

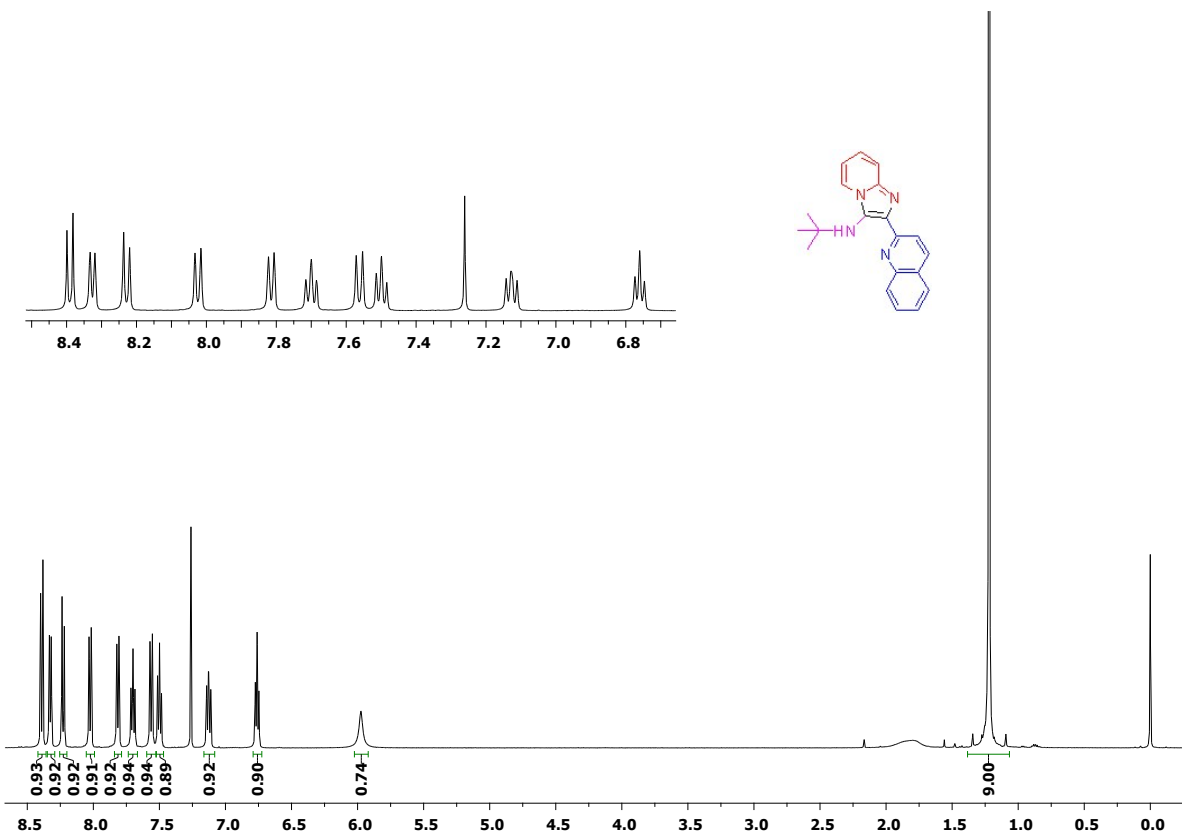
## Supporting information

### **A facile I<sub>2</sub>-catalyzed synthesis of imidazo[1,2-*a*]pyridines *via* sp<sup>3</sup> C-H functionalization of azaarenes and evaluation of anticancer activity**

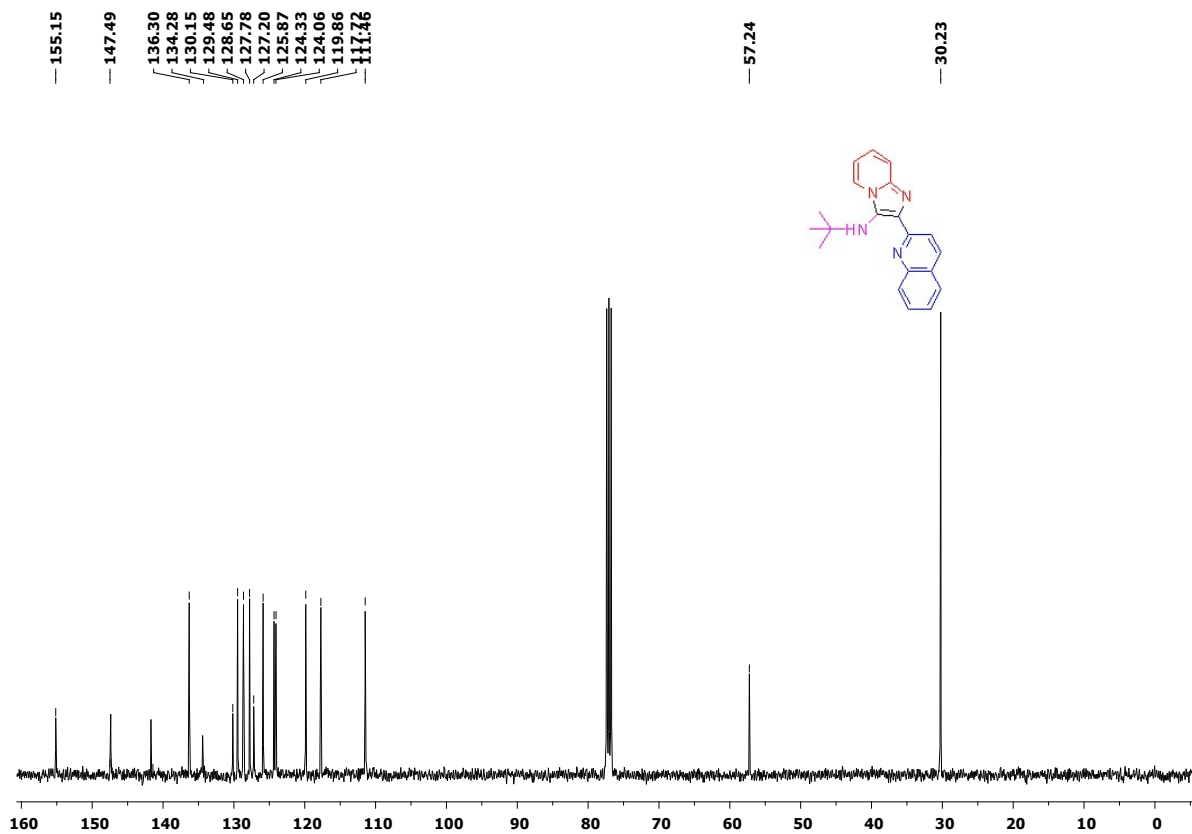
Geeta Sai Mani,<sup>a,b</sup> Siddiq Pasha Shaik,<sup>b</sup> Yellaiah Tangella,<sup>b</sup> Swarna Bale,<sup>a</sup> Chandraiah Godugu<sup>a</sup> and Ahmed Kamal<sup>\*a,b</sup>

#### **List of contents**

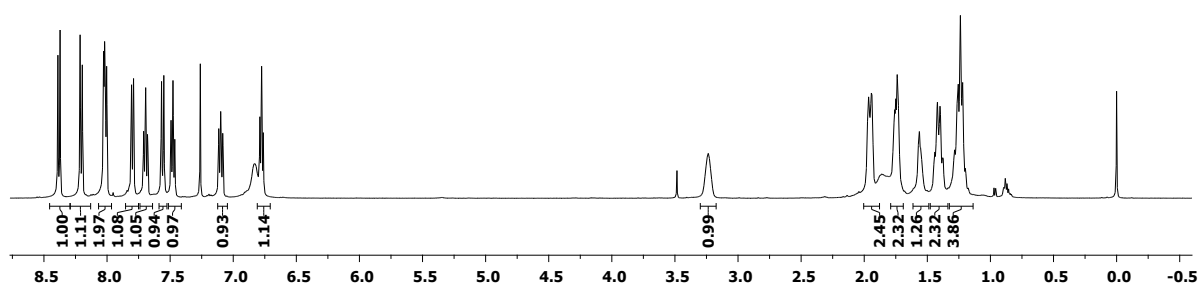
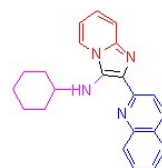
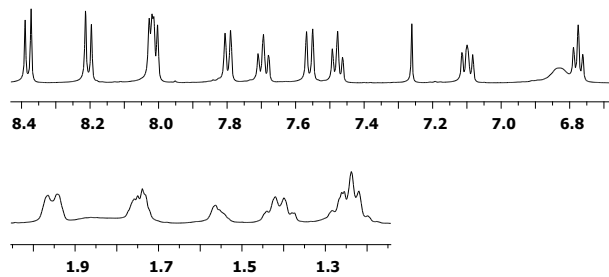
<sup>1</sup> H and <sup>13</sup> C NMR spectra of compounds <b>4a-k</b> , <b>7a-p</b> and <b>5a-c</b> .....	<b>2-31</b>
---	-------------



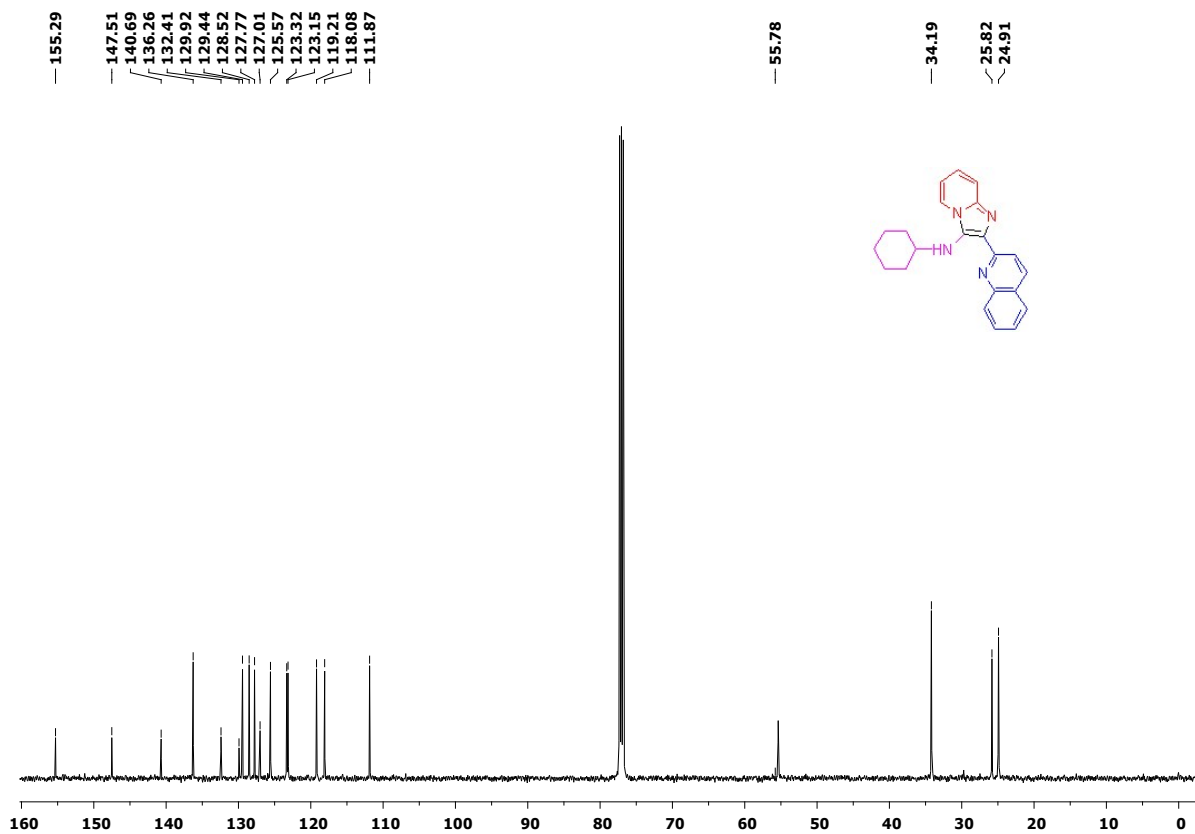
<sup>1</sup>H NMR spectrum of compound 4a



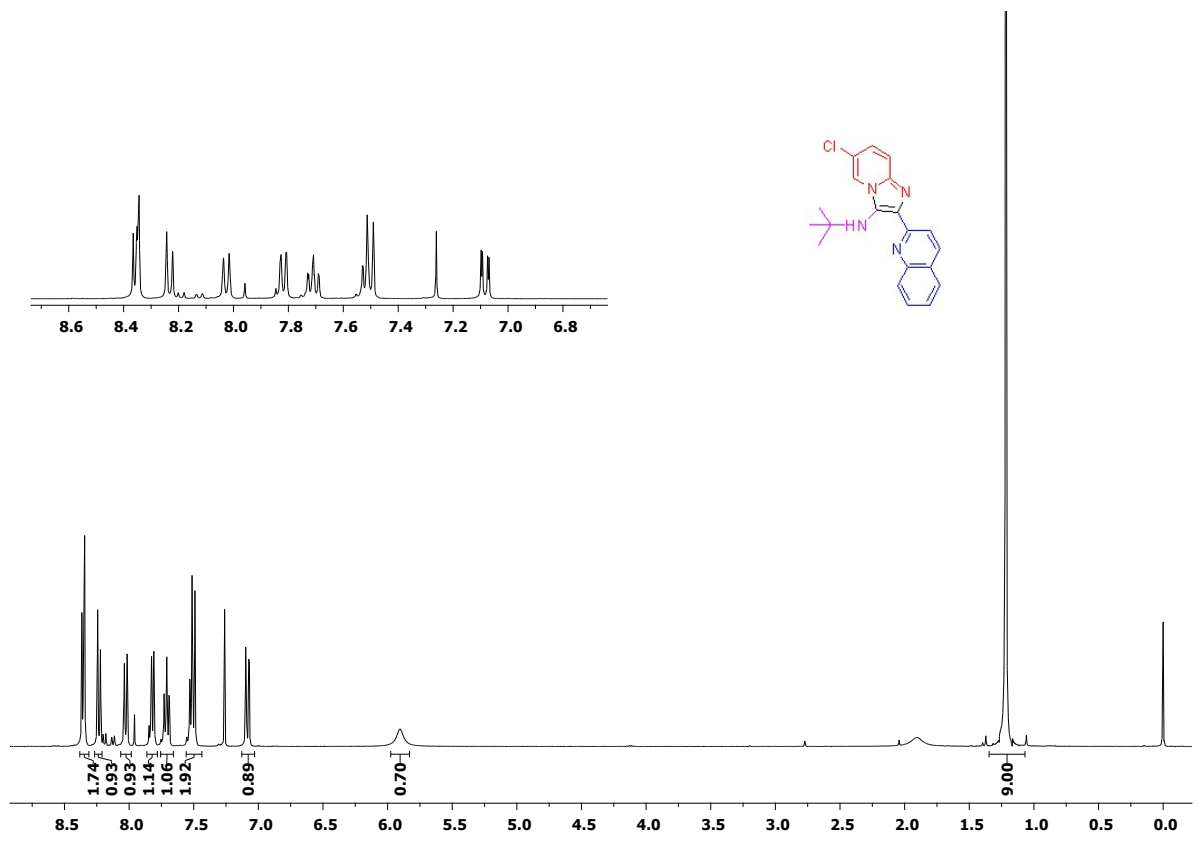
<sup>13</sup>C NMR spectrum of compound 4a



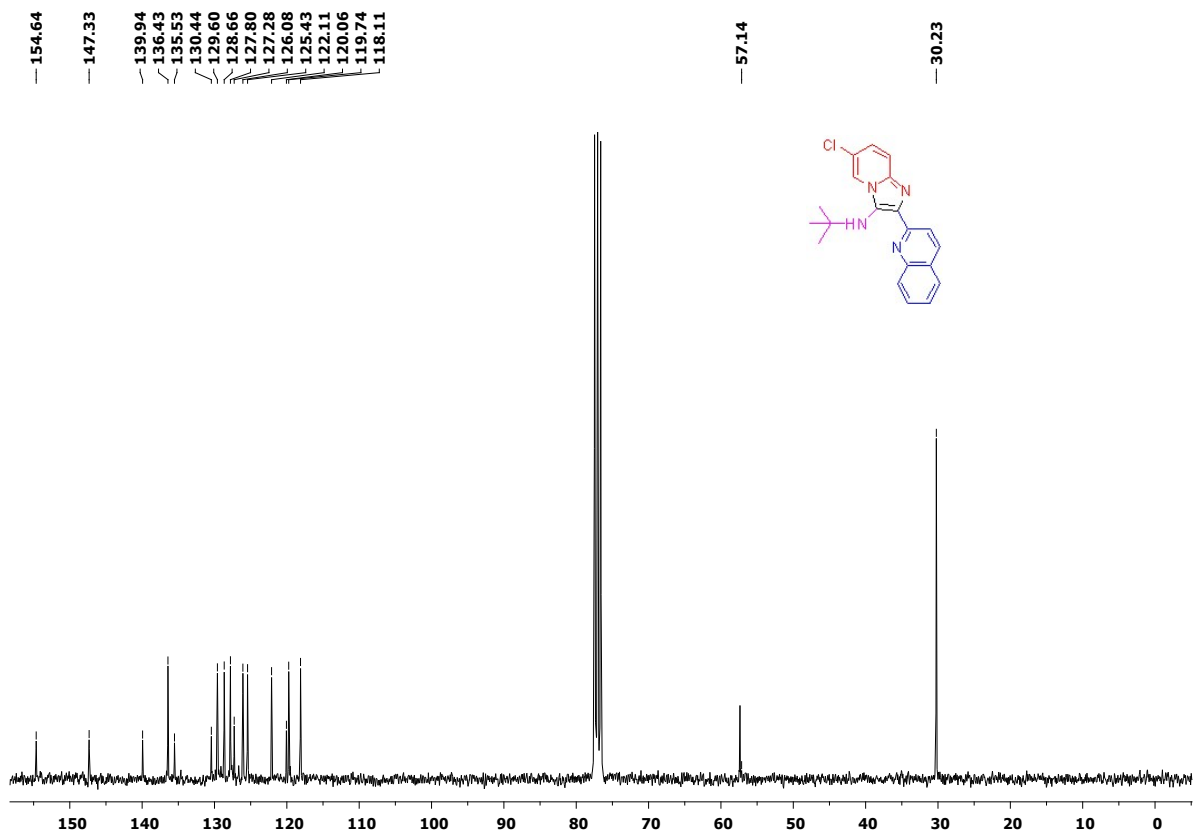
<sup>1</sup>H NMR spectrum of compound **4b**



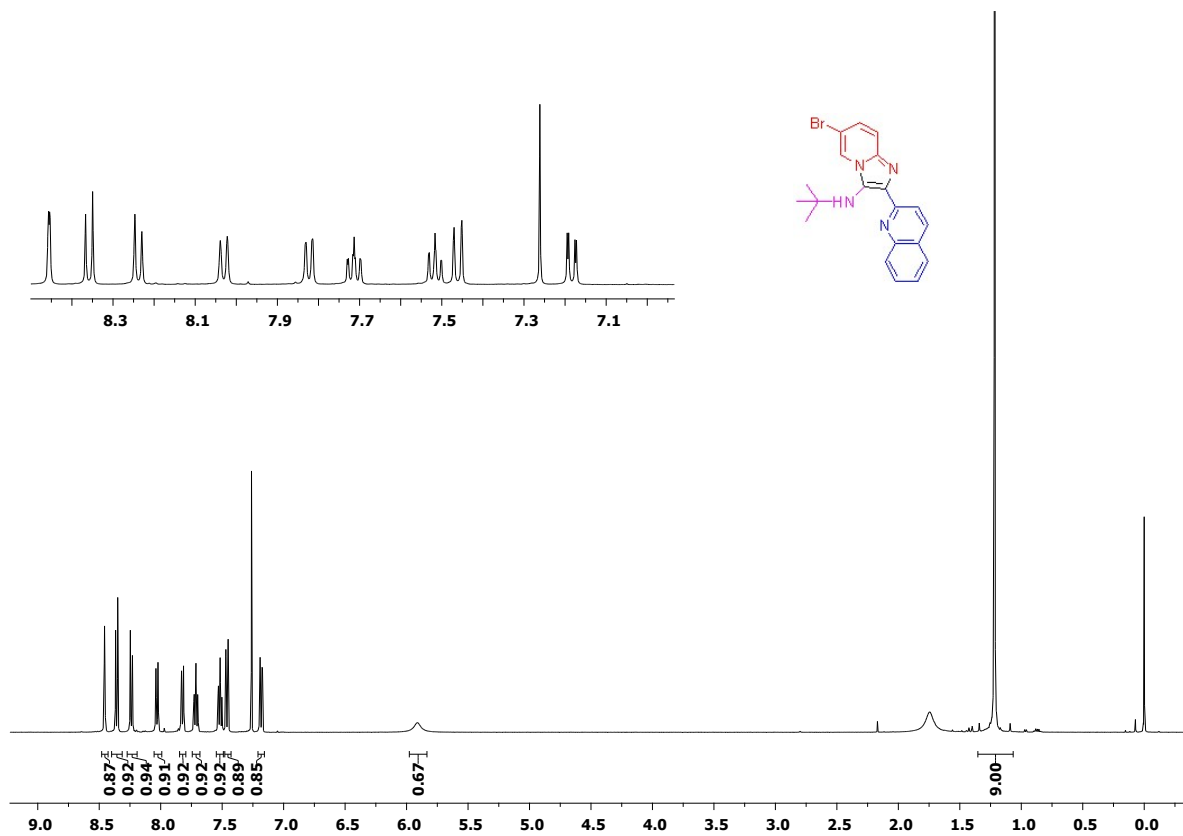
<sup>13</sup>C NMR spectrum of compound **4b**



