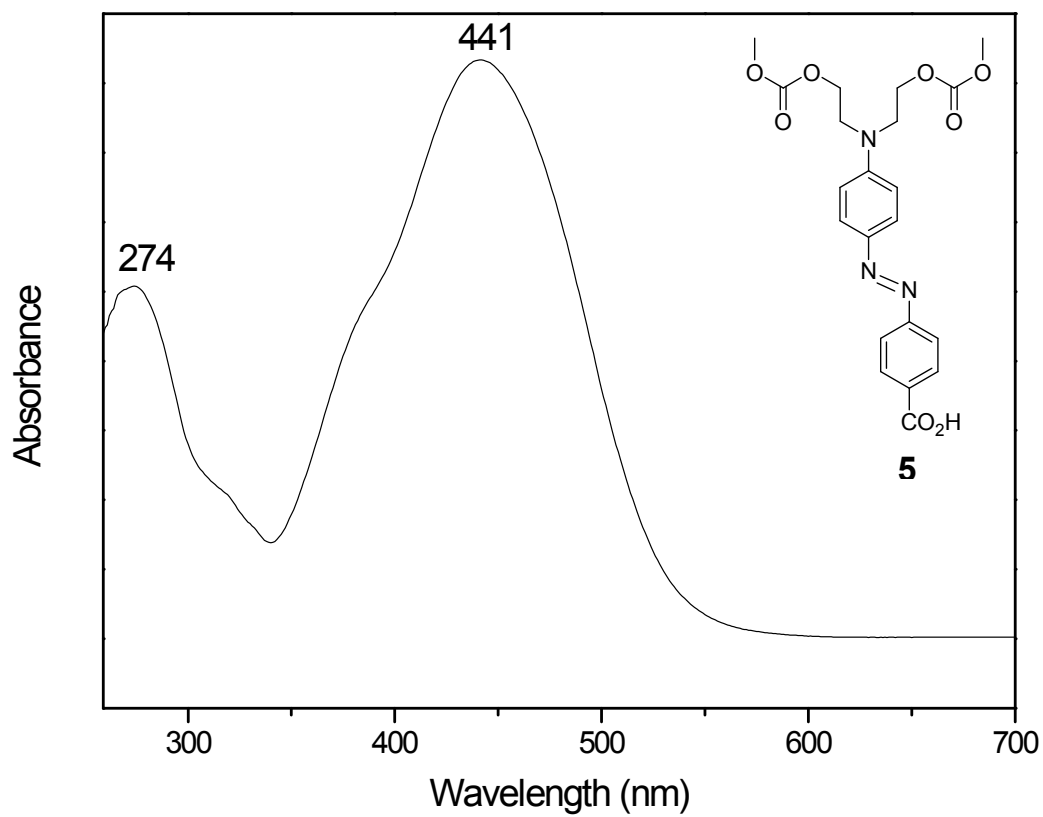
**Figure 65.** UV-Vis spectrum of compound 3 in DMSO.



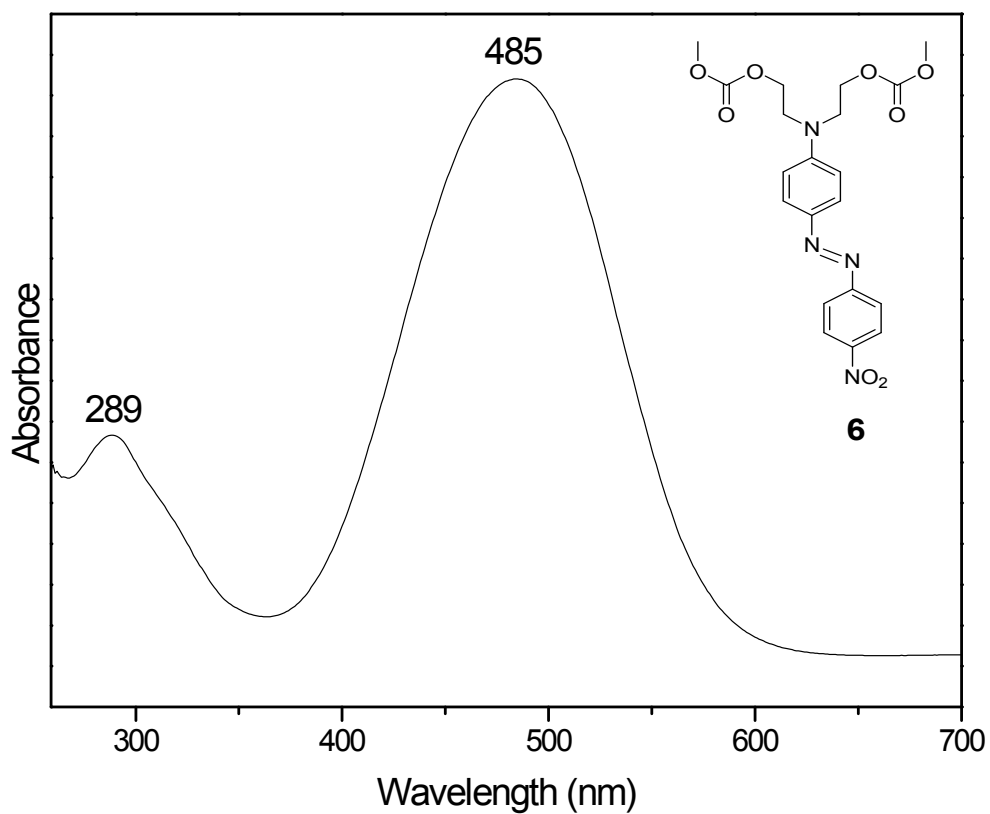
**Figure 66.** UV-Vis spectrum of compound 4 in DMSO.

