

## Supporting Information

# Copper-Catalyzed *N*-Arylation of Pyranoquinolinones with Boronic Acids at Room Temperature without Ligand

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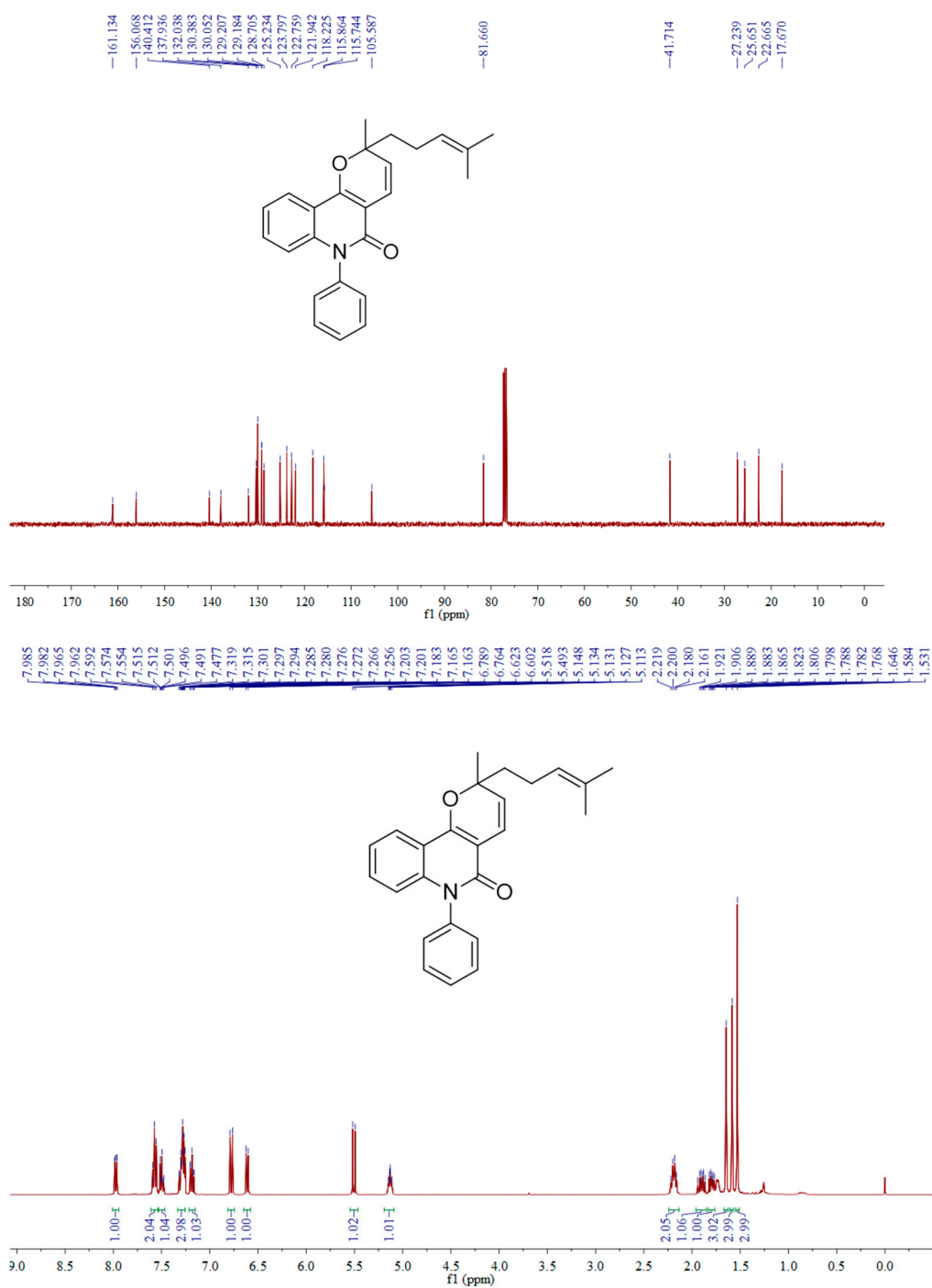
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