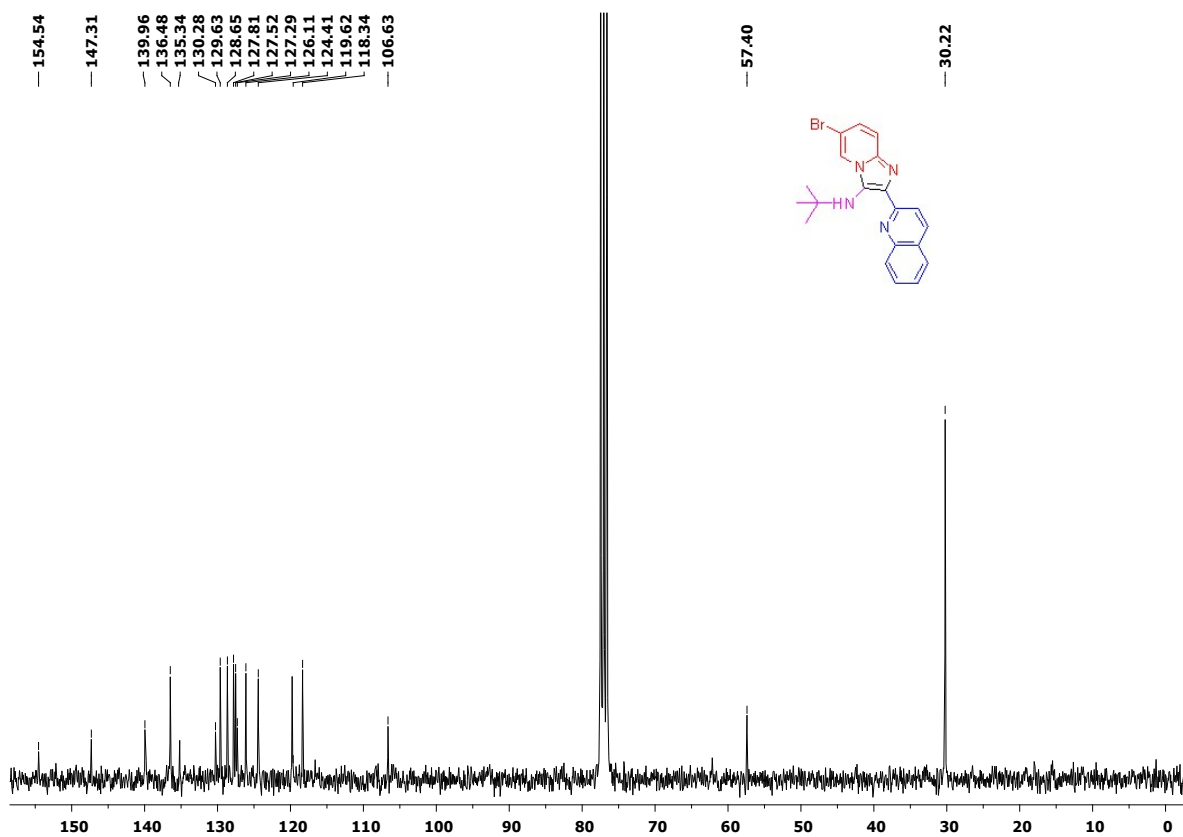
$^1\text{H}$  NMR spectrum of compound **4c**



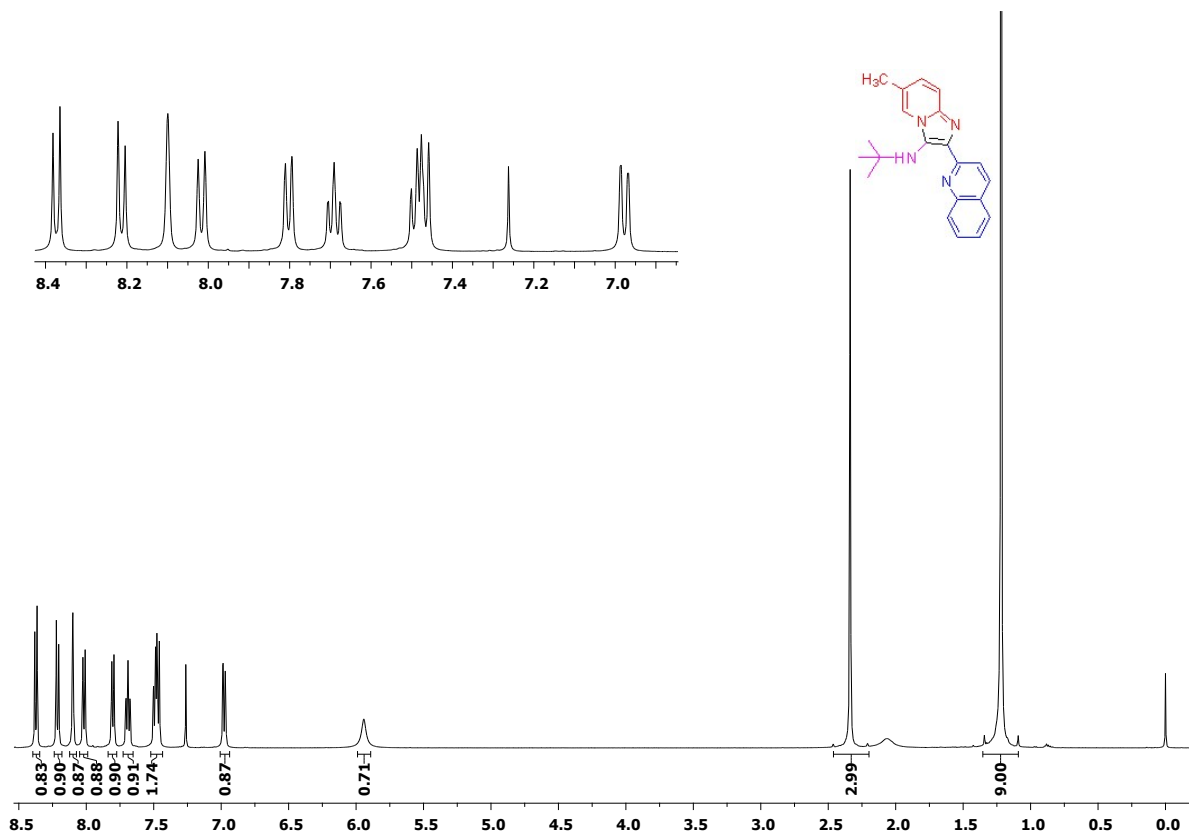
$^{13}\text{C}$  NMR spectrum of compound **4c**



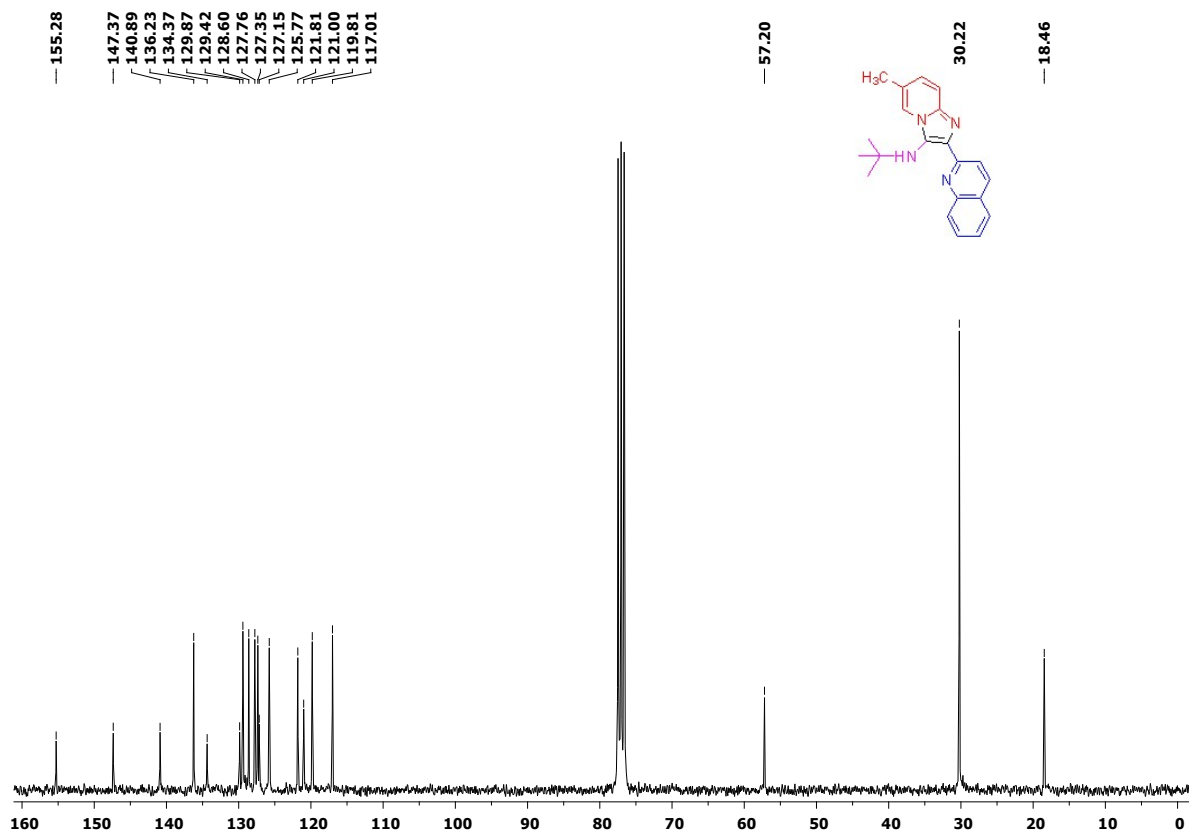
<sup>1</sup>H NMR spectrum of compound **4d**



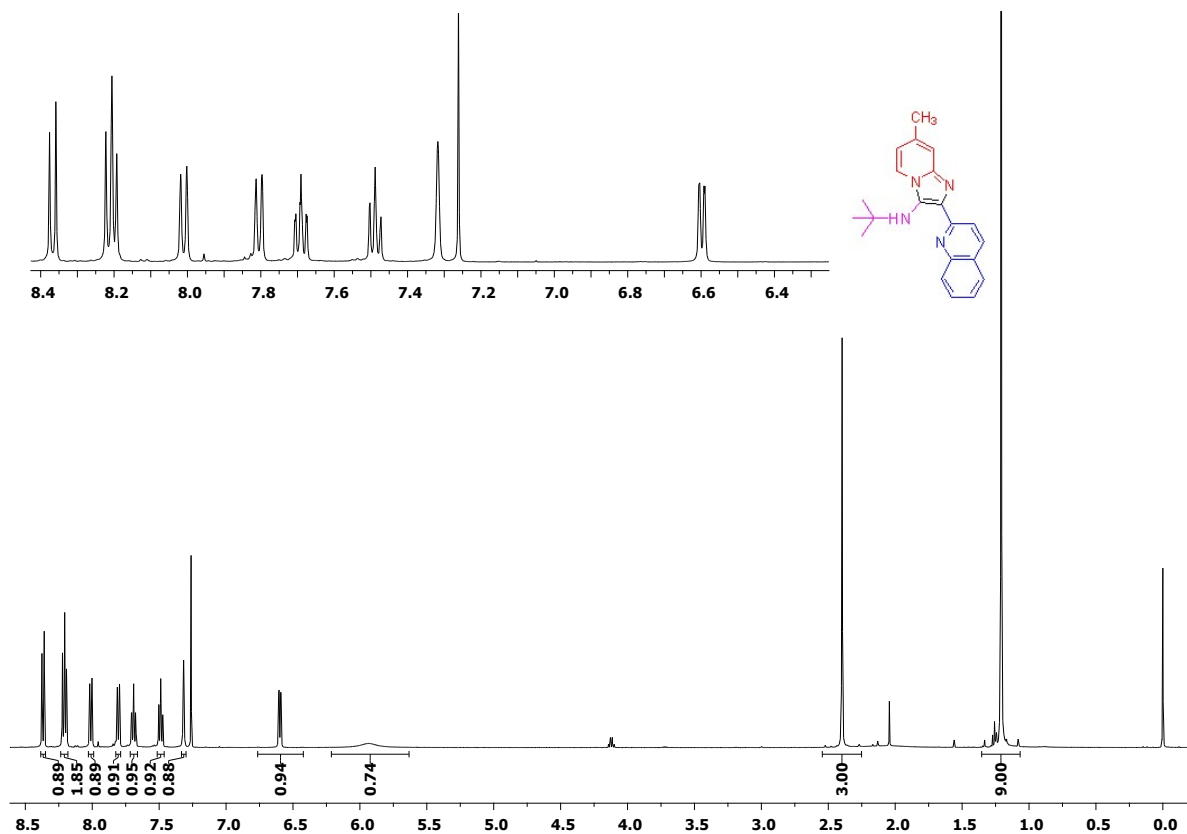
<sup>13</sup>C NMR spectrum of compound **4d**



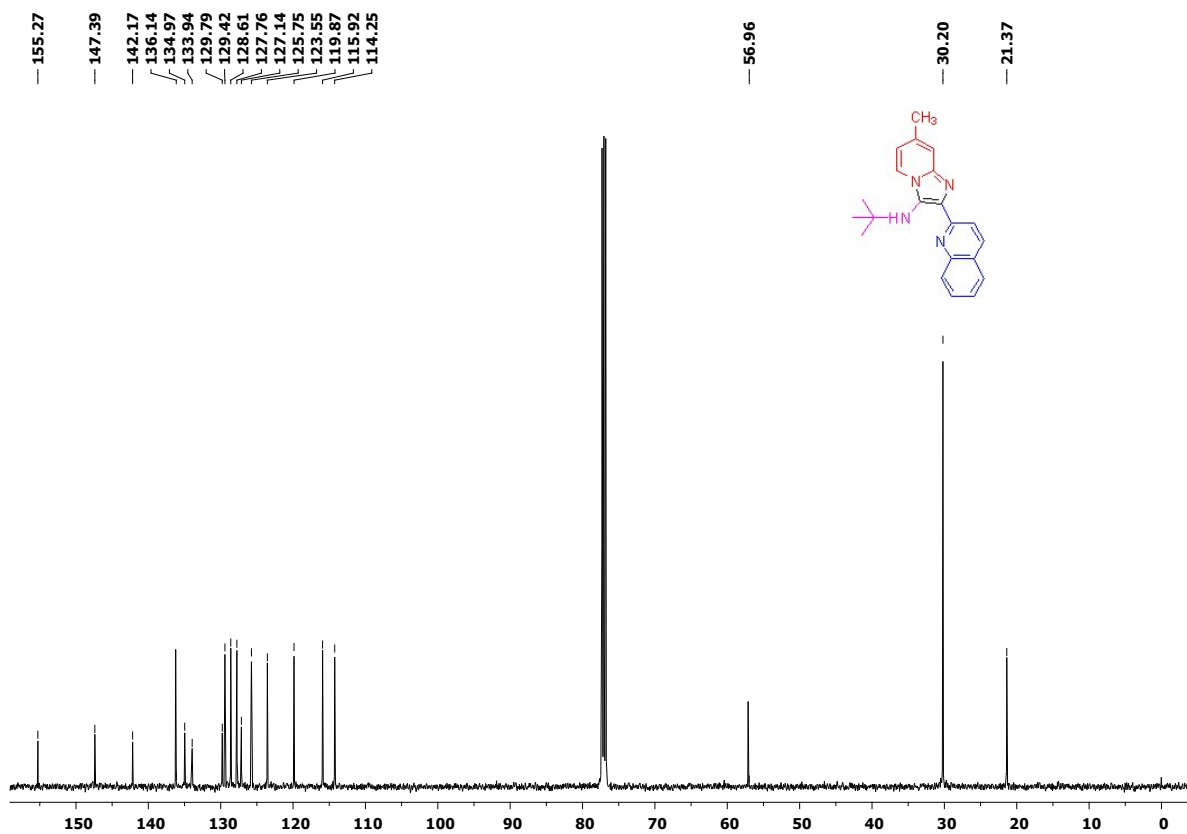
$^1\text{H}$  NMR spectrum of compound **4e**



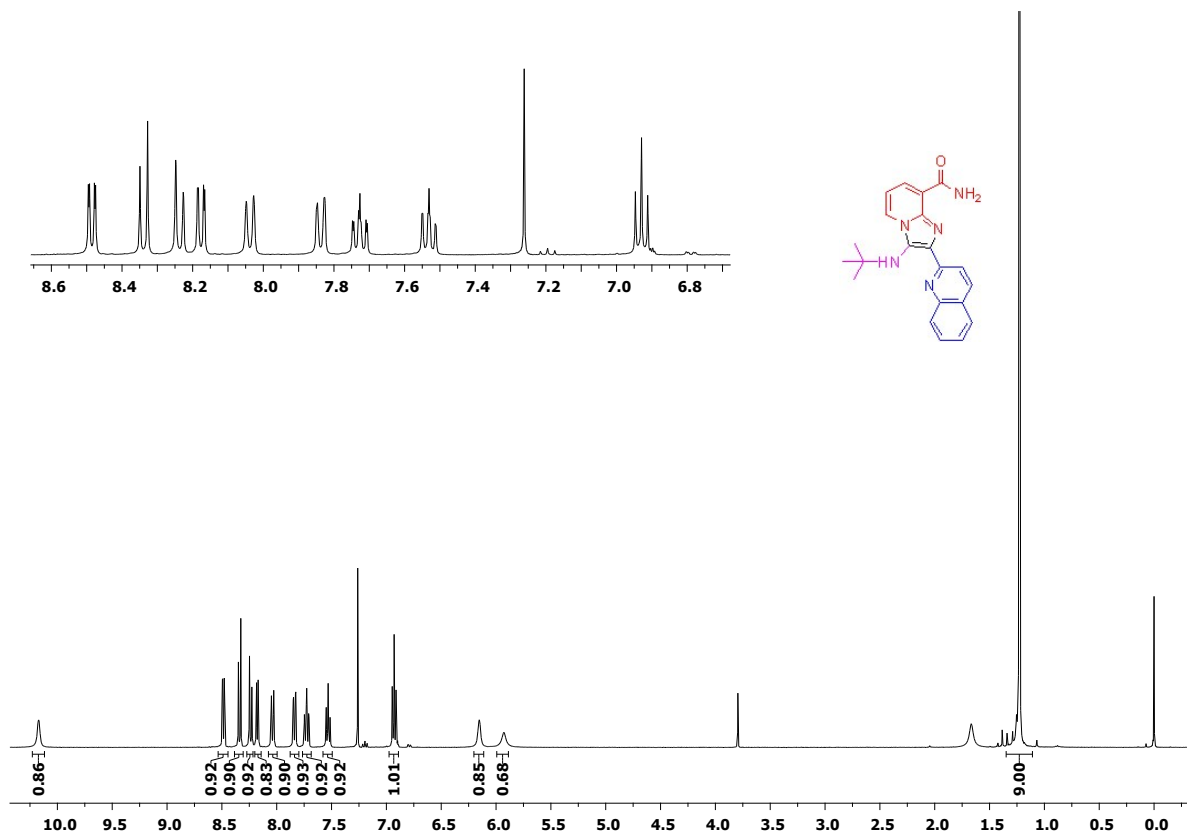
$^{13}\text{C}$  NMR spectrum of compound **4e**



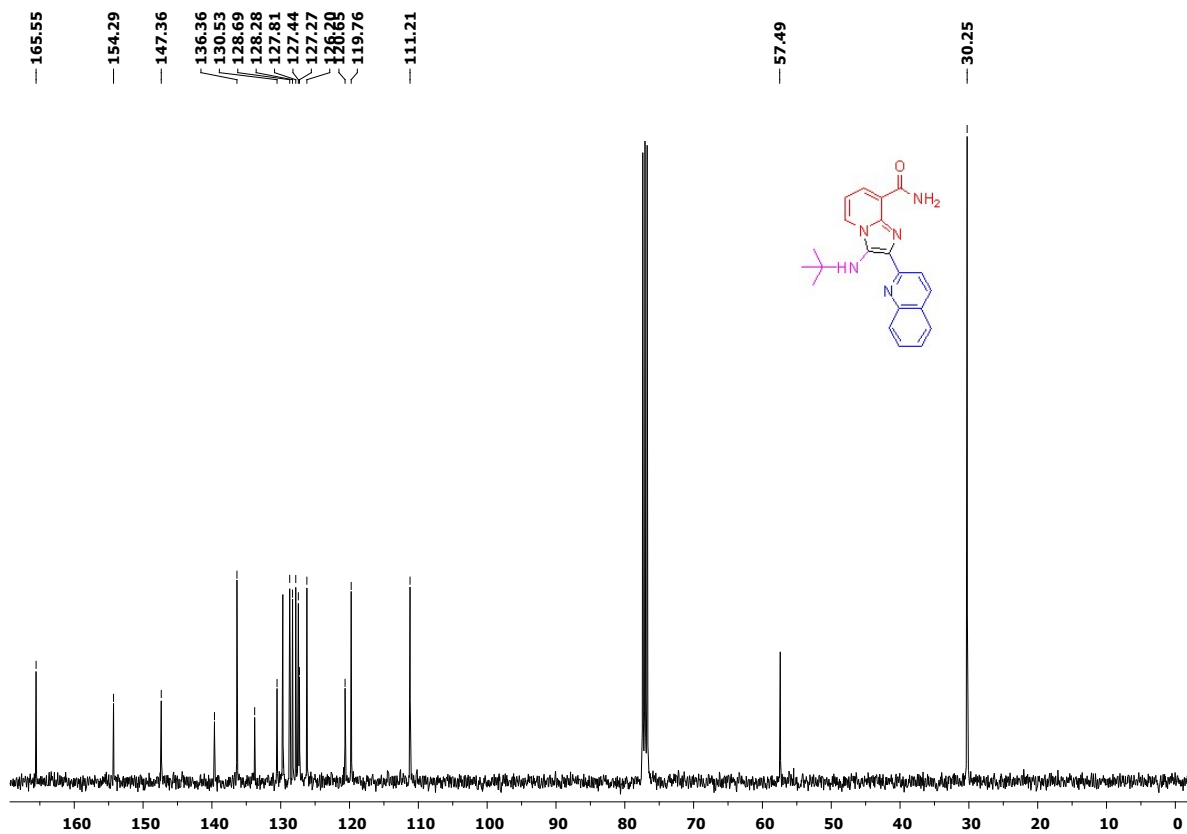
<sup>1</sup>H NMR spectrum of compound **4f**