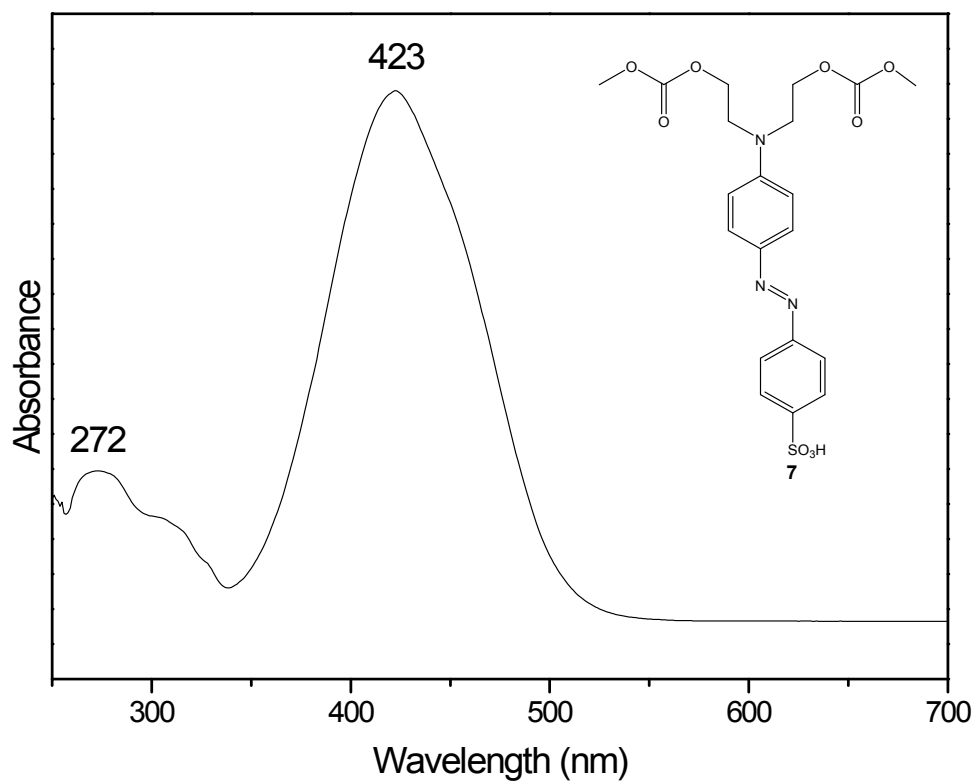
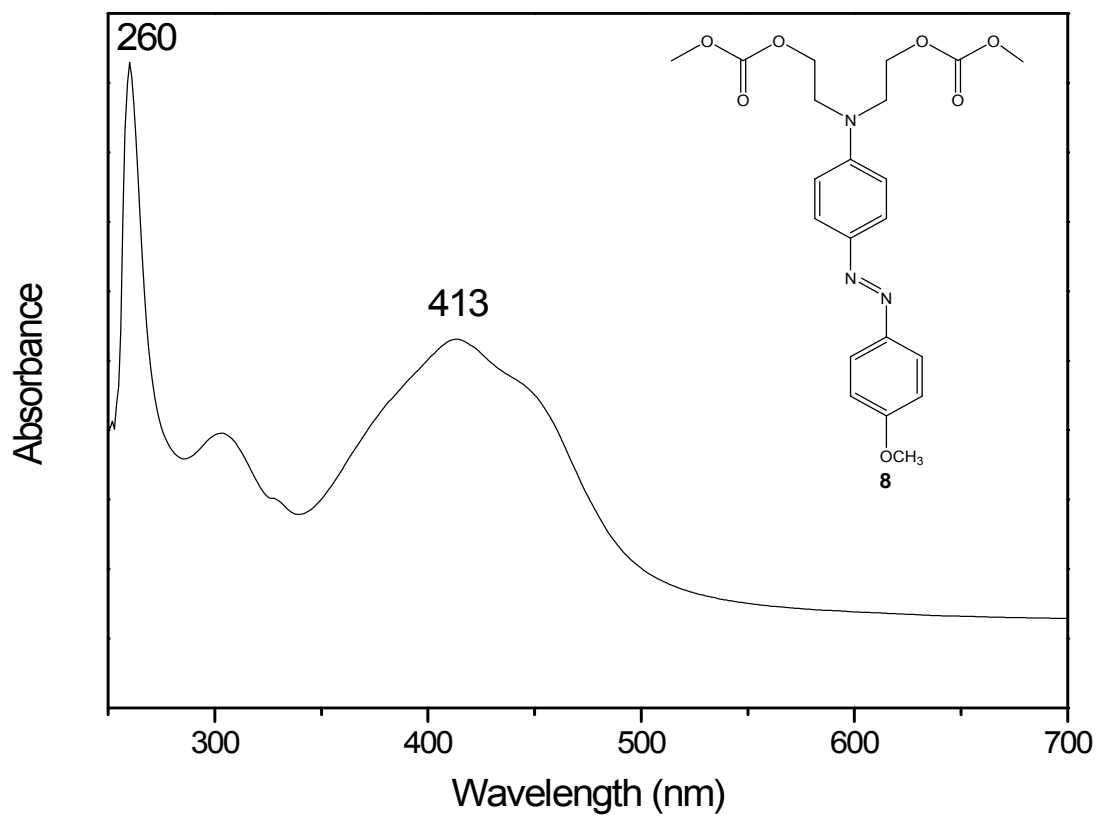