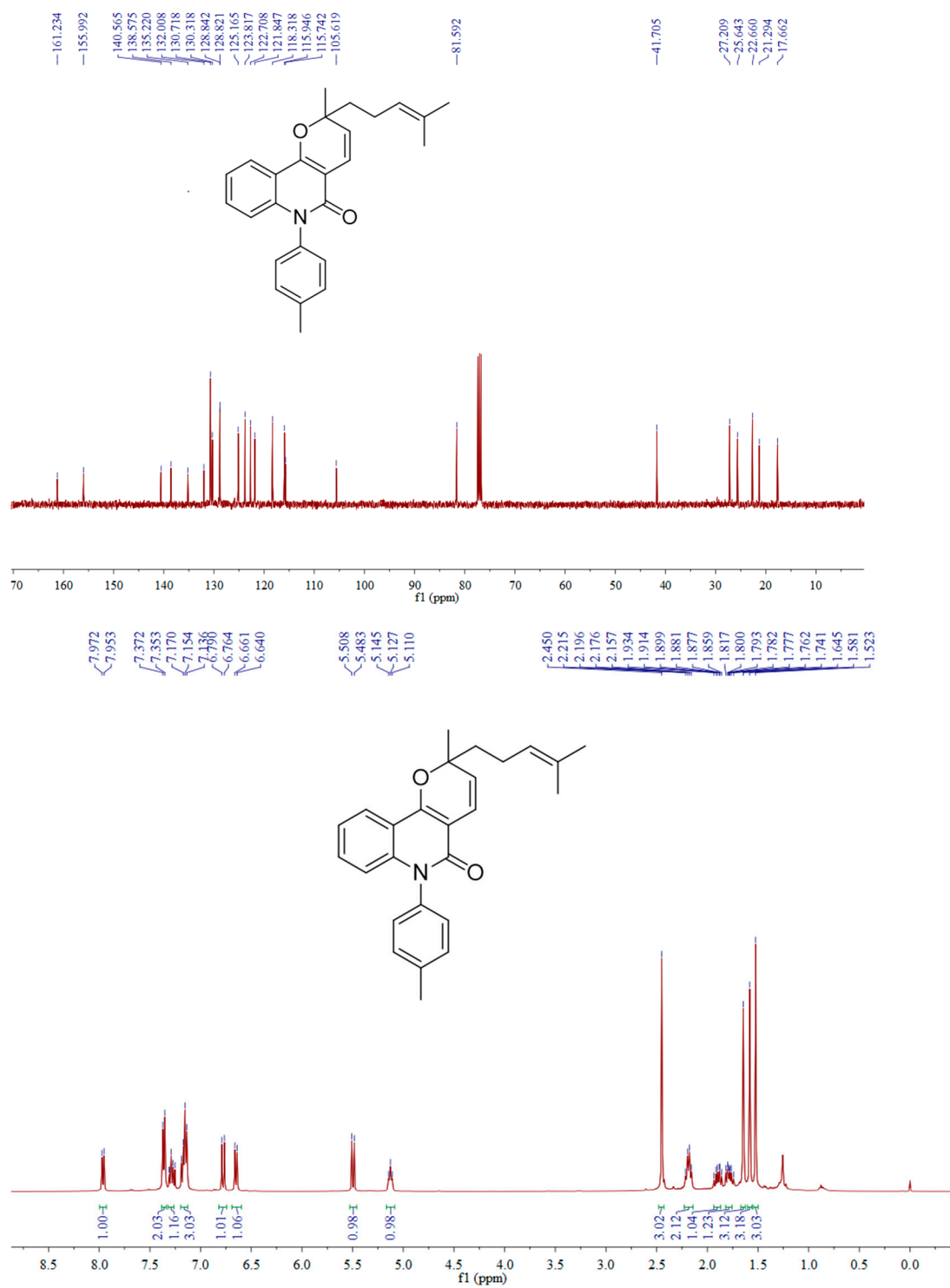
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### I. NMR Spectra

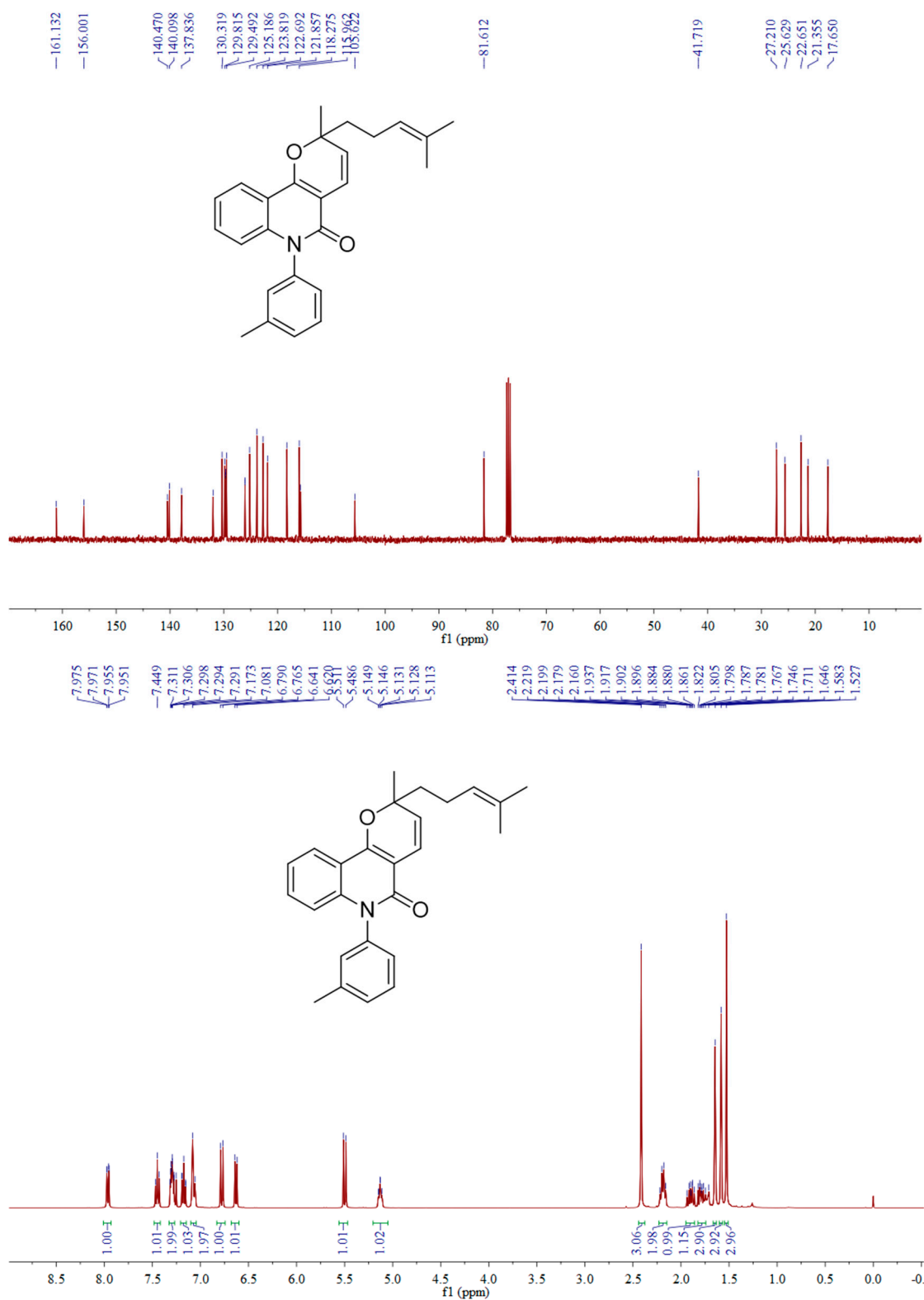