<sup>13</sup>C NMR spectrum of compound **4f**

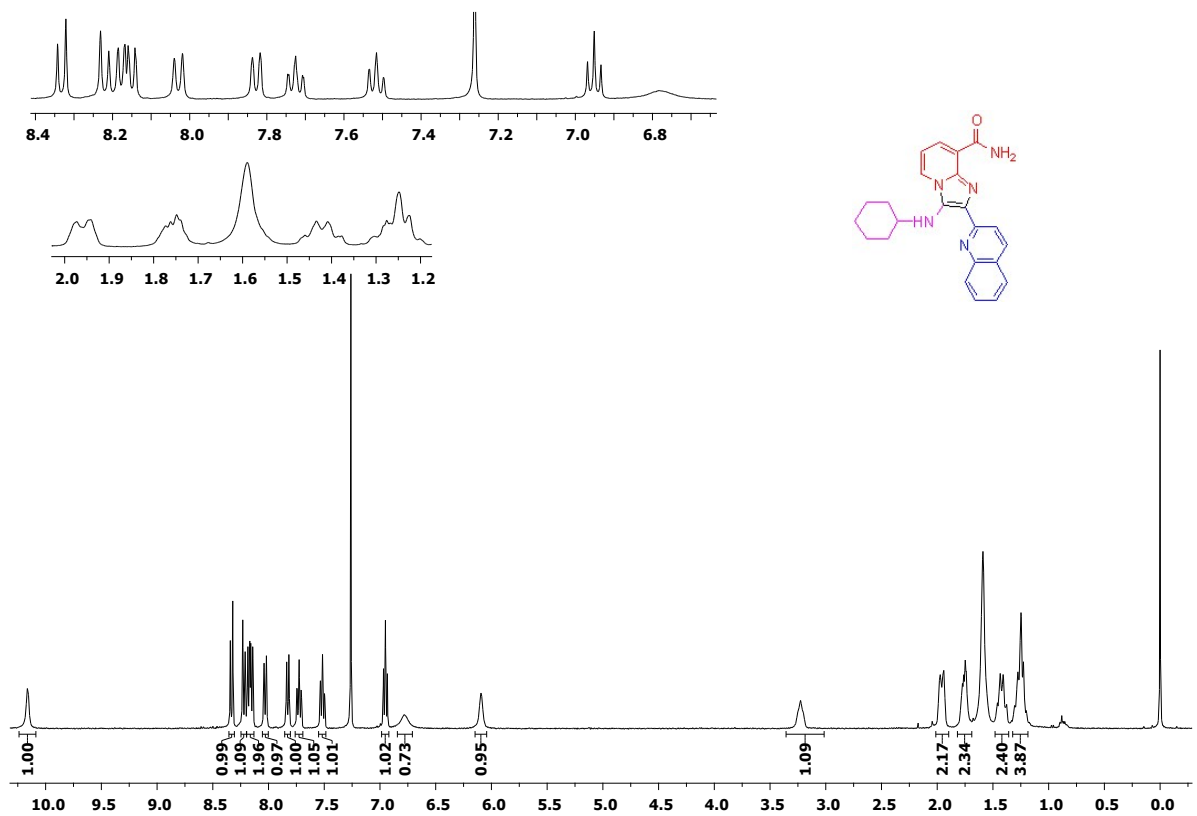


<sup>1</sup>H NMR spectrum of compound **4g**

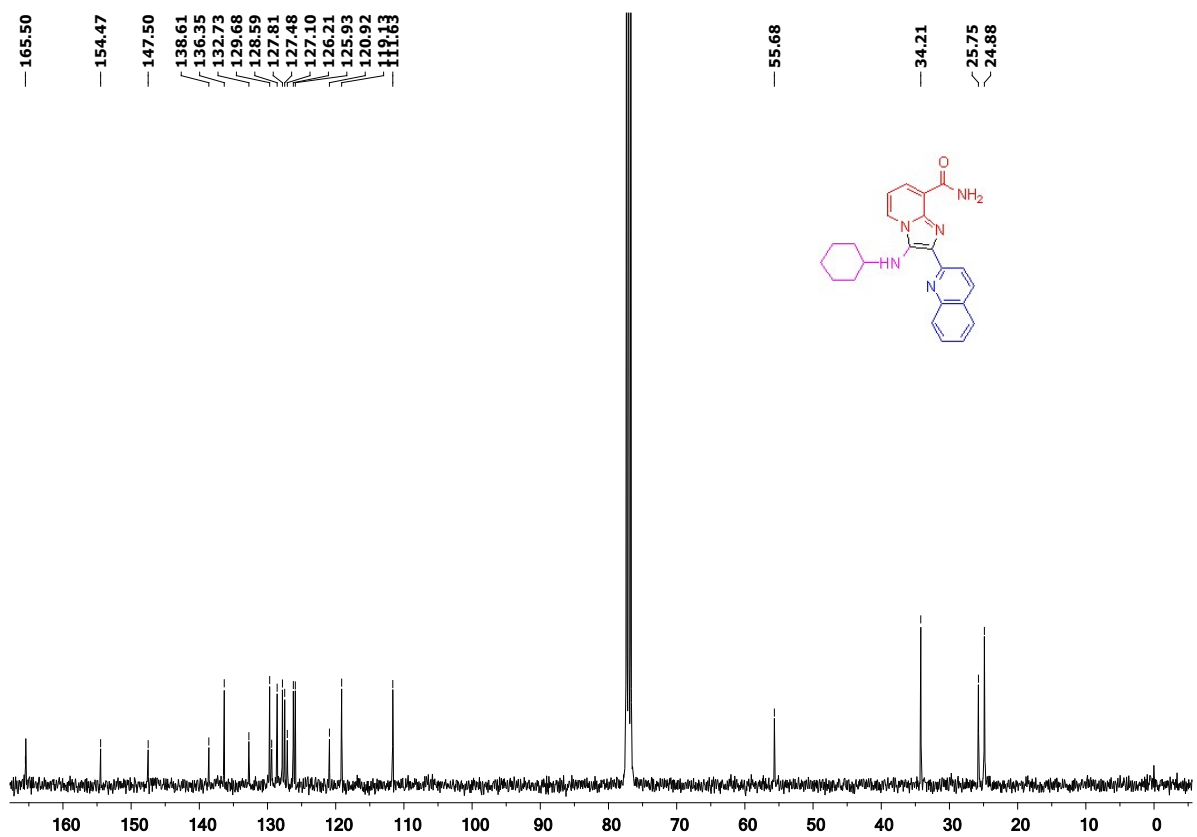


<sup>13</sup>C NMR spectrum of compound **4g**

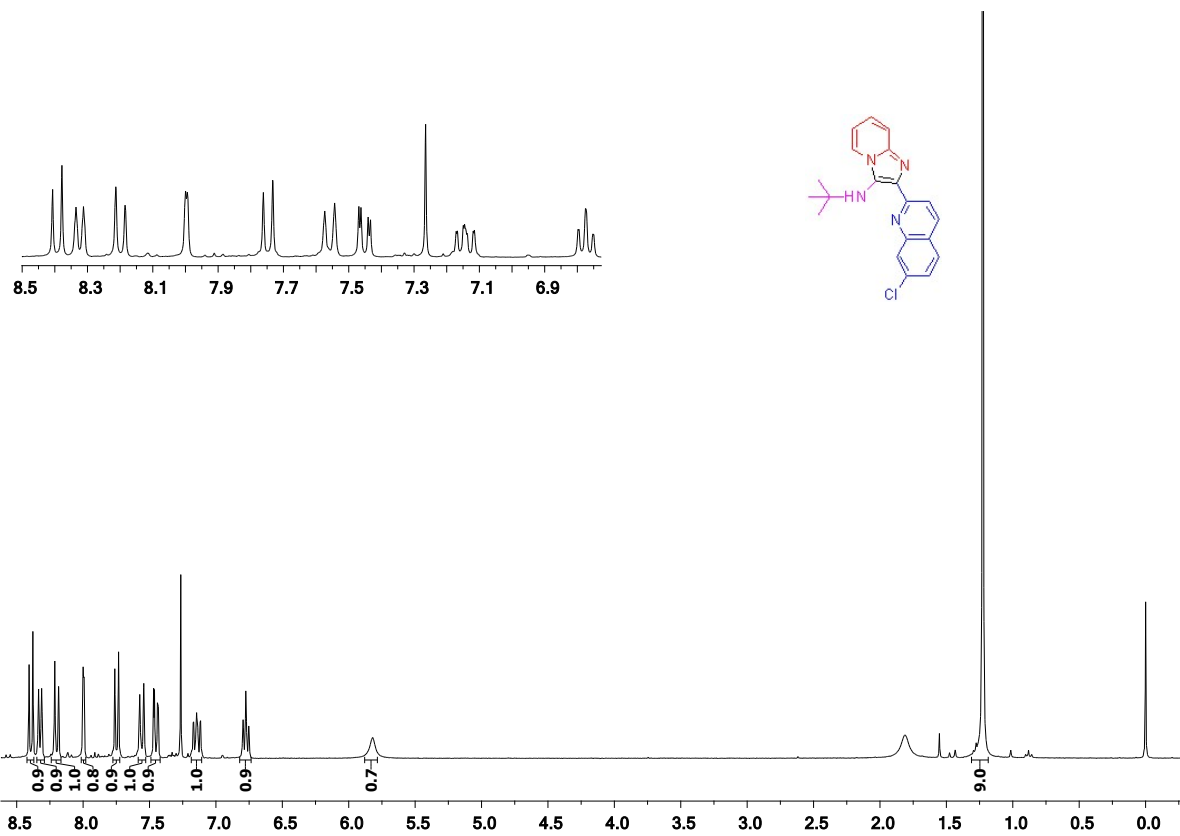




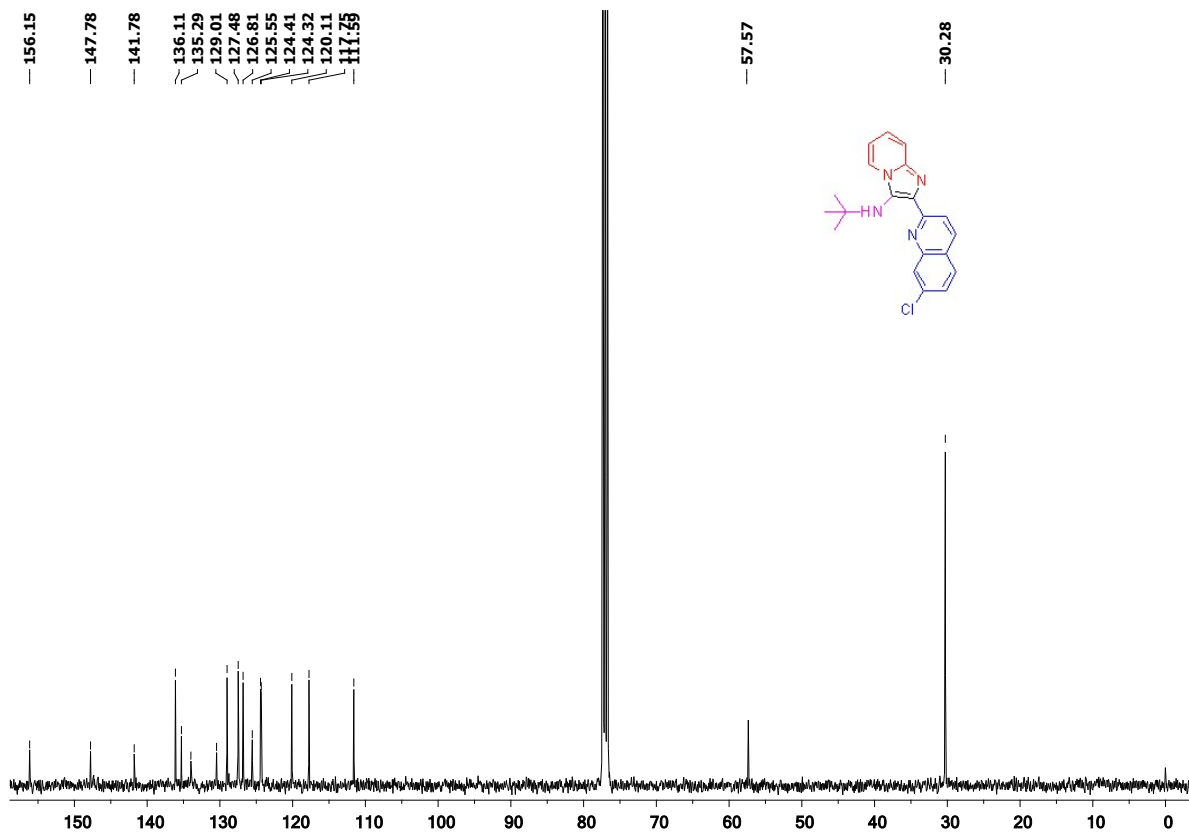
<sup>1</sup>H NMR spectrum of compound **4h**



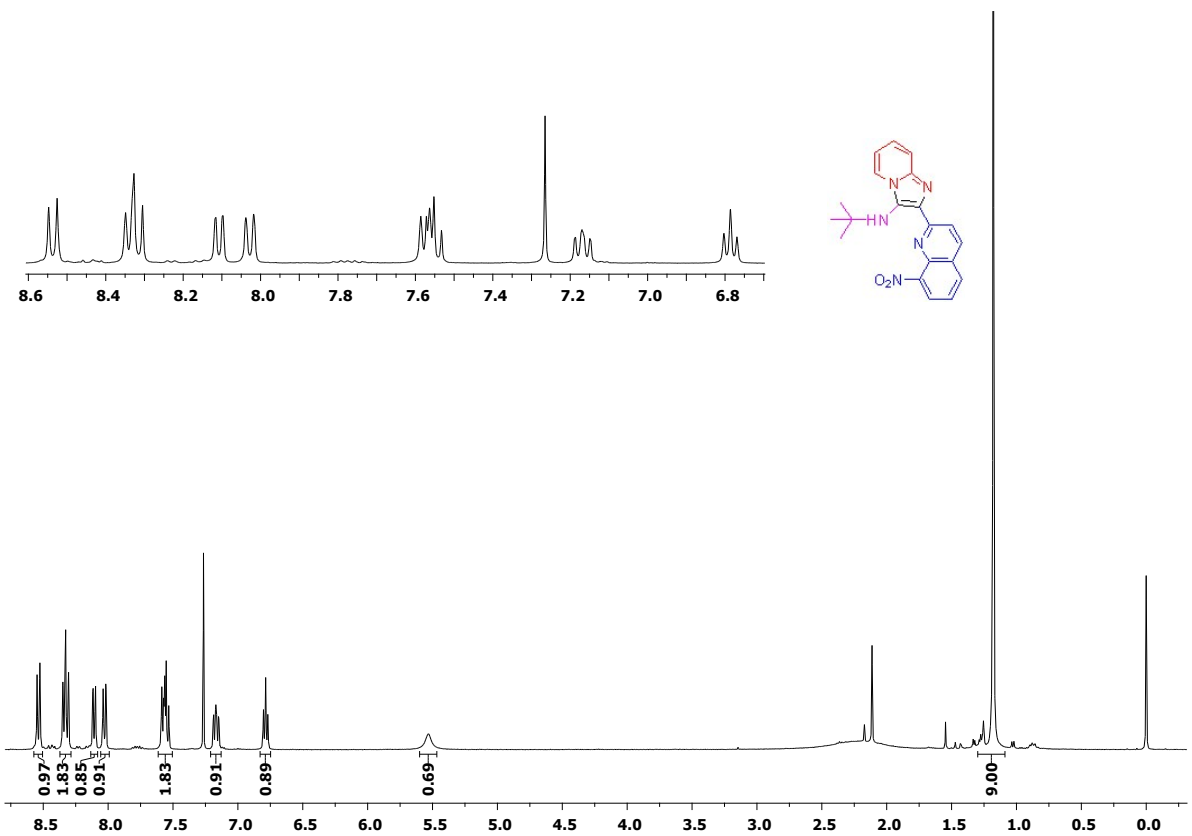
<sup>13</sup>C NMR spectrum of compound **4h**



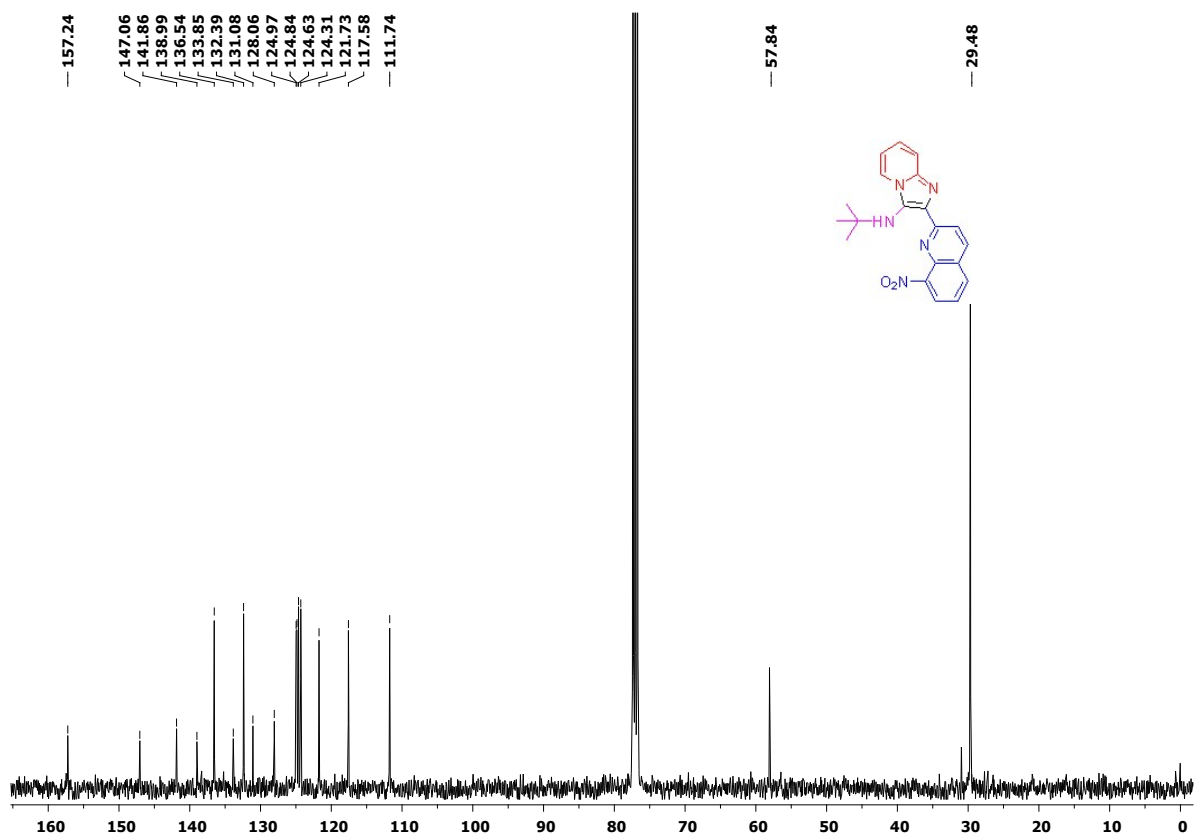
<sup>1</sup>H NMR spectrum of compound **4i**



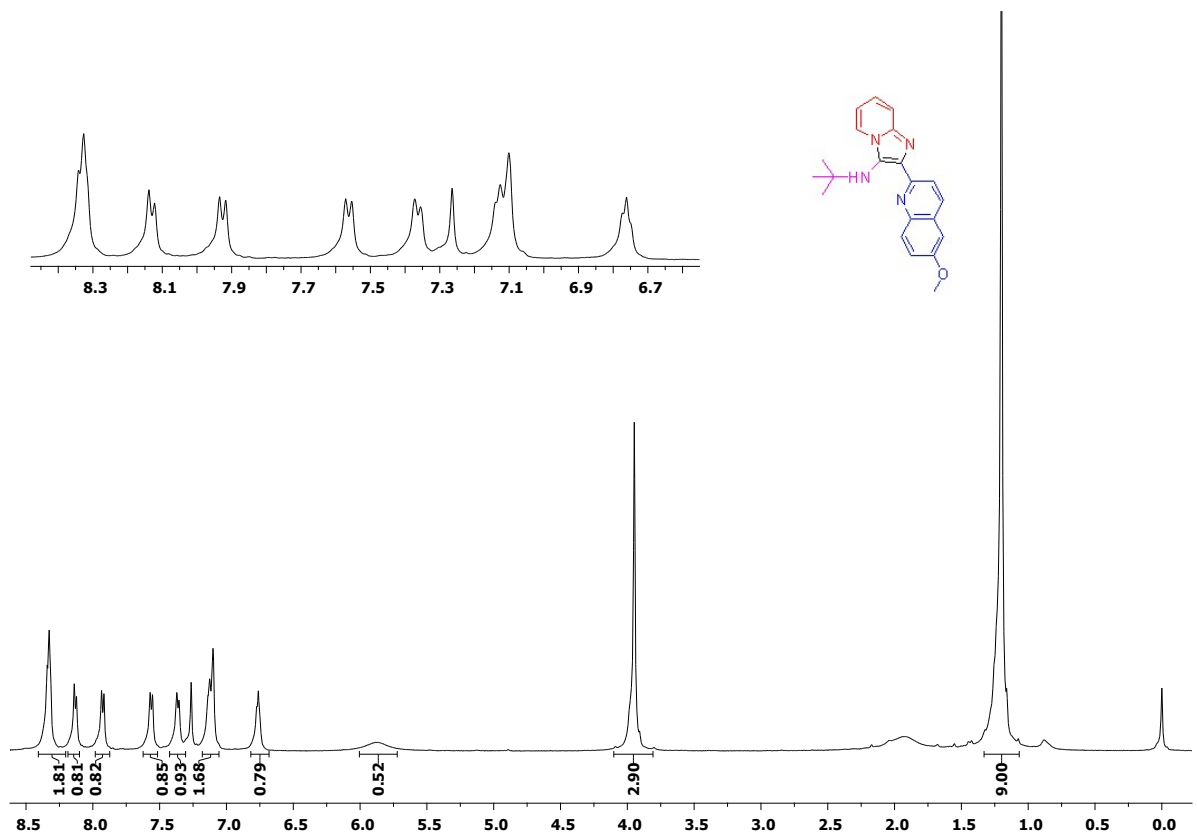
<sup>13</sup>C NMR spectrum of compound **4i**