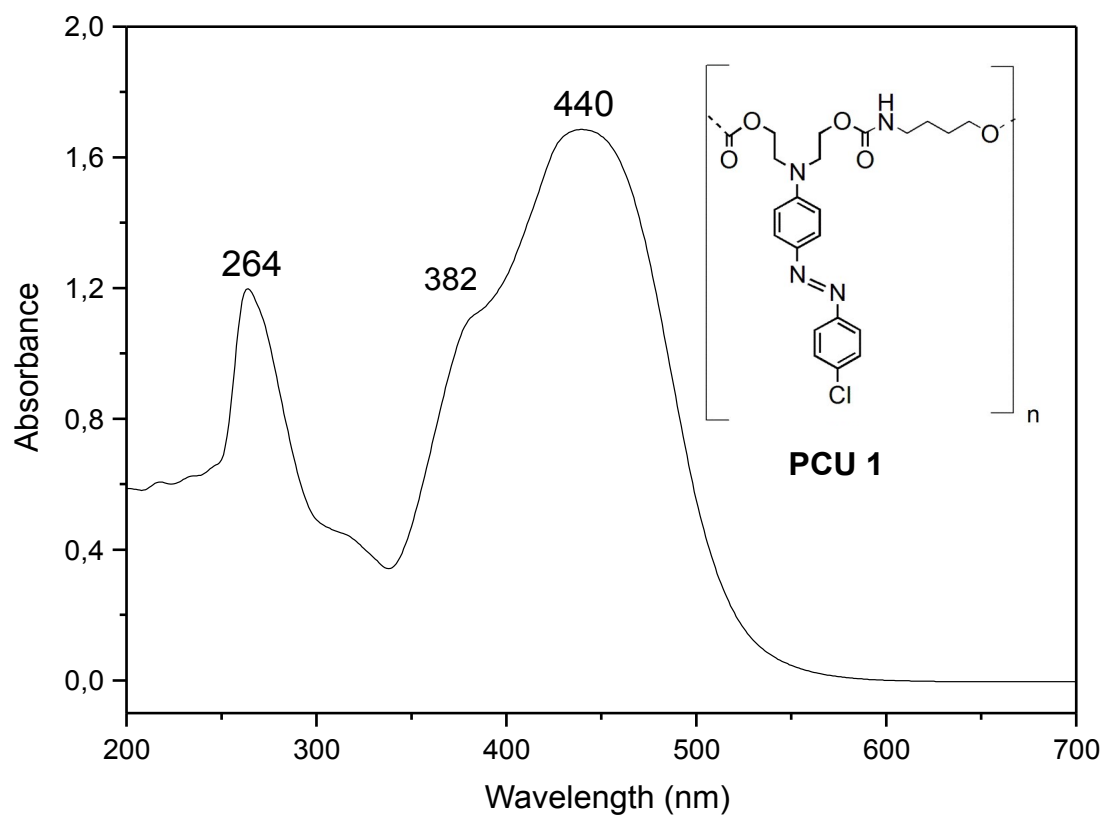
**Figure 67.** UV-Vis spectrum of compound 5 in DMSO.



**Figure 68.** UV-Vis spectrum of compound 6 in DMSO.



**Figure 69.** UV-Vis spectrum of compound 7 in DMSO.**Figure 70.** UV-Vis spectrum of compound 8 in DMSO.

**Figure 71.** UV-Vis spectrum of PCU 1 in DMSO.**Figure 72.** UV-Vis spectrum of PCU 2 in DMSO.