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**Figure S1.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound 3a

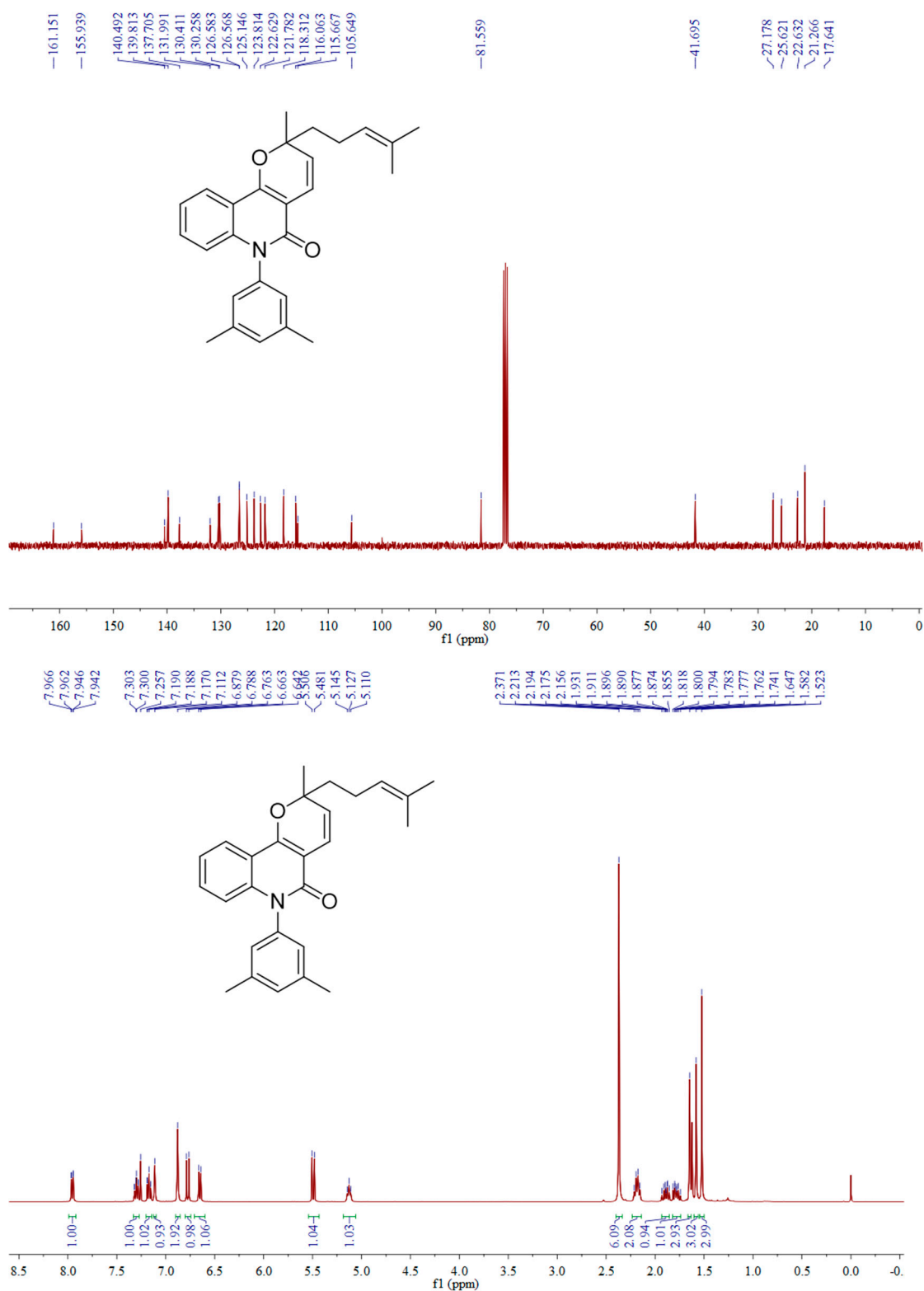