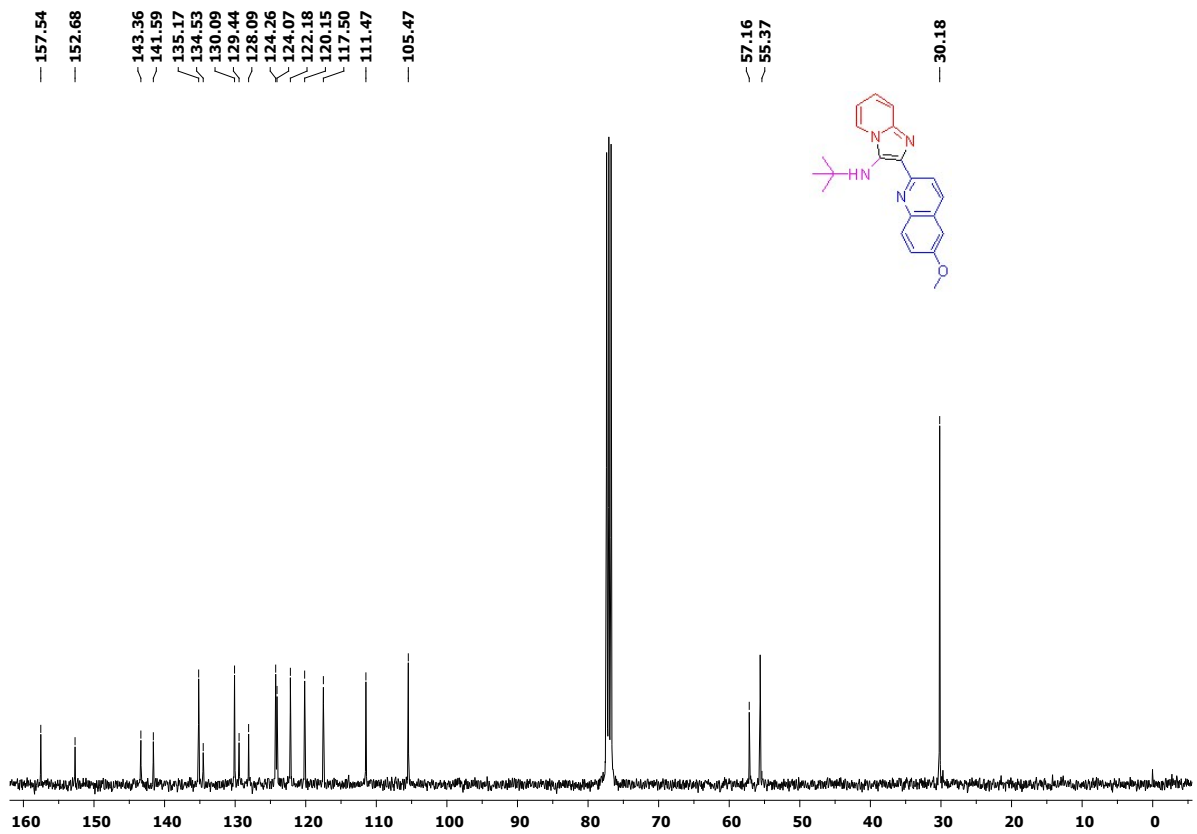
<sup>1</sup>H NMR spectrum of compound 4j



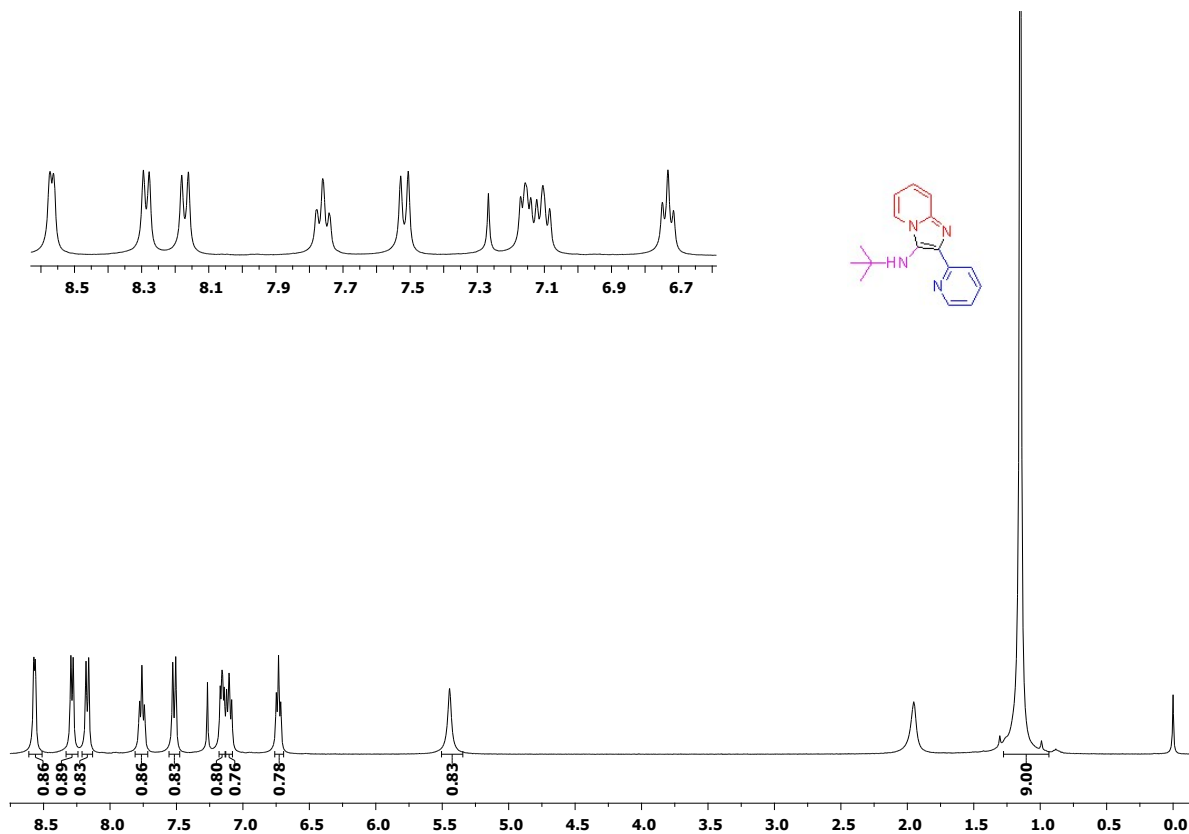
<sup>13</sup>C NMR spectrum of compound 4j



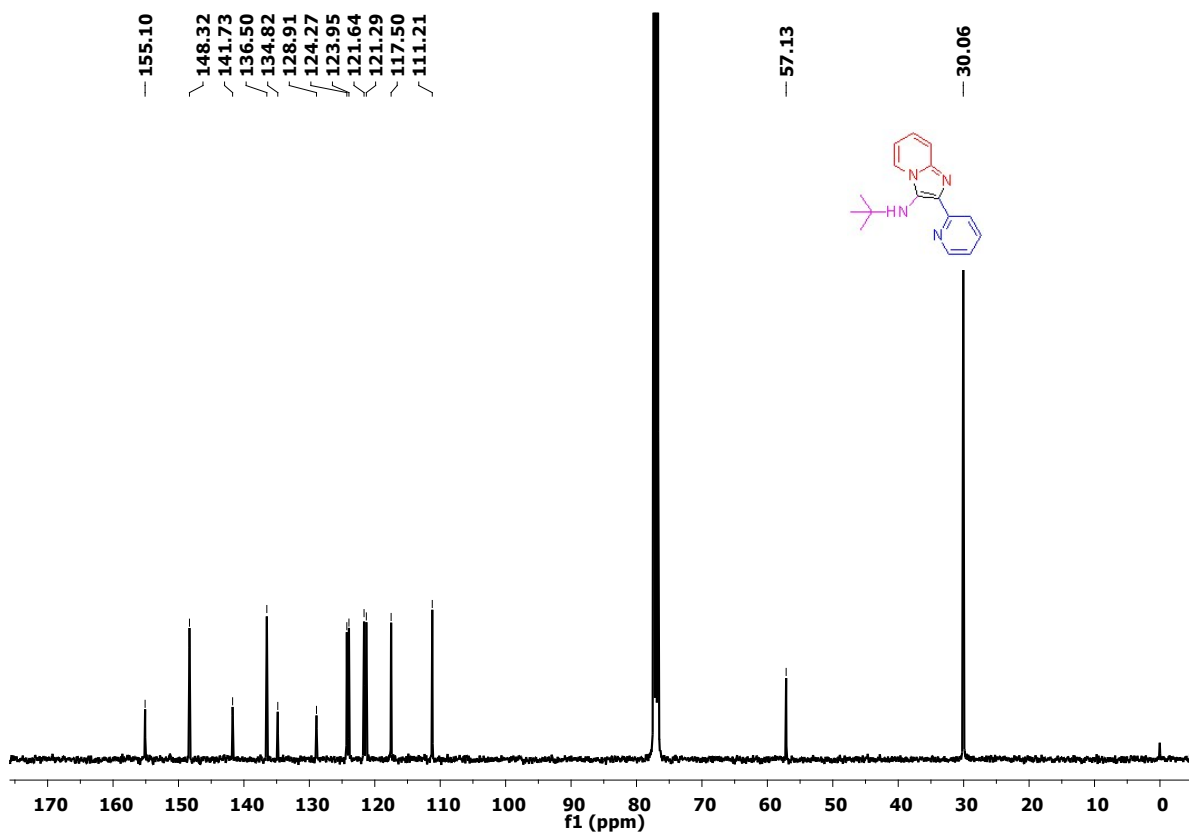
<sup>1</sup>H NMR spectrum of compound **4k**



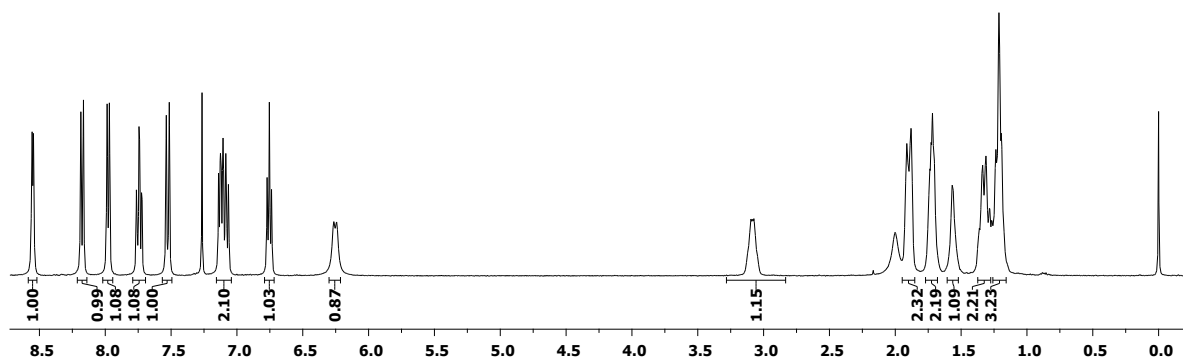
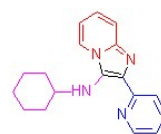
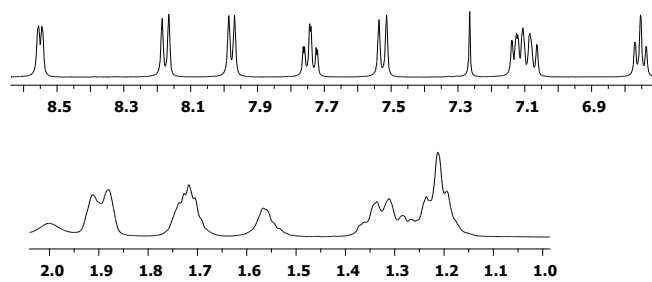
<sup>13</sup>C NMR spectrum of compound **4k**



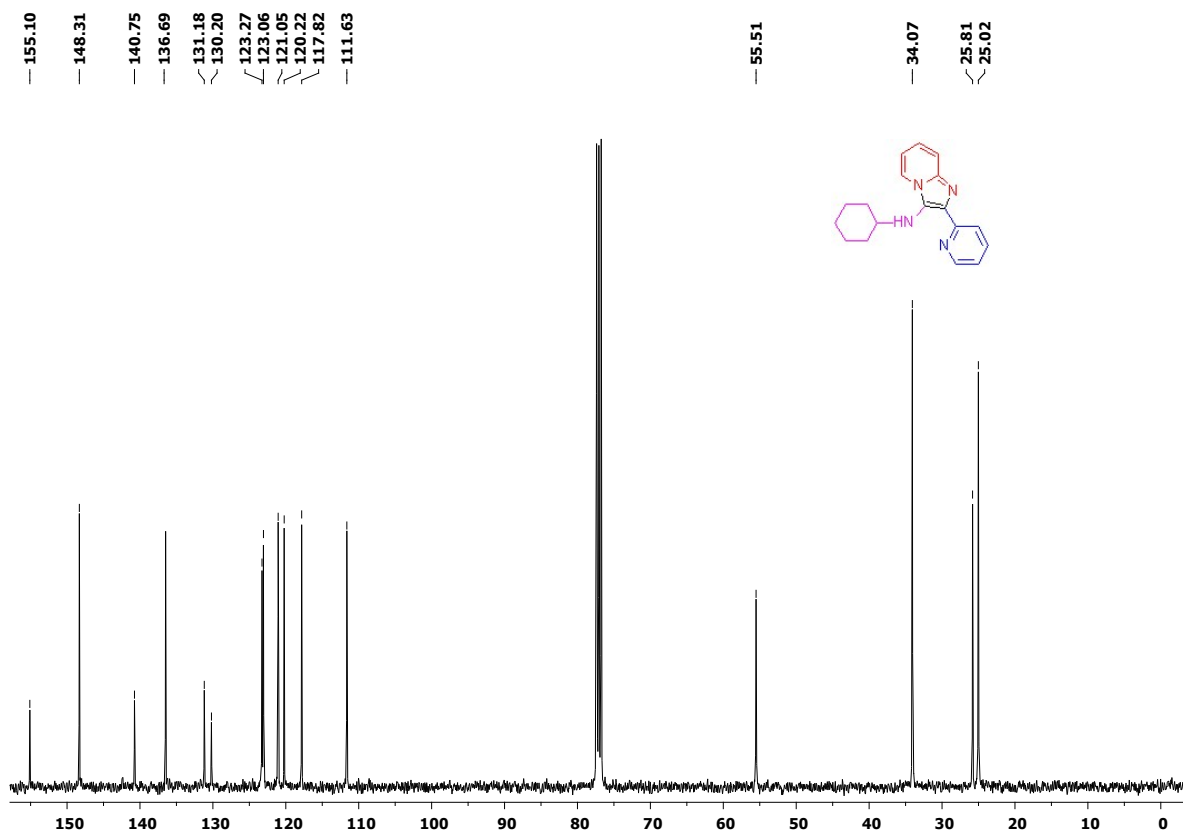
<sup>1</sup>H NMR spectrum of compound 7a



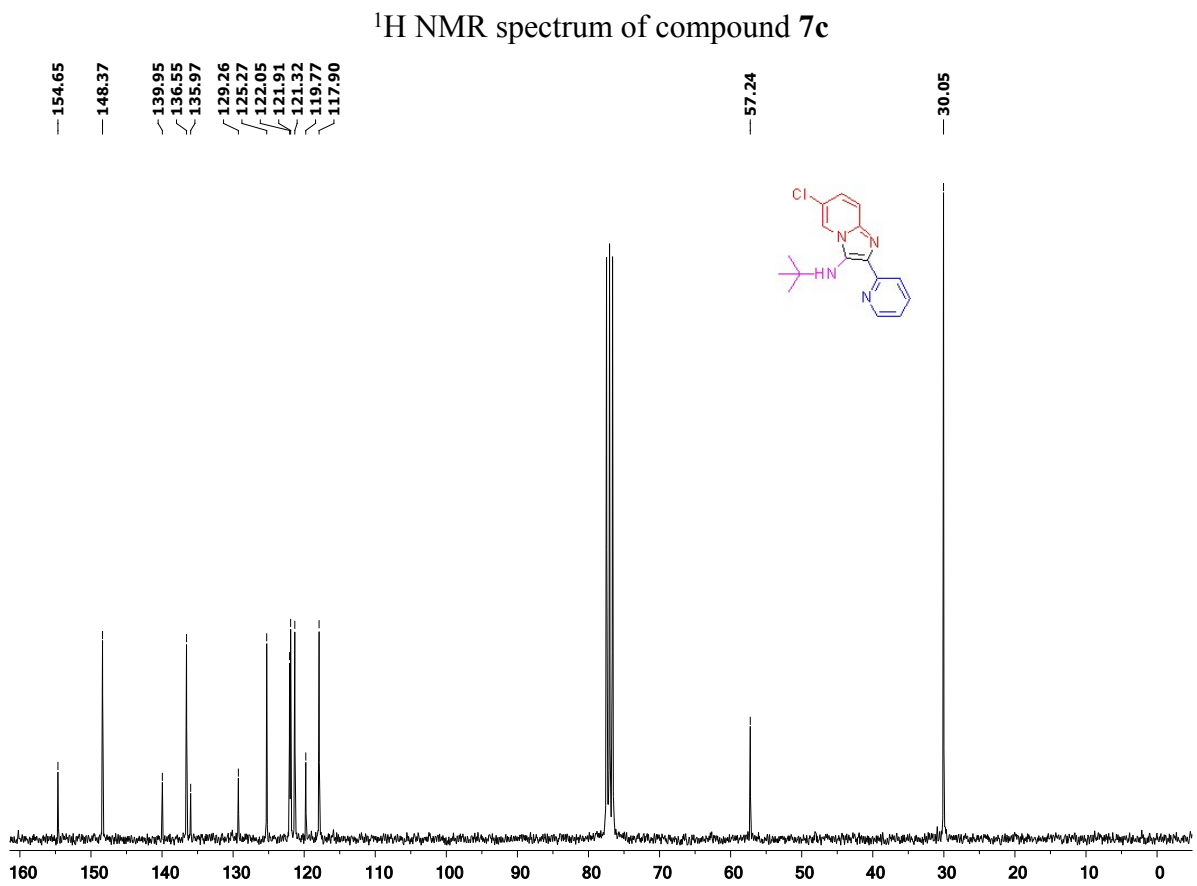
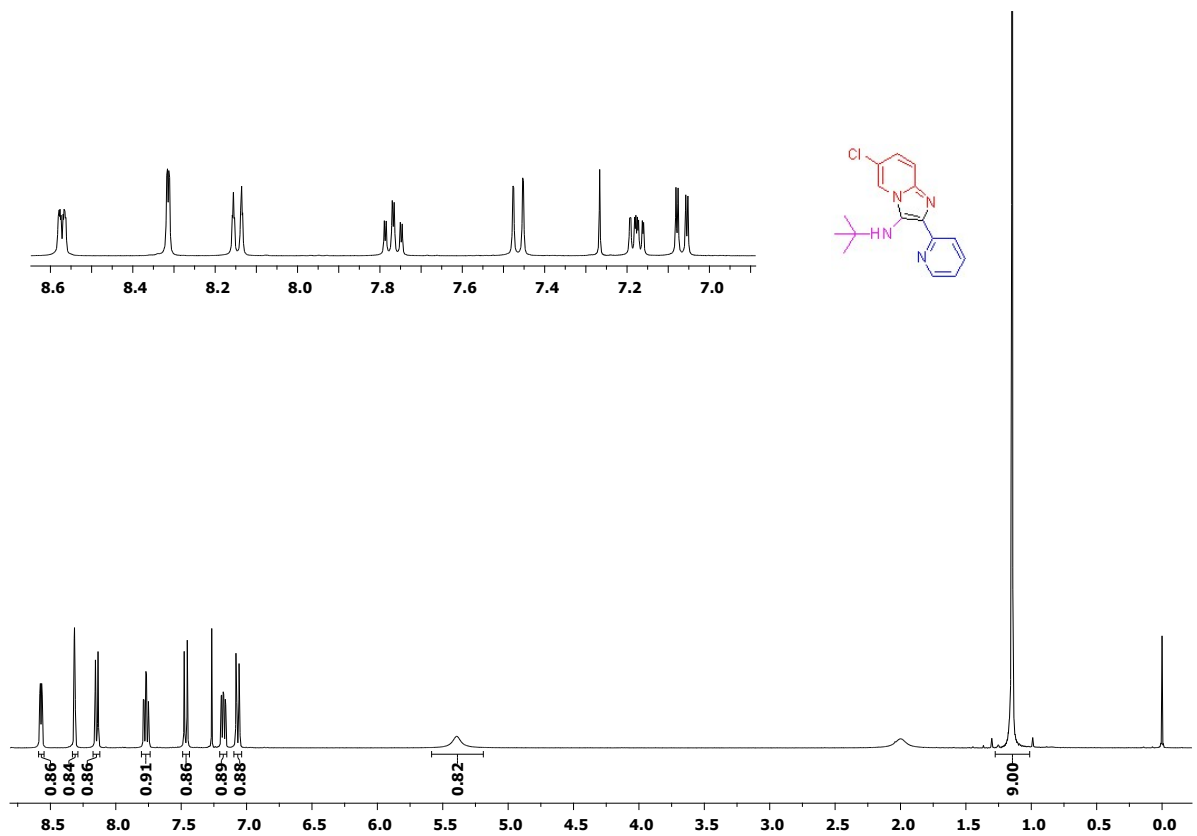
<sup>13</sup>C NMR spectrum of compound 7a