**Figure S2.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3b**

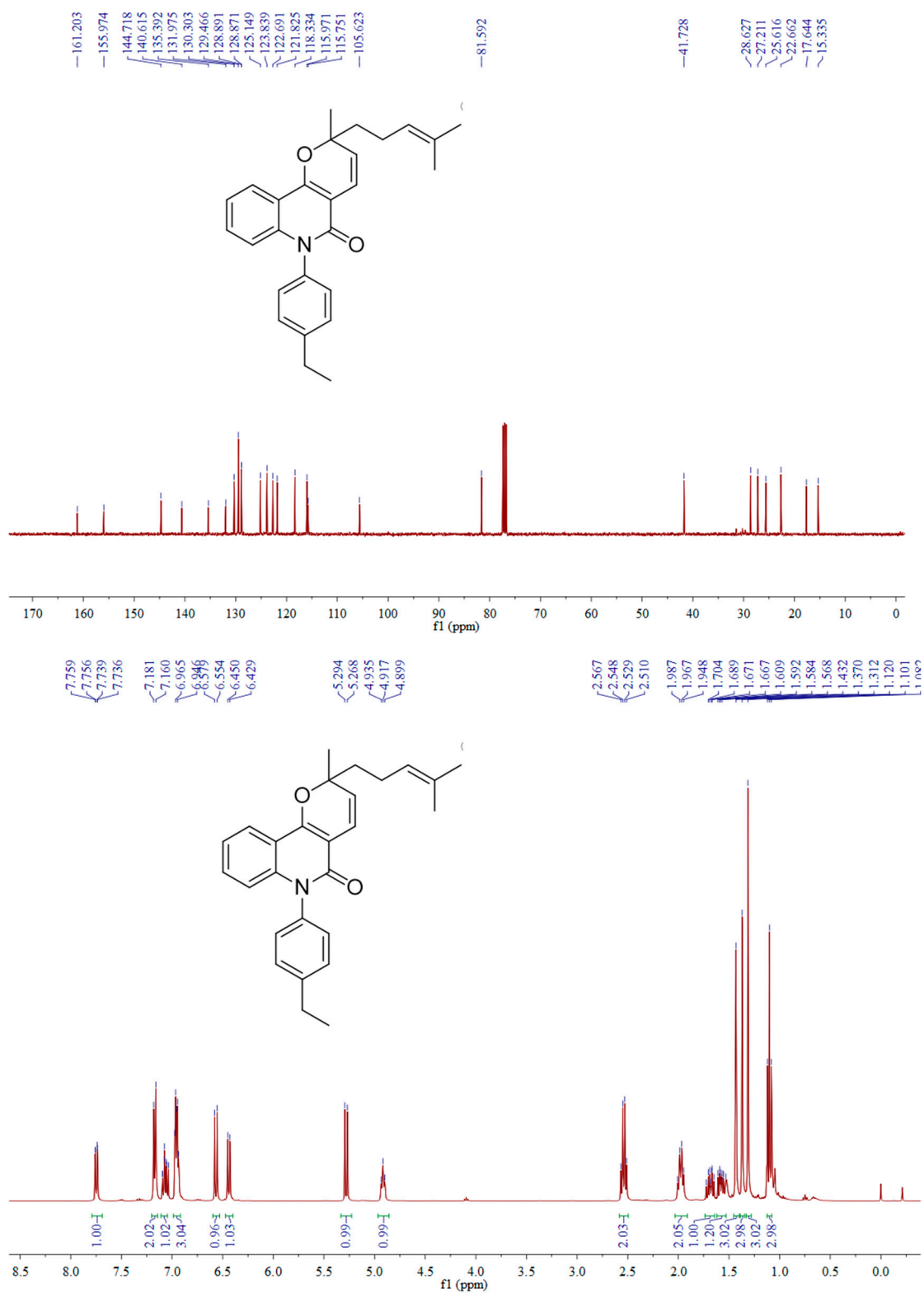


**Figure S3.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3c**

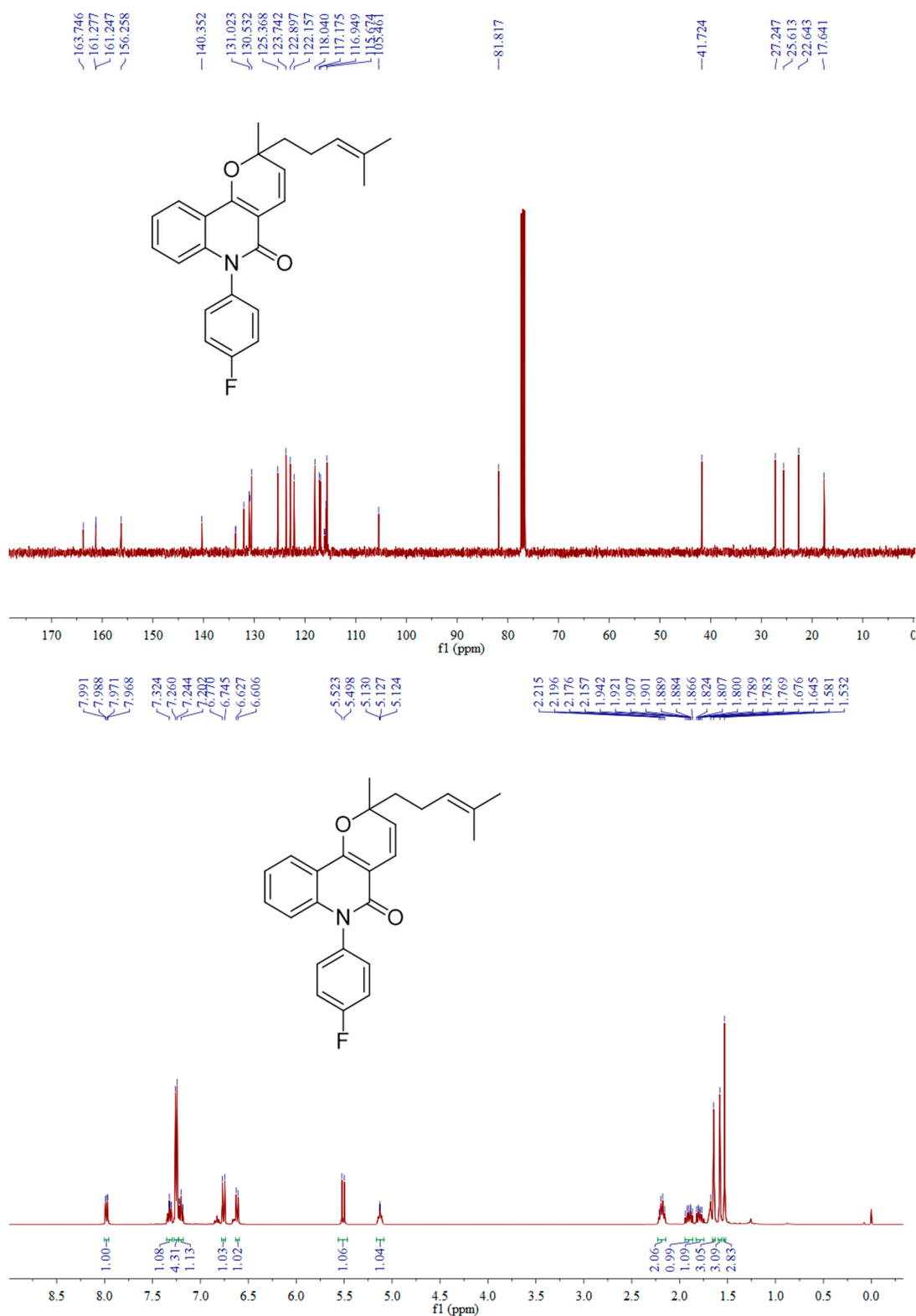




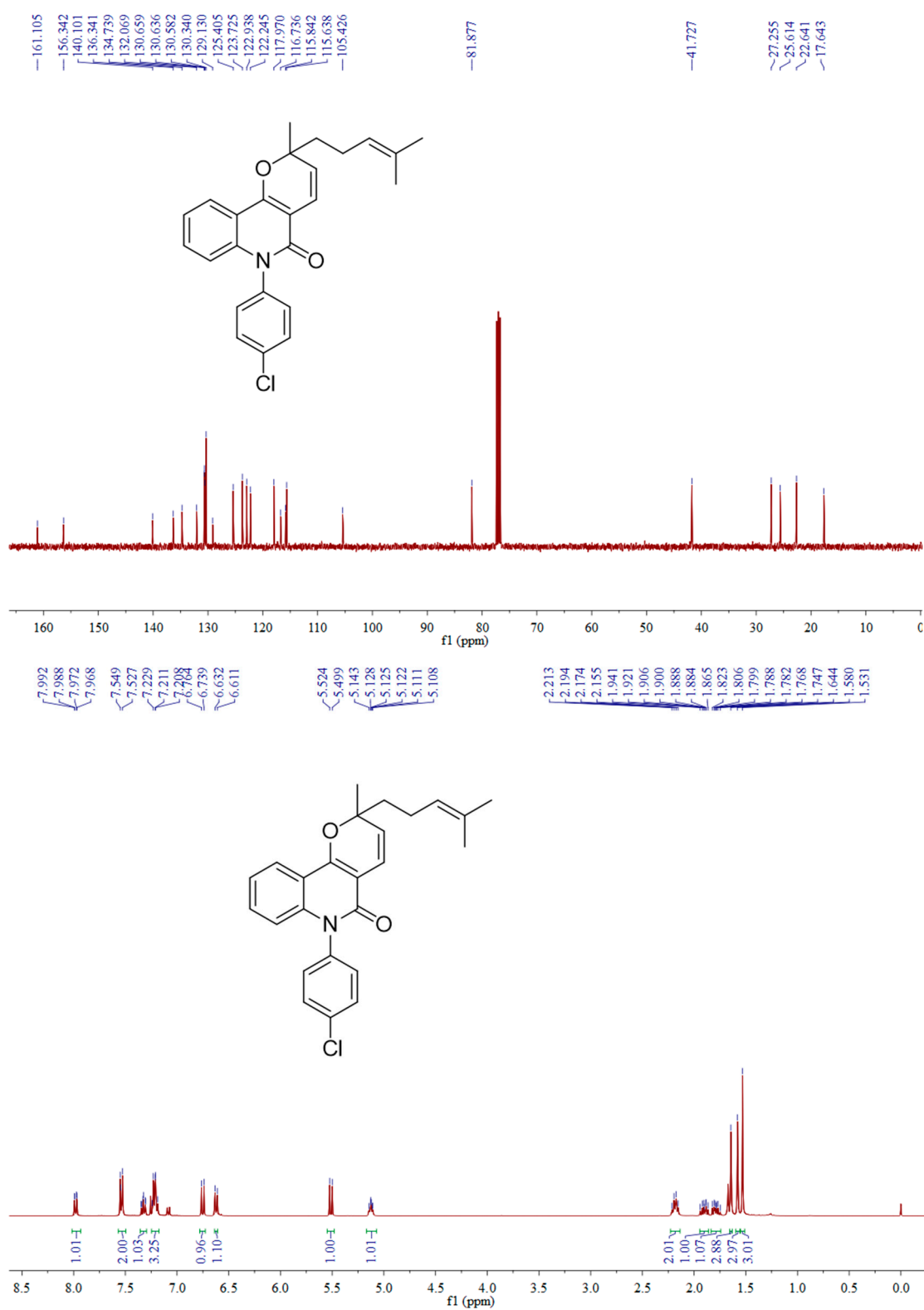