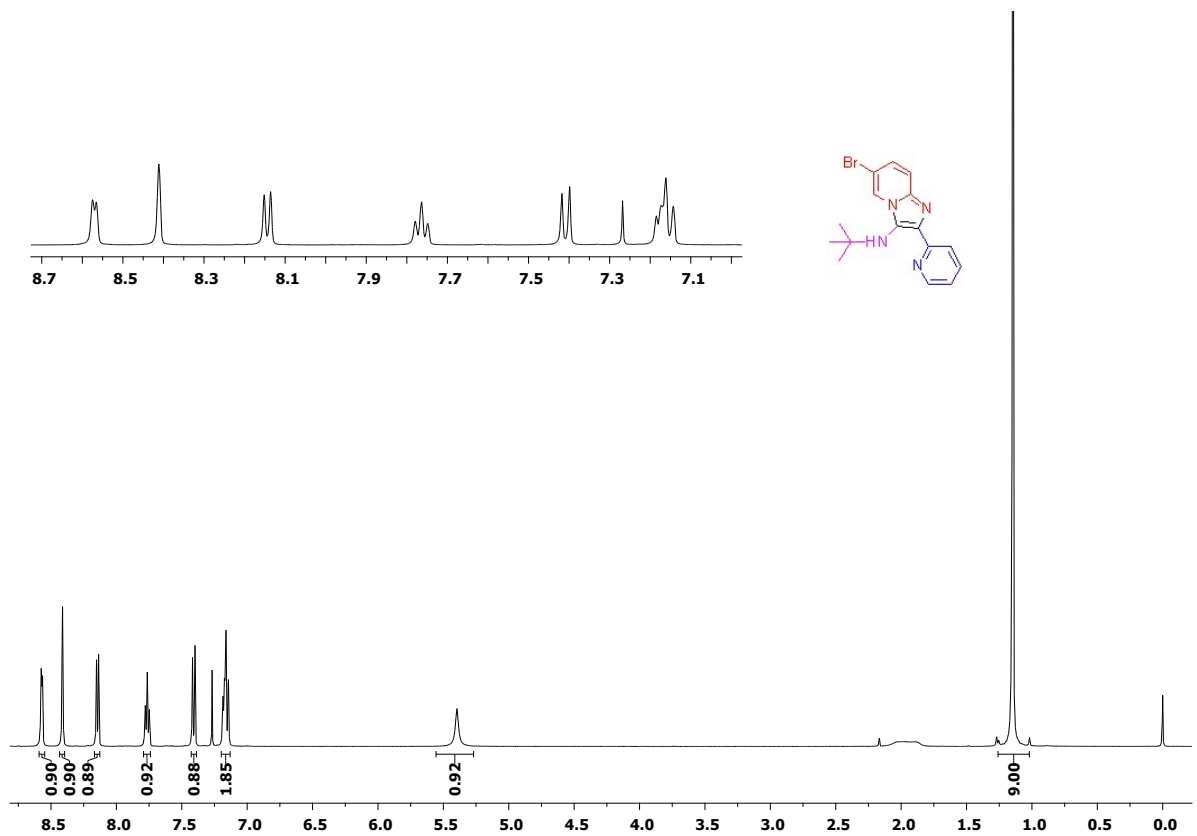


$^1\text{H}$  NMR spectrum of compound **7b**

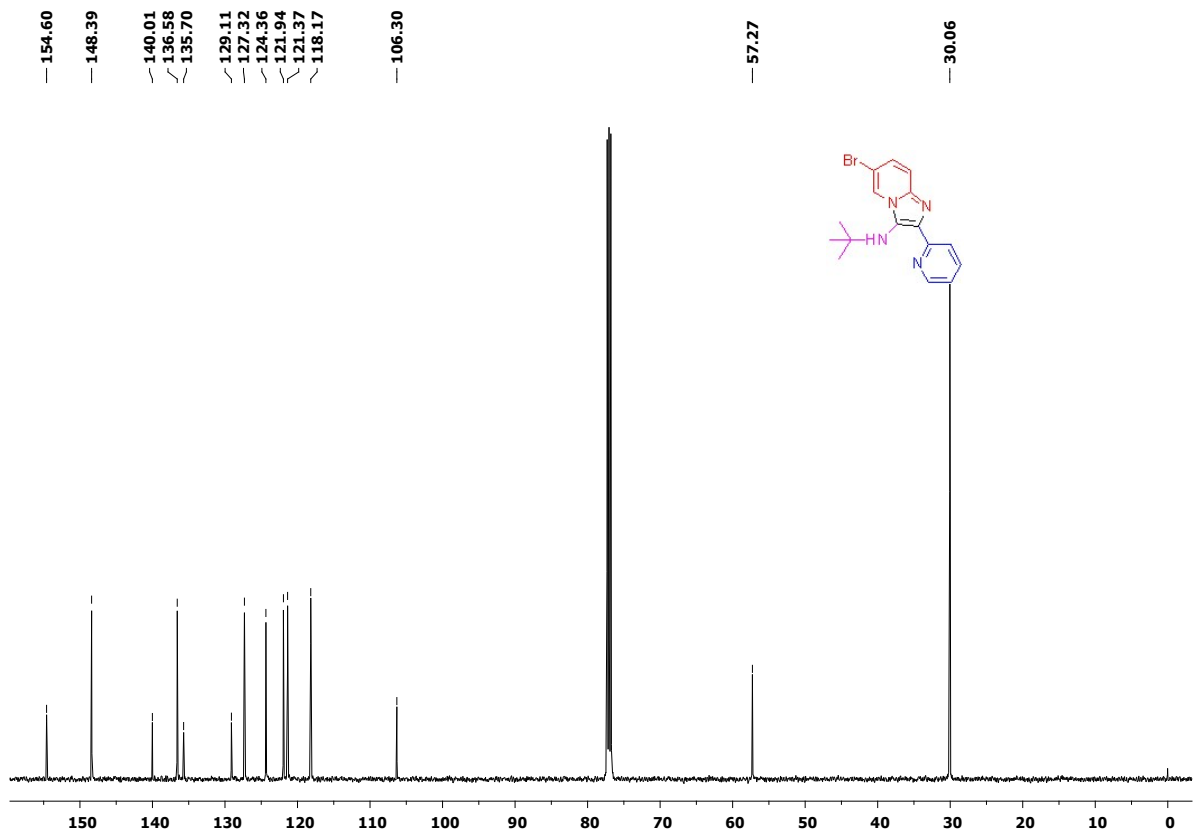


$^{13}\text{C}$  NMR spectrum of compound **7b**



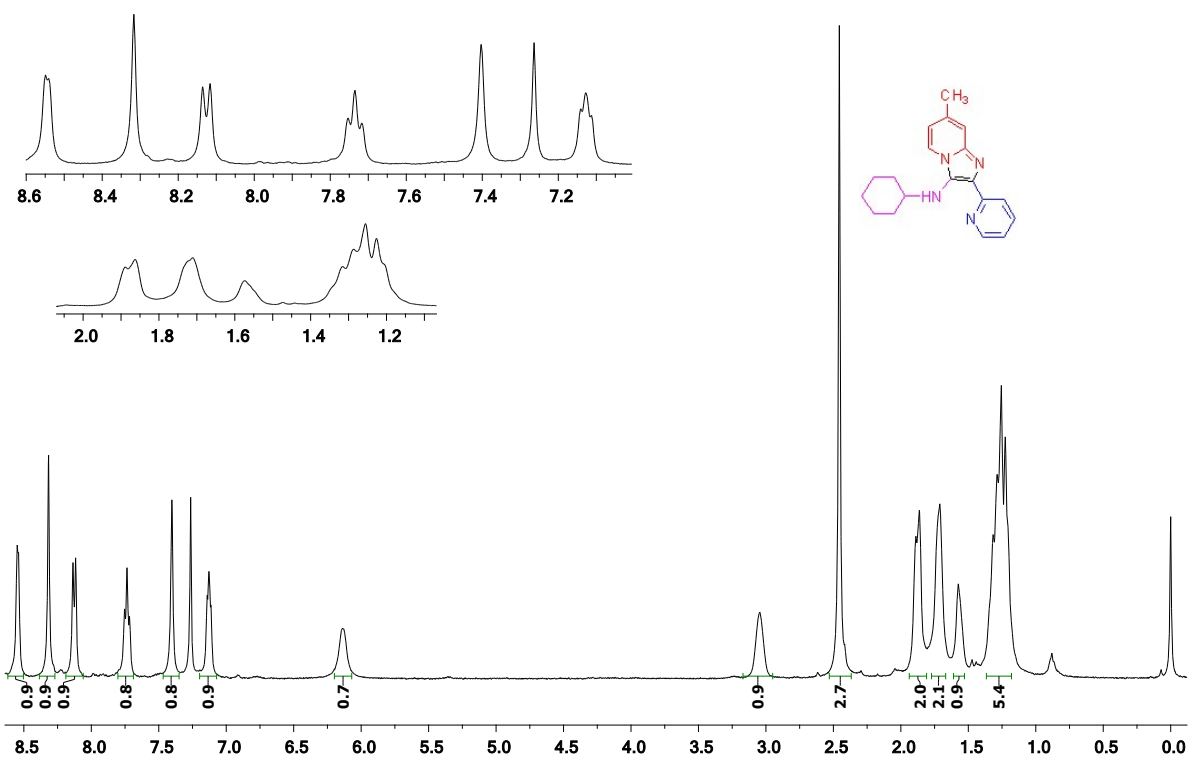


<sup>1</sup>H NMR spectrum of compound **7d**

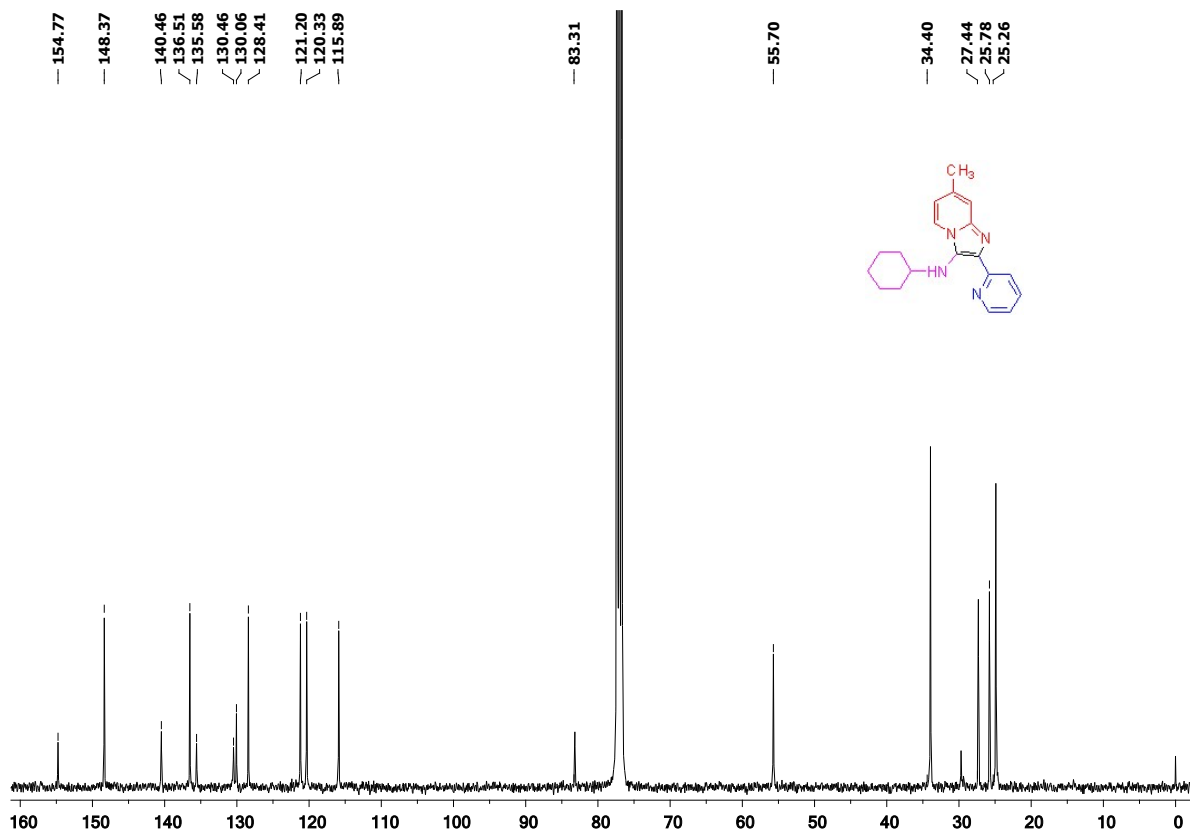


<sup>13</sup>C NMR spectrum of compound **7d**

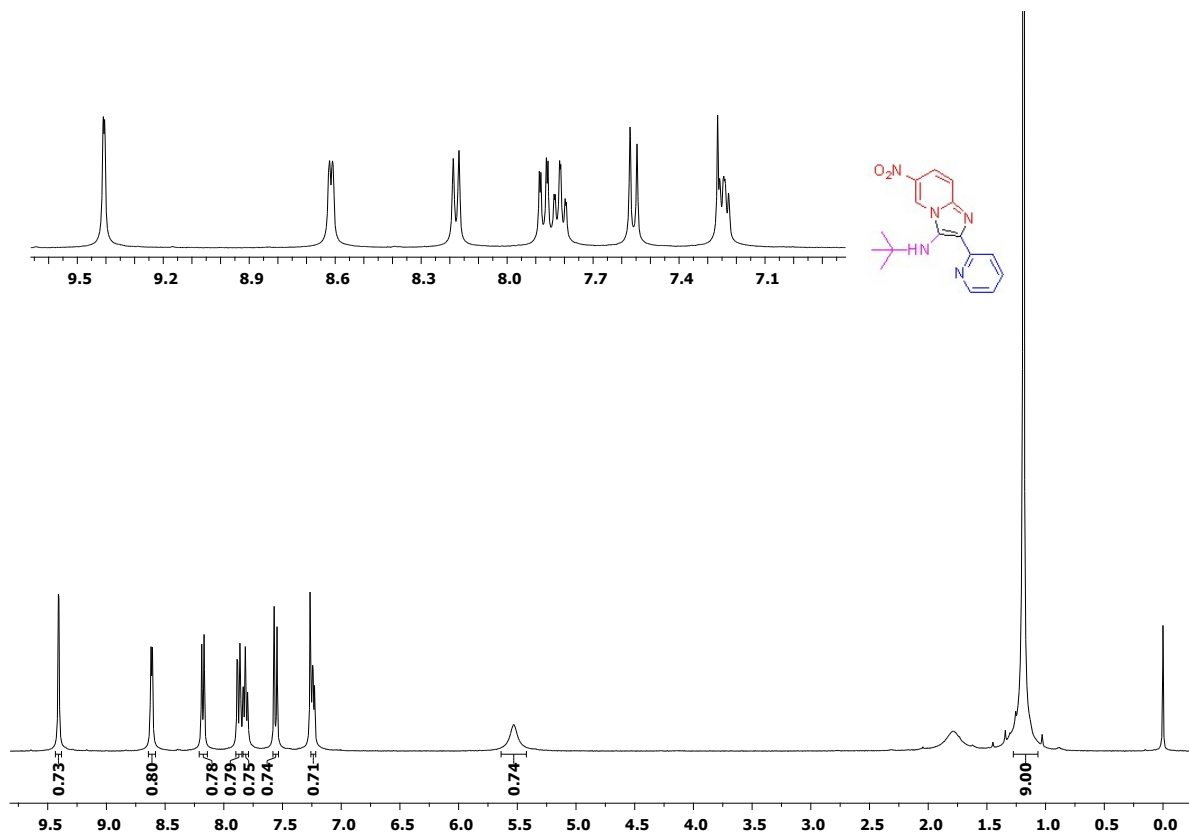




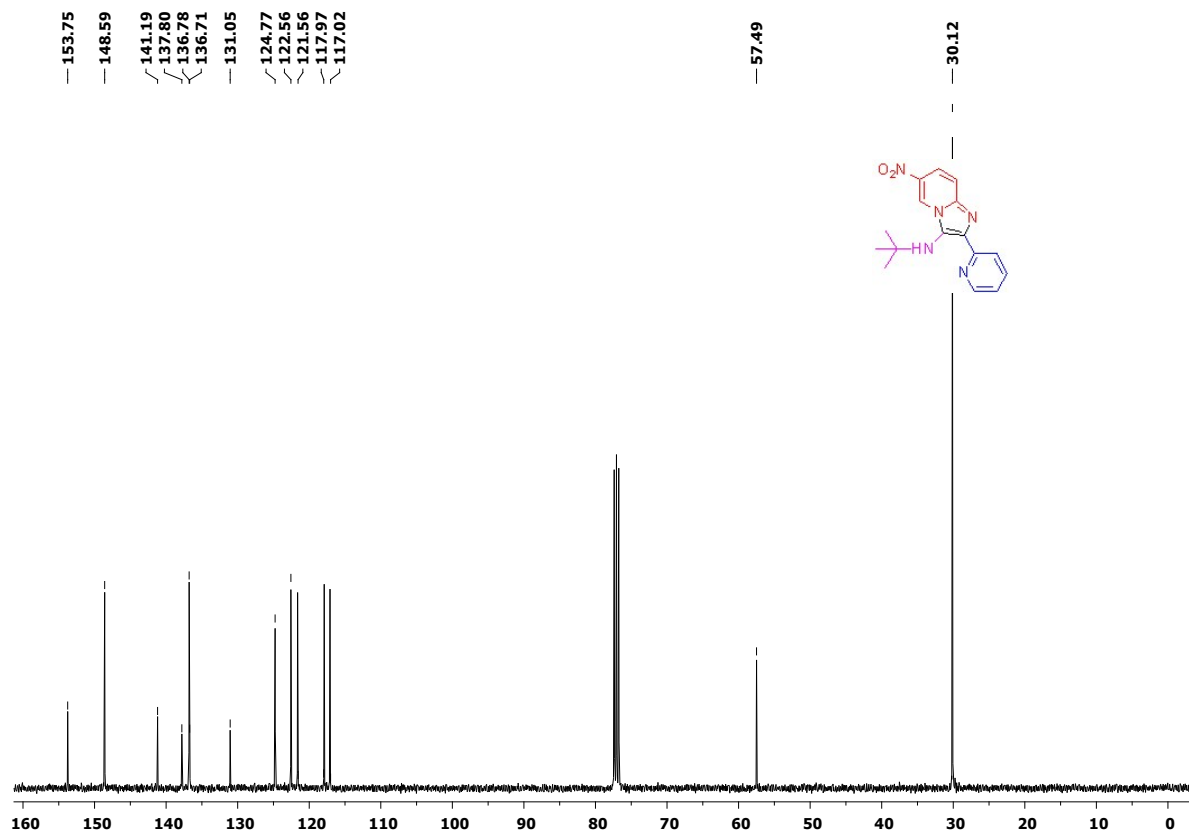
$^1\text{H}$  NMR spectrum of compound **7e**