**Figure S4.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3d**



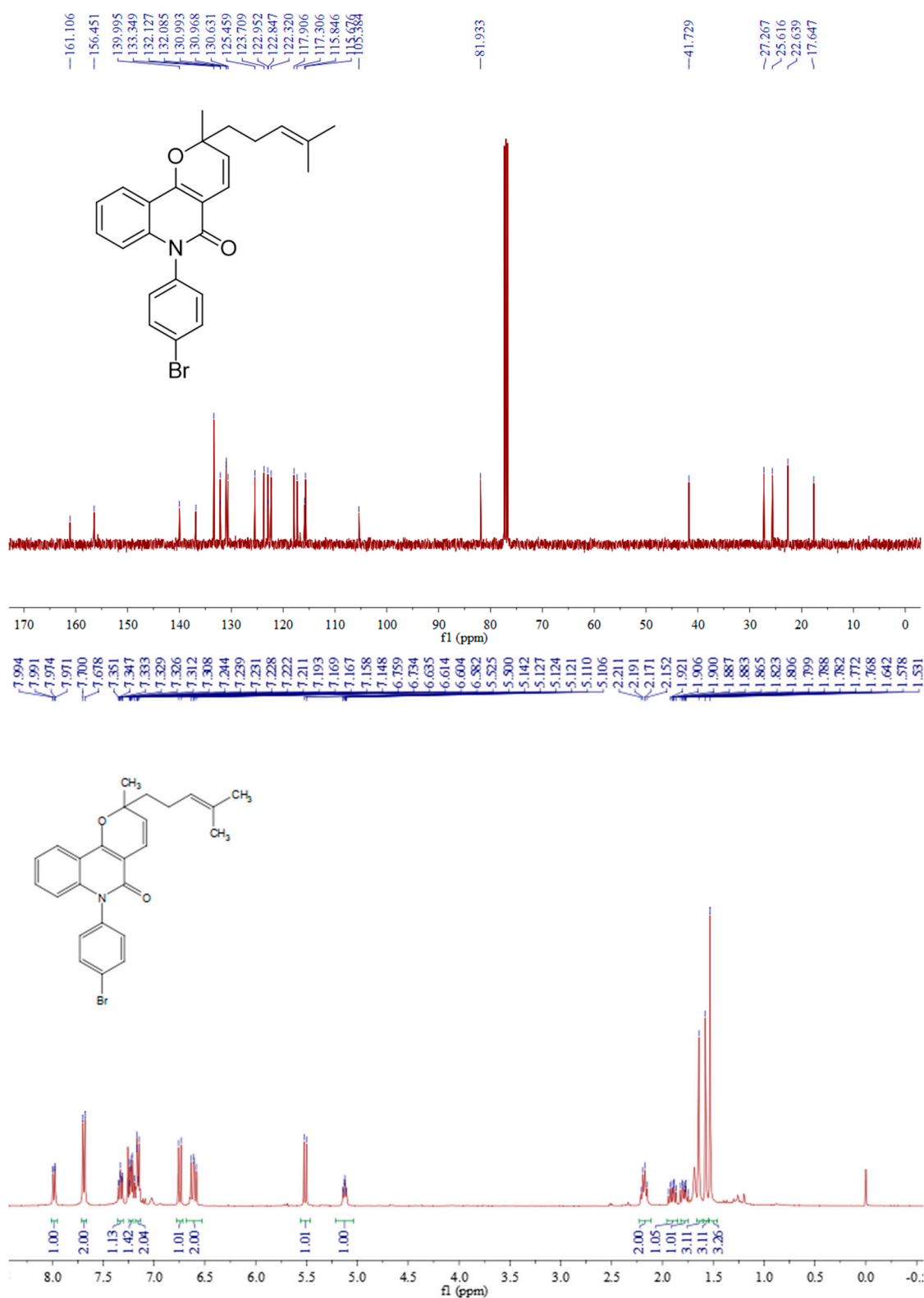
**Figure S5.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