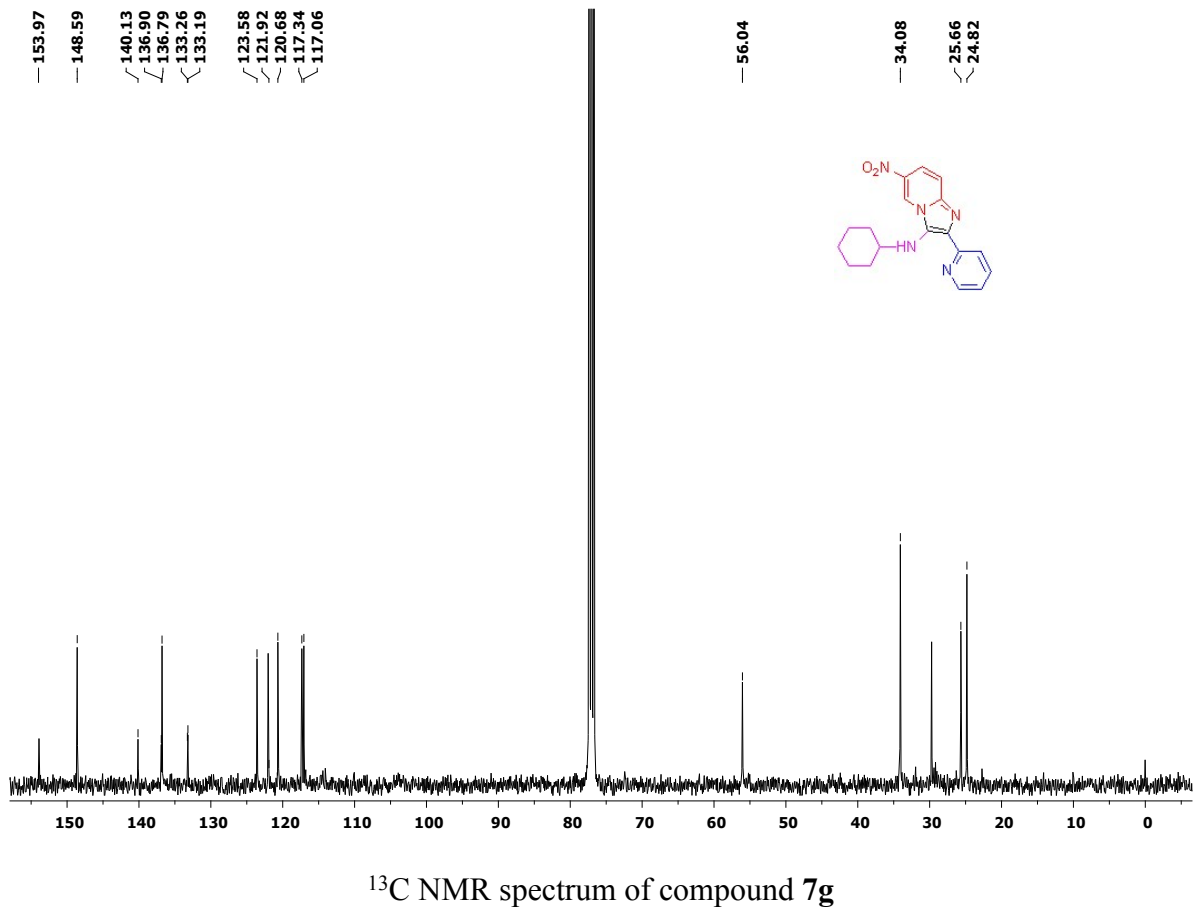
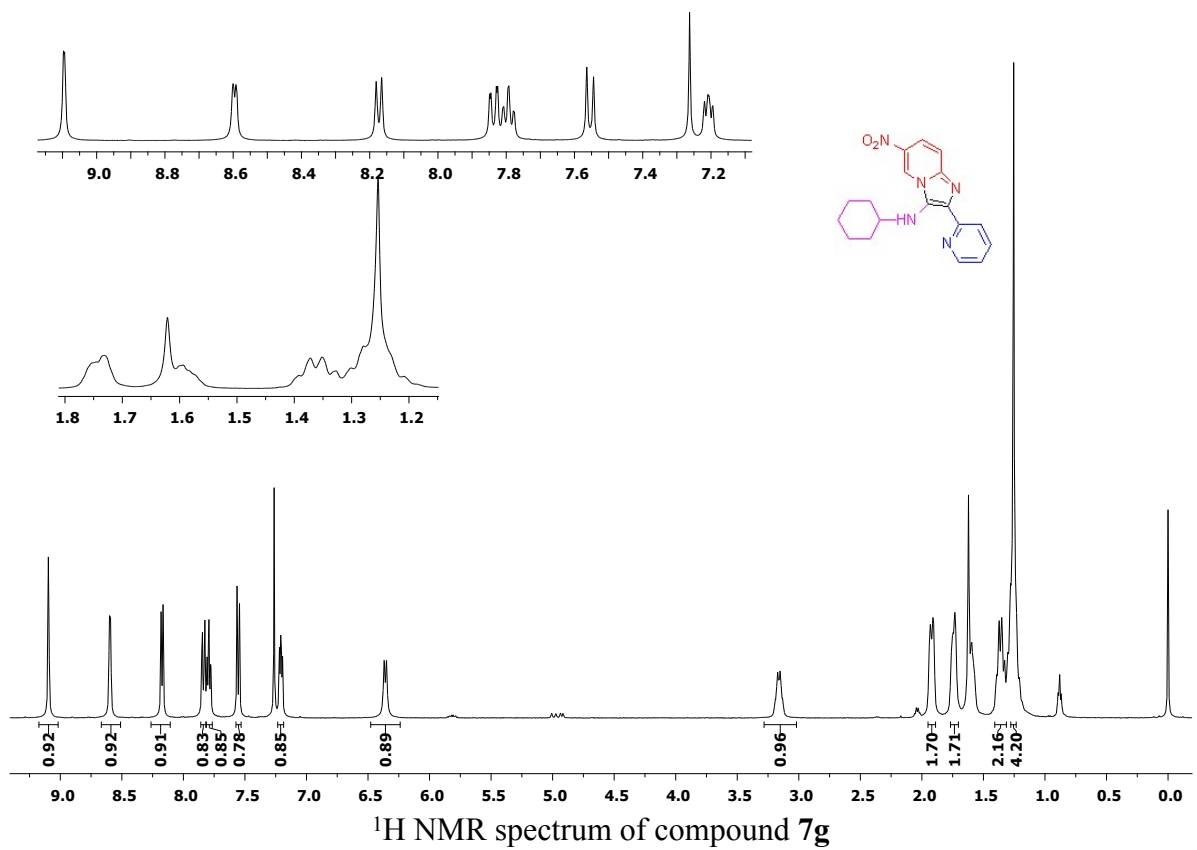
$^{13}\text{C}$  NMR spectrum of compound **7e**

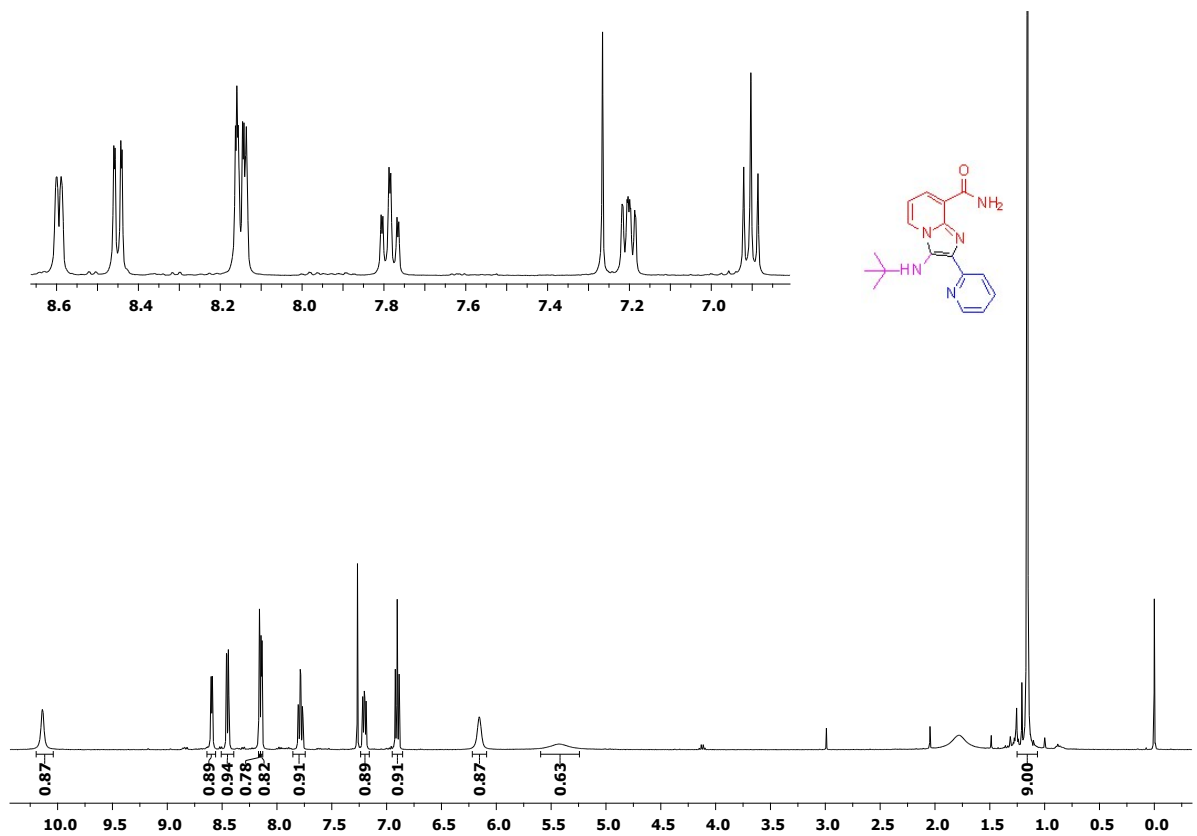


$^1\text{H}$  NMR spectrum of compound 7f

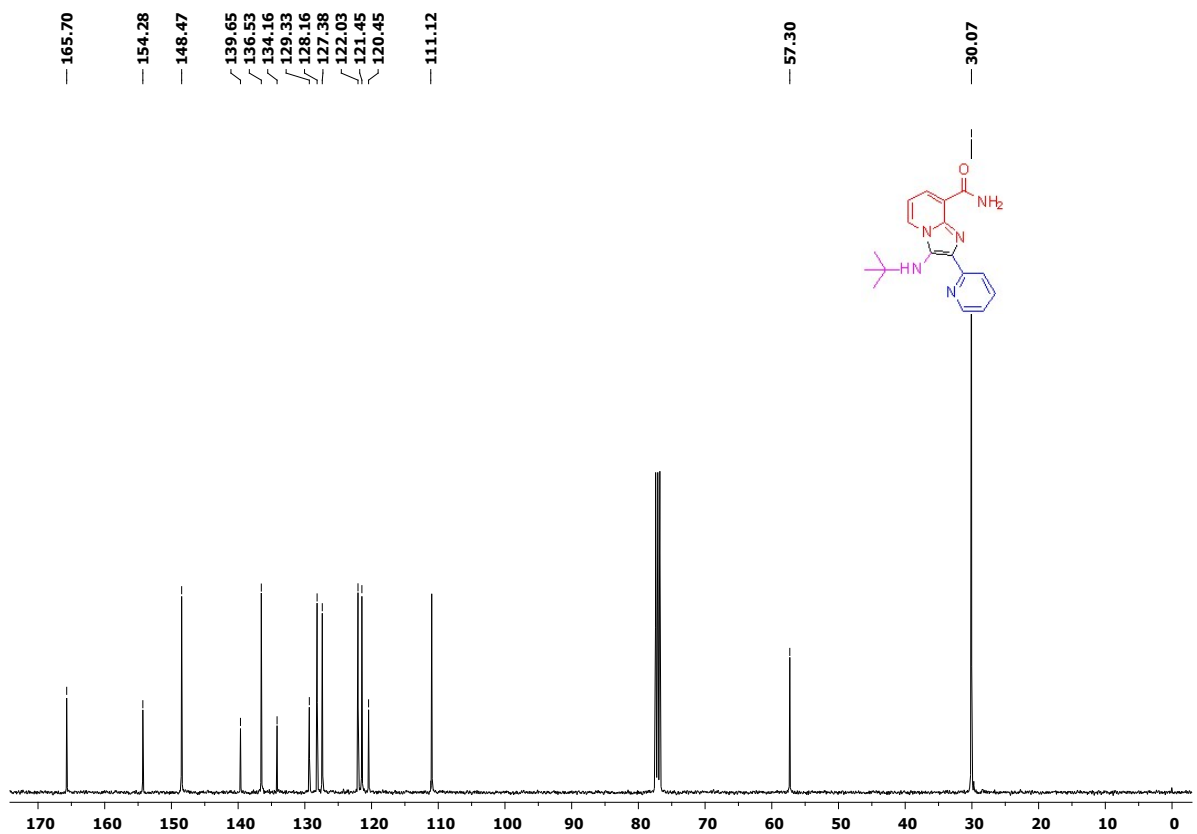


$^{13}\text{C}$  NMR spectrum of compound 7f

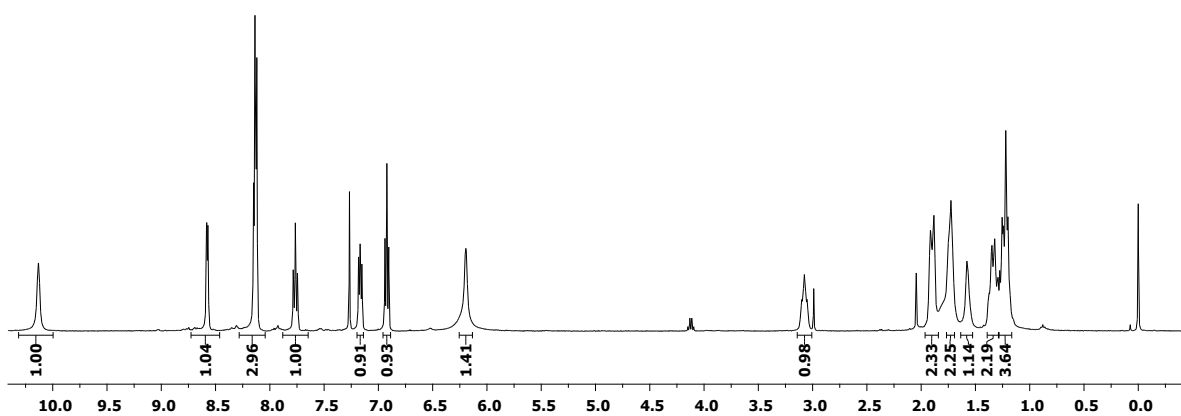
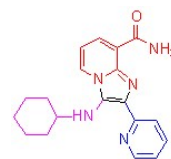
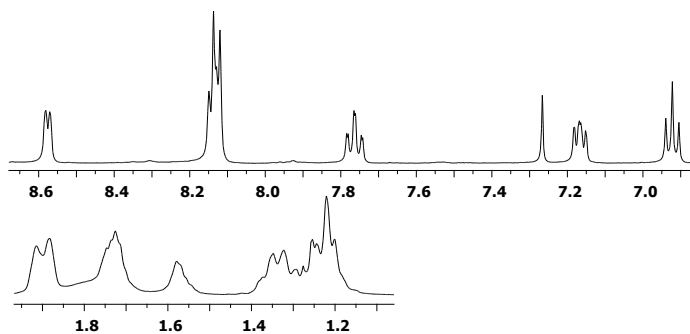




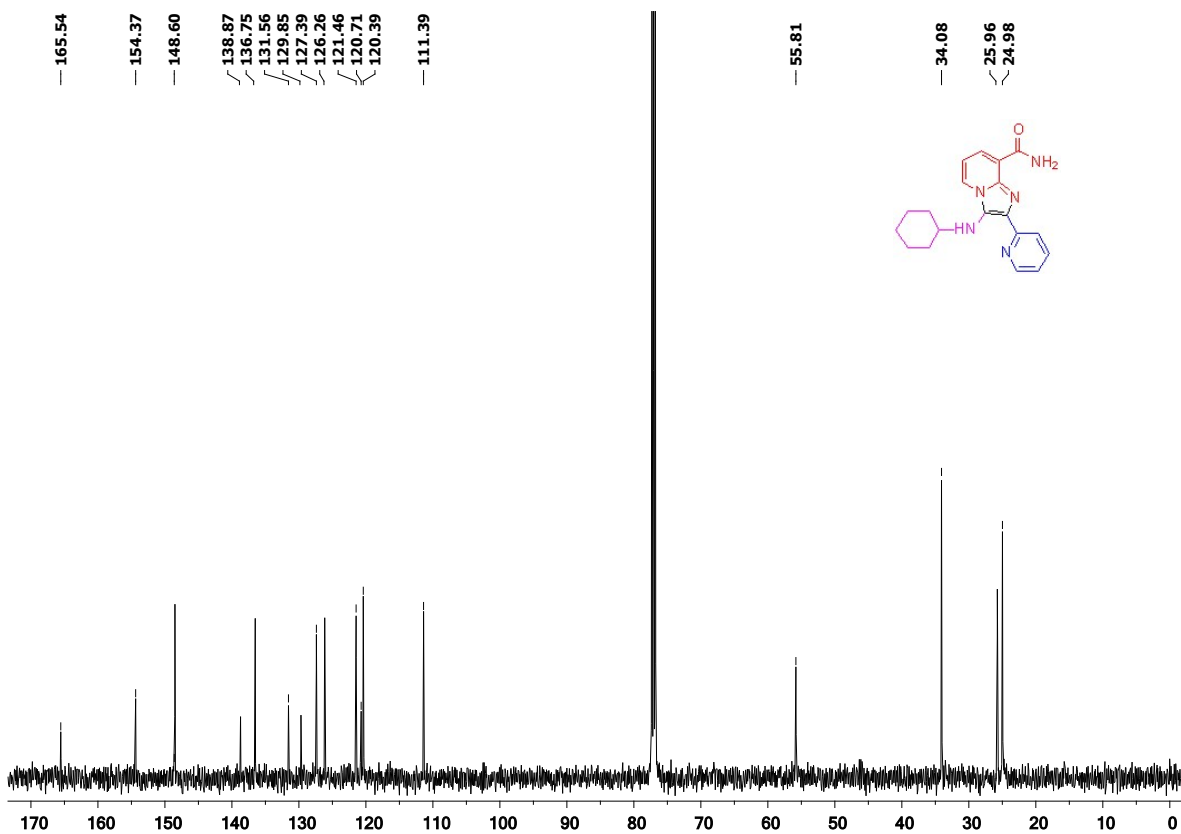
<sup>1</sup>H NMR spectrum of compound **7h**



<sup>13</sup>C NMR spectrum of compound **7h**

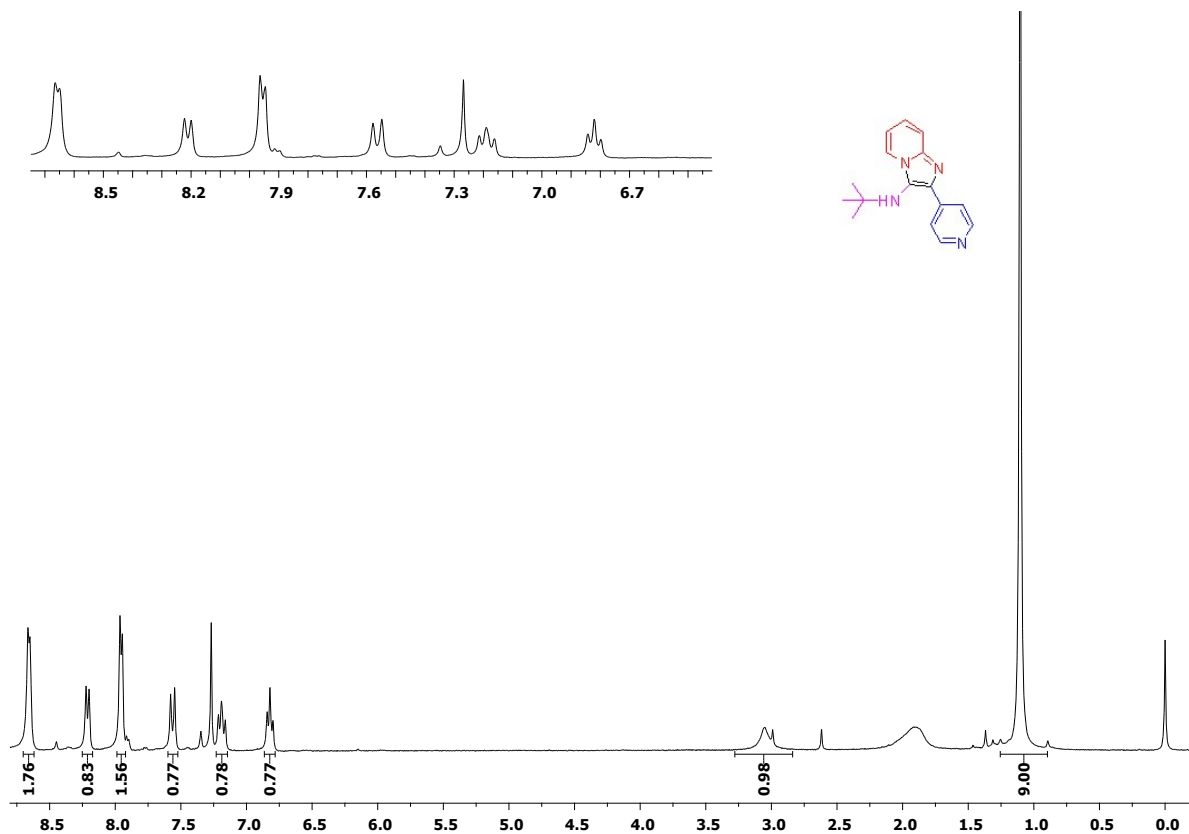


<sup>1</sup>H NMR spectrum of compound **7i**

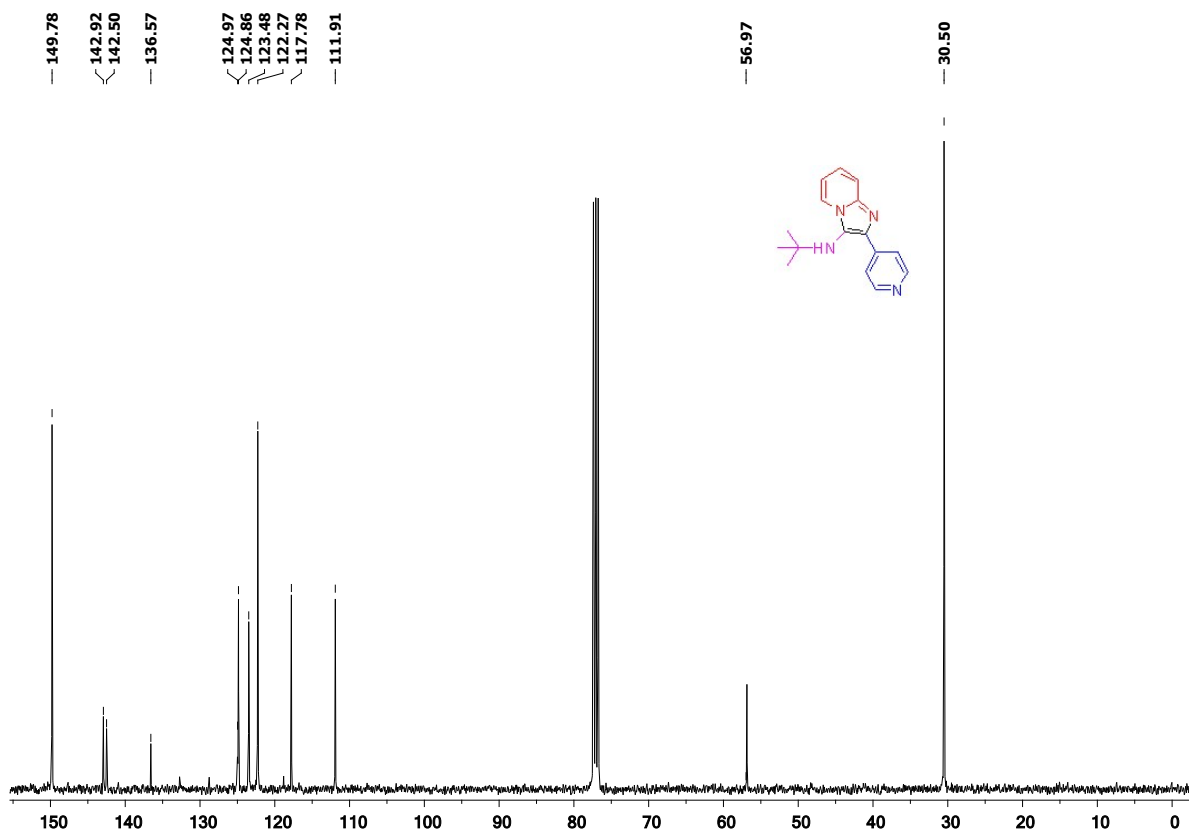


<sup>13</sup>C NMR spectrum of compound **7i**

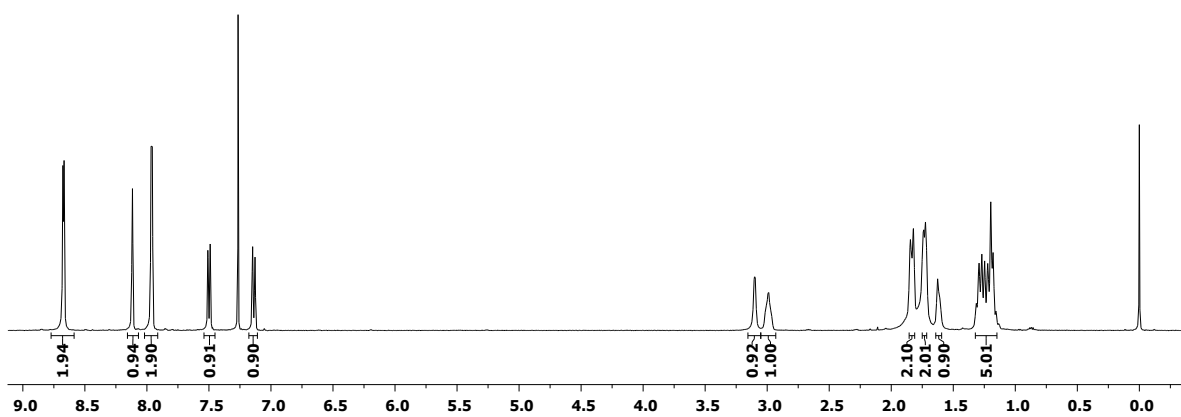
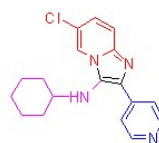
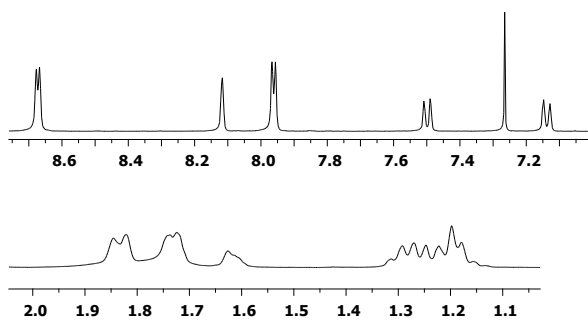




$^1\text{H}$  NMR spectrum of compound 7k



$^{13}\text{C}$  NMR spectrum of compound 7k



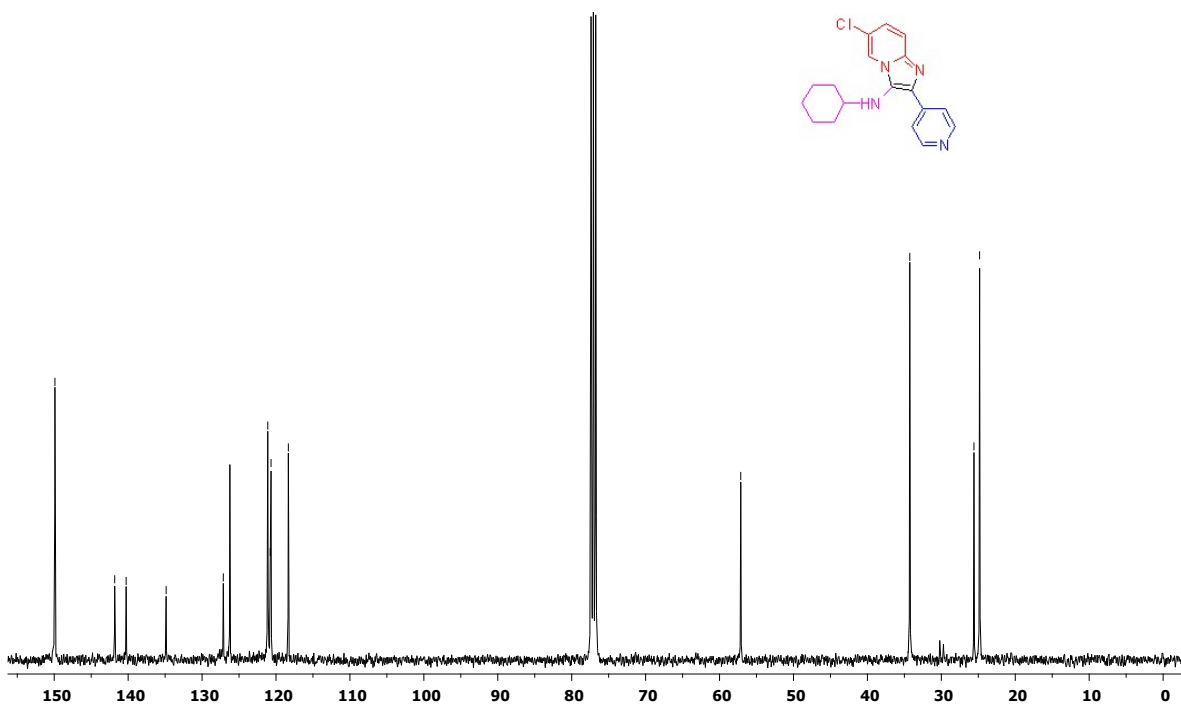
<sup>1</sup>H NMR spectrum of compound 71

149.90  
141.82  
140.27  
134.86  
127.13  
126.43  
121.11  
120.78  
120.67  
118.33

57.13

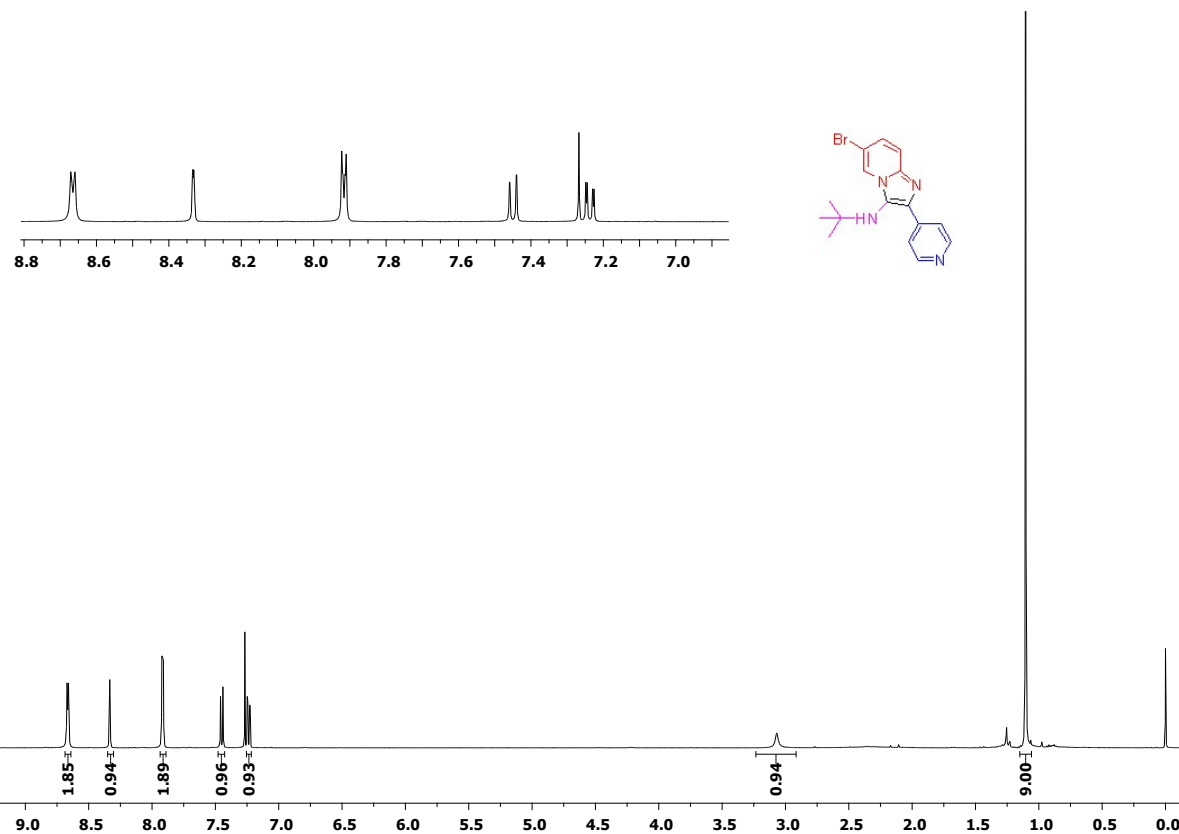
34.27

25.59  
24.82

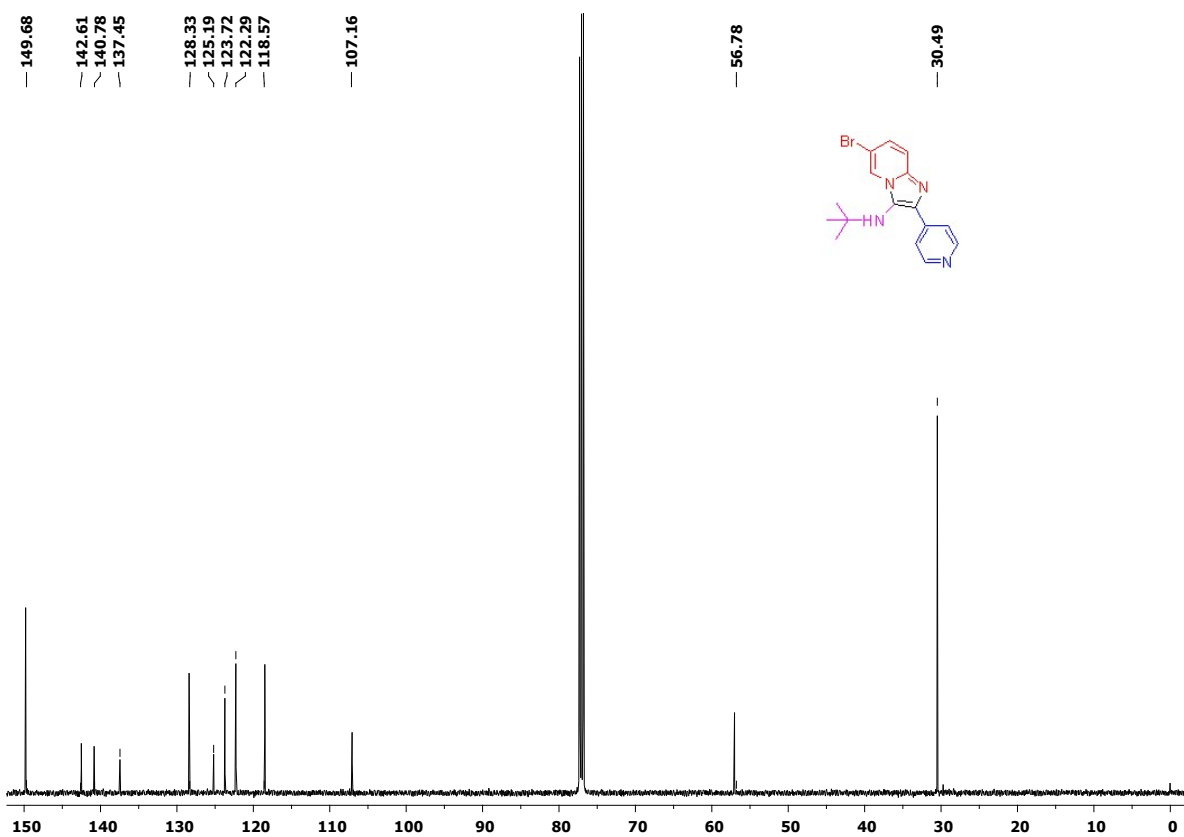


<sup>13</sup>C NMR spectrum of compound 71

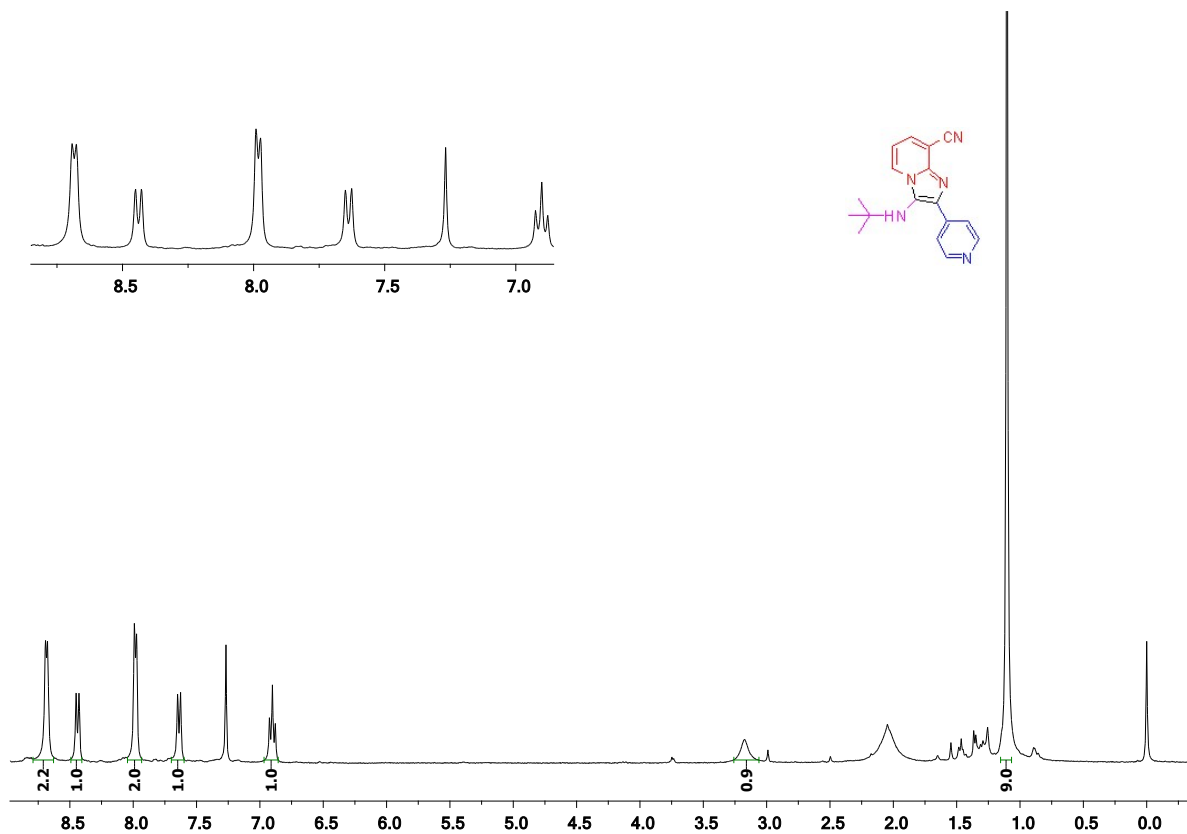




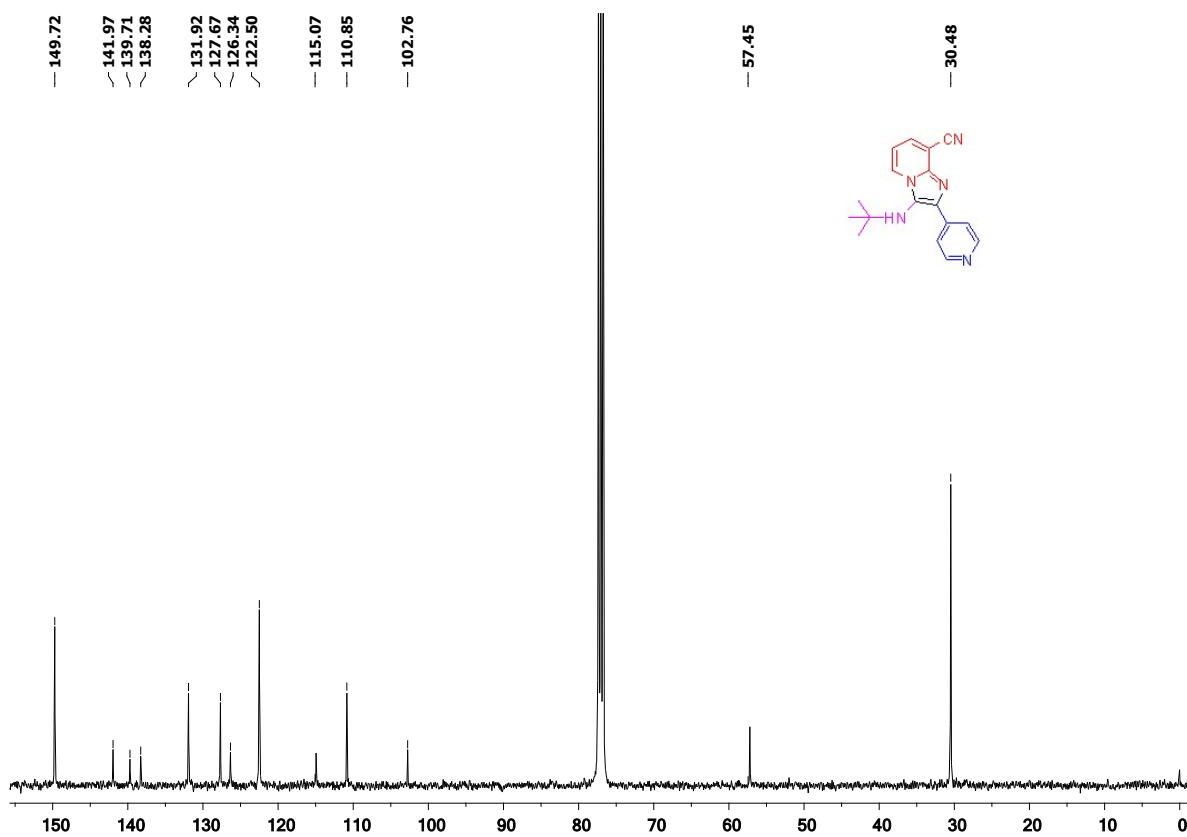
<sup>1</sup>H NMR spectrum of compound 7m



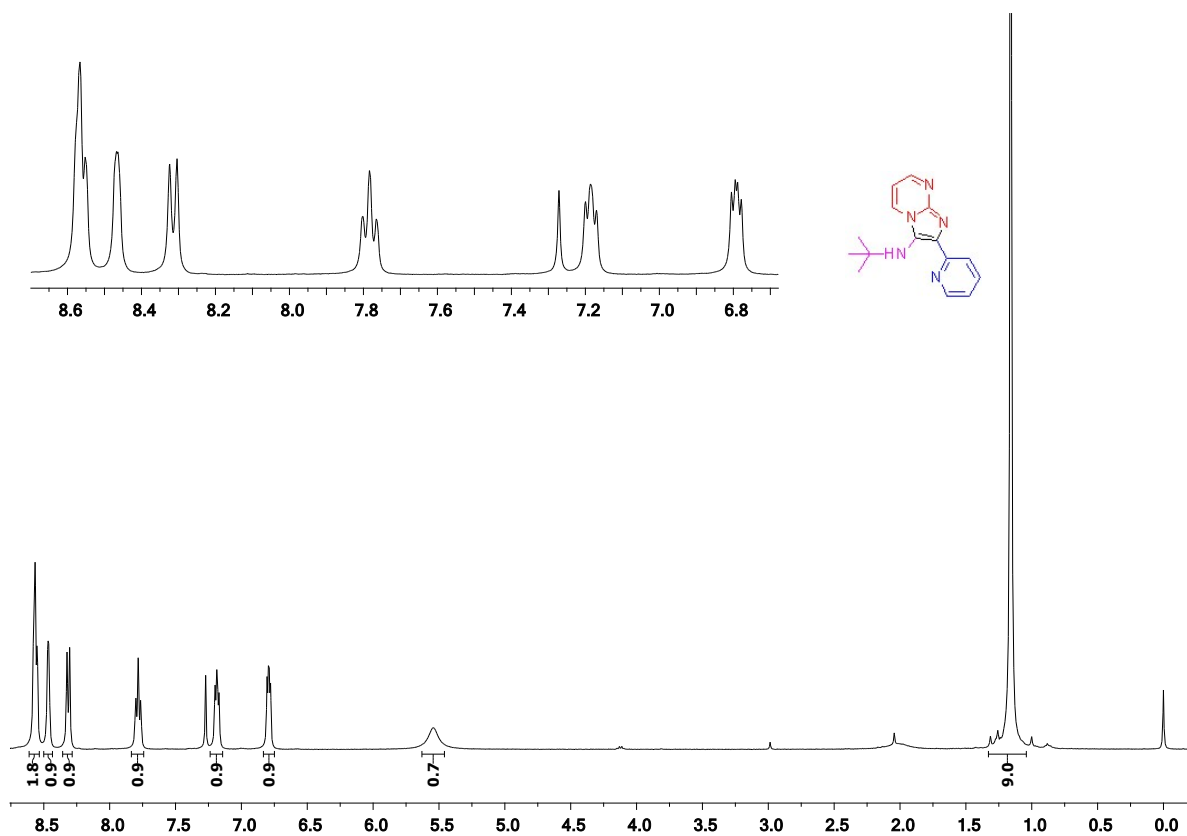
<sup>13</sup>C NMR spectrum of compound 7m



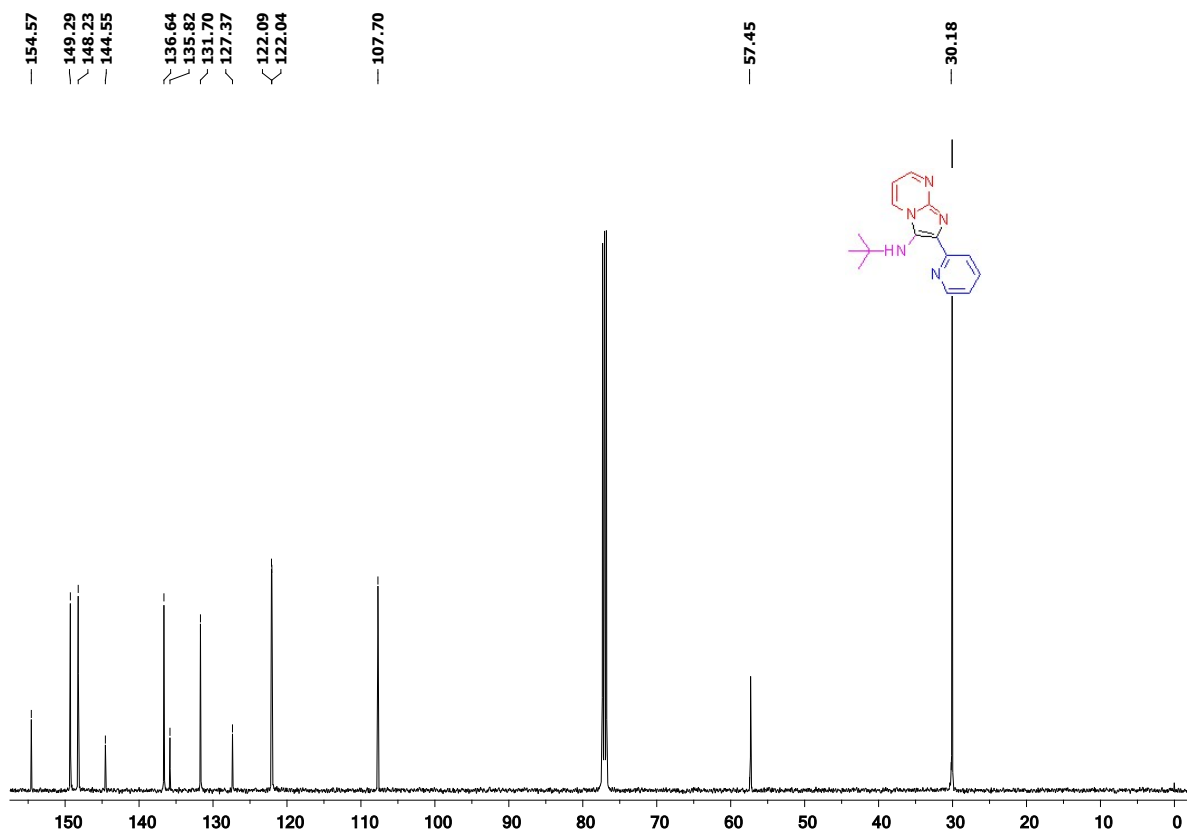
<sup>1</sup>H NMR spectrum of compound **7n**



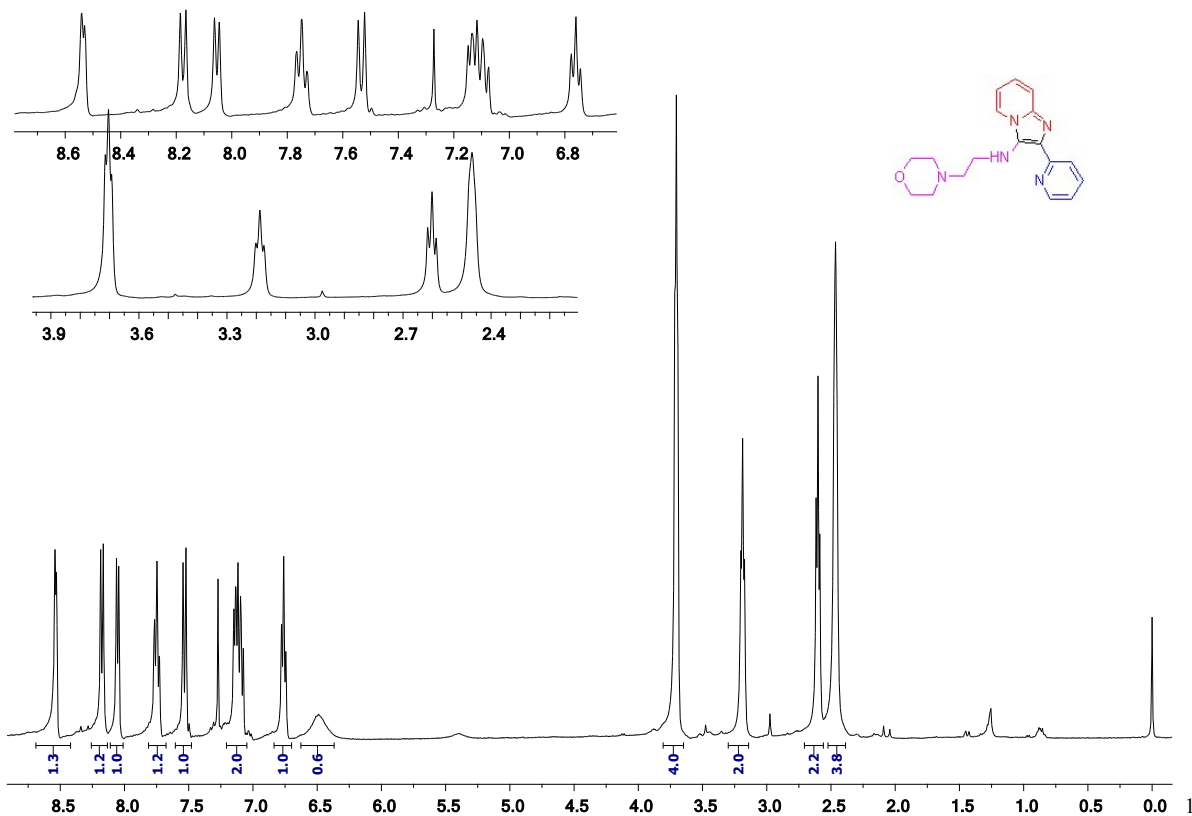
<sup>13</sup>C NMR spectrum of compound **7n**



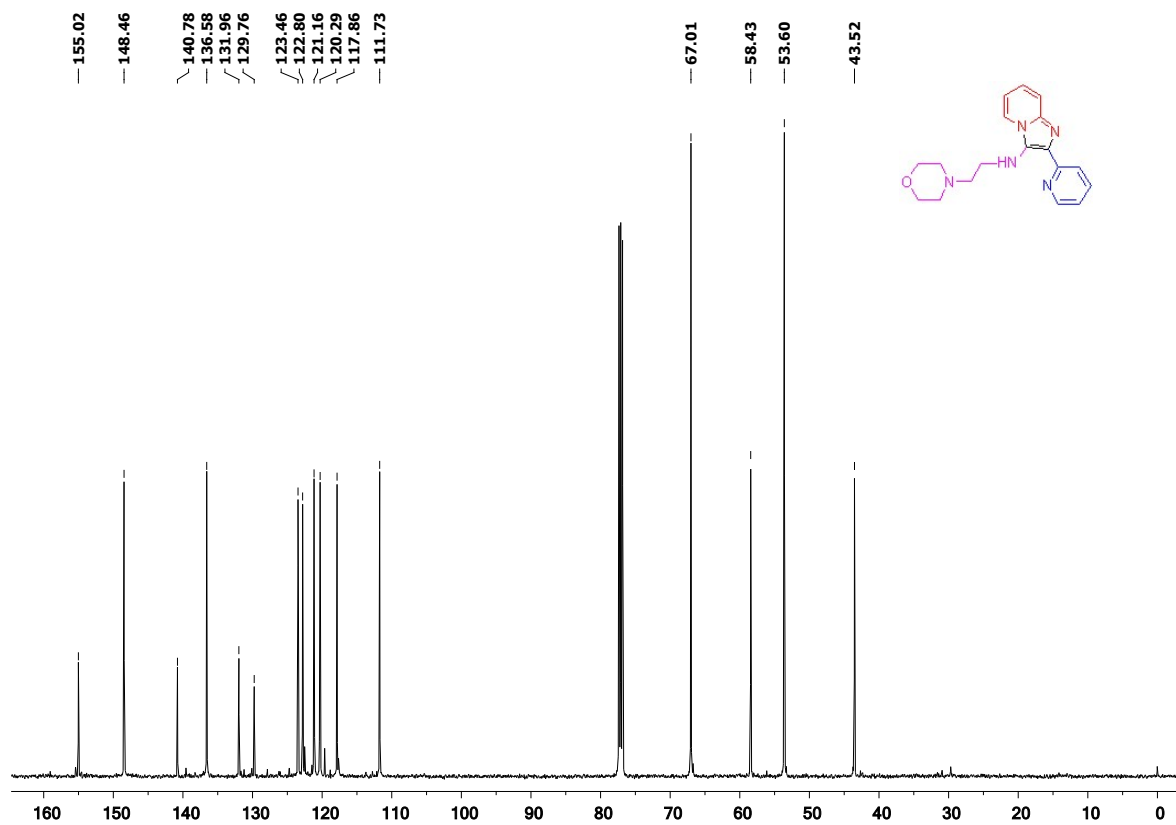
$^1\text{H}$  NMR spectrum of compound **7o**



$^{13}\text{C}$  NMR spectrum of compound **7o**

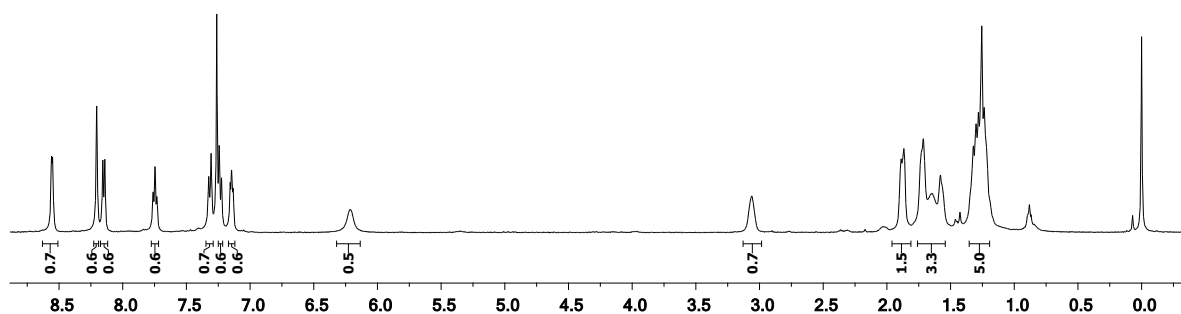
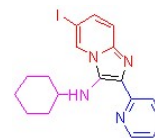
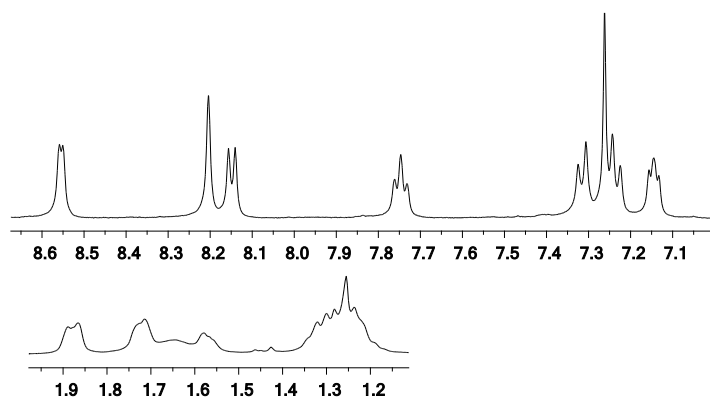


<sup>1</sup>H NMR spectrum of compound 7p

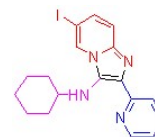
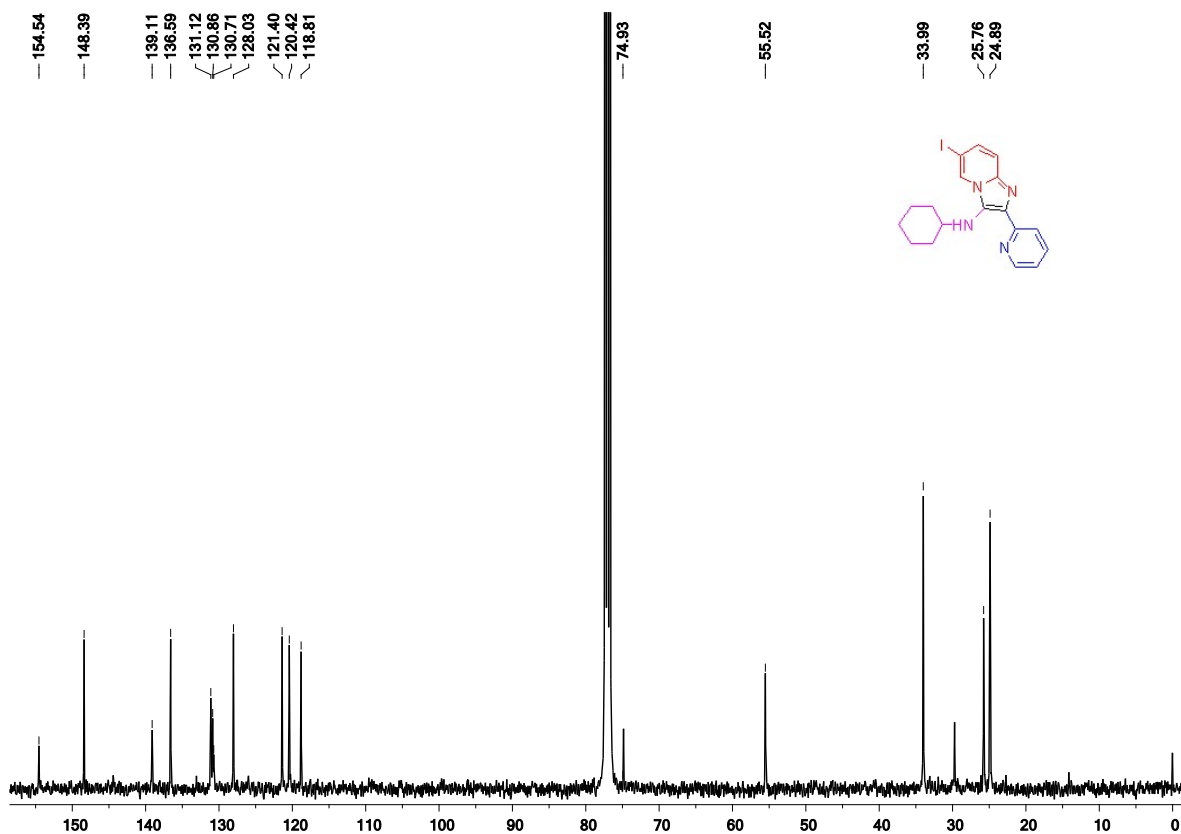




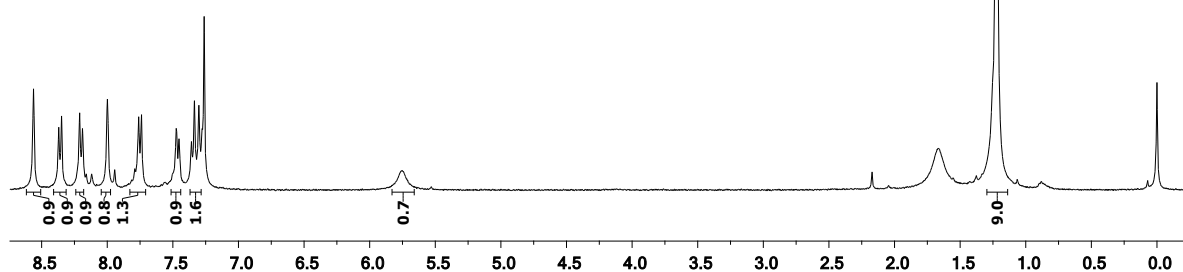
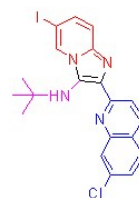
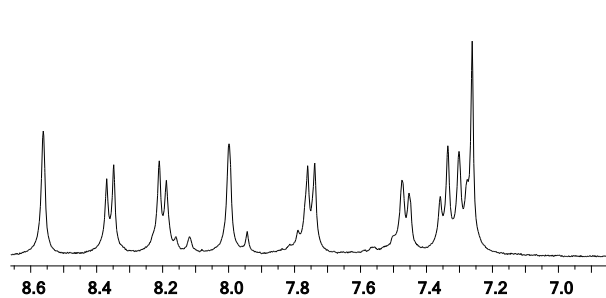
<sup>13</sup>C NMR spectrum of compound **5a**



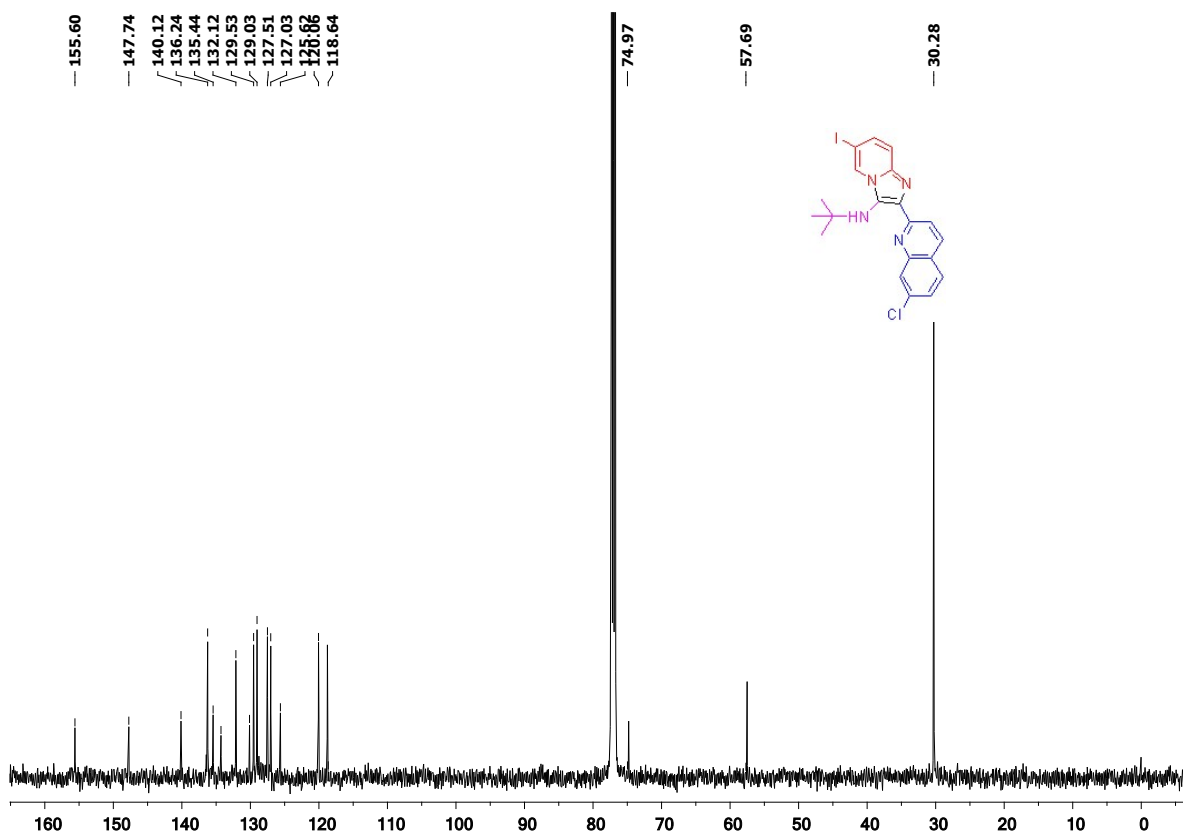
<sup>1</sup>H NMR spectrum of compound **5b**



$^{13}\text{C}$  NMR spectrum of compound **5b**



$^1\text{H}$  NMR spectrum of compound **5c**



$^{13}\text{C}$  NMR spectrum of compound **5c**