3e**



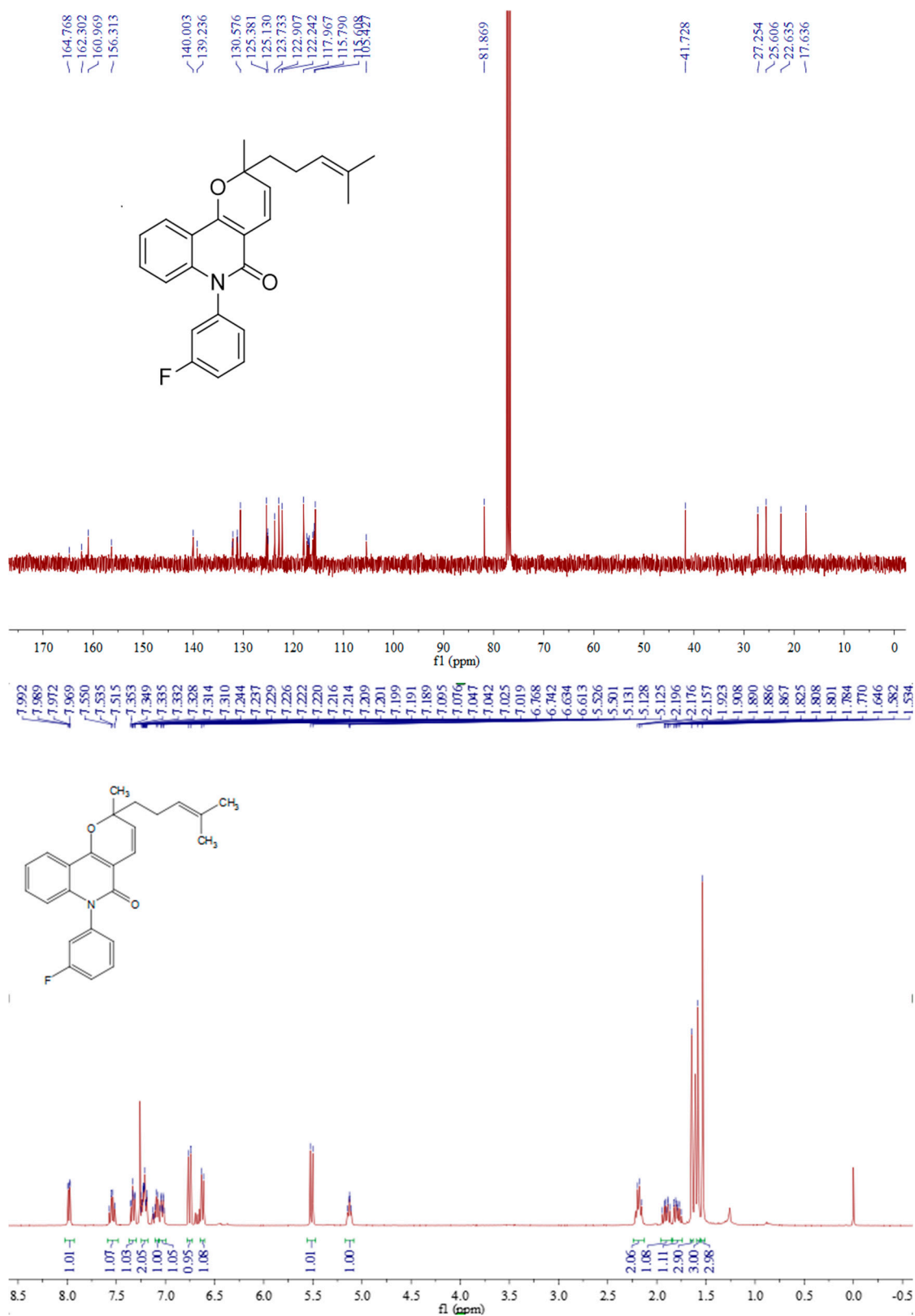
**Figure S6.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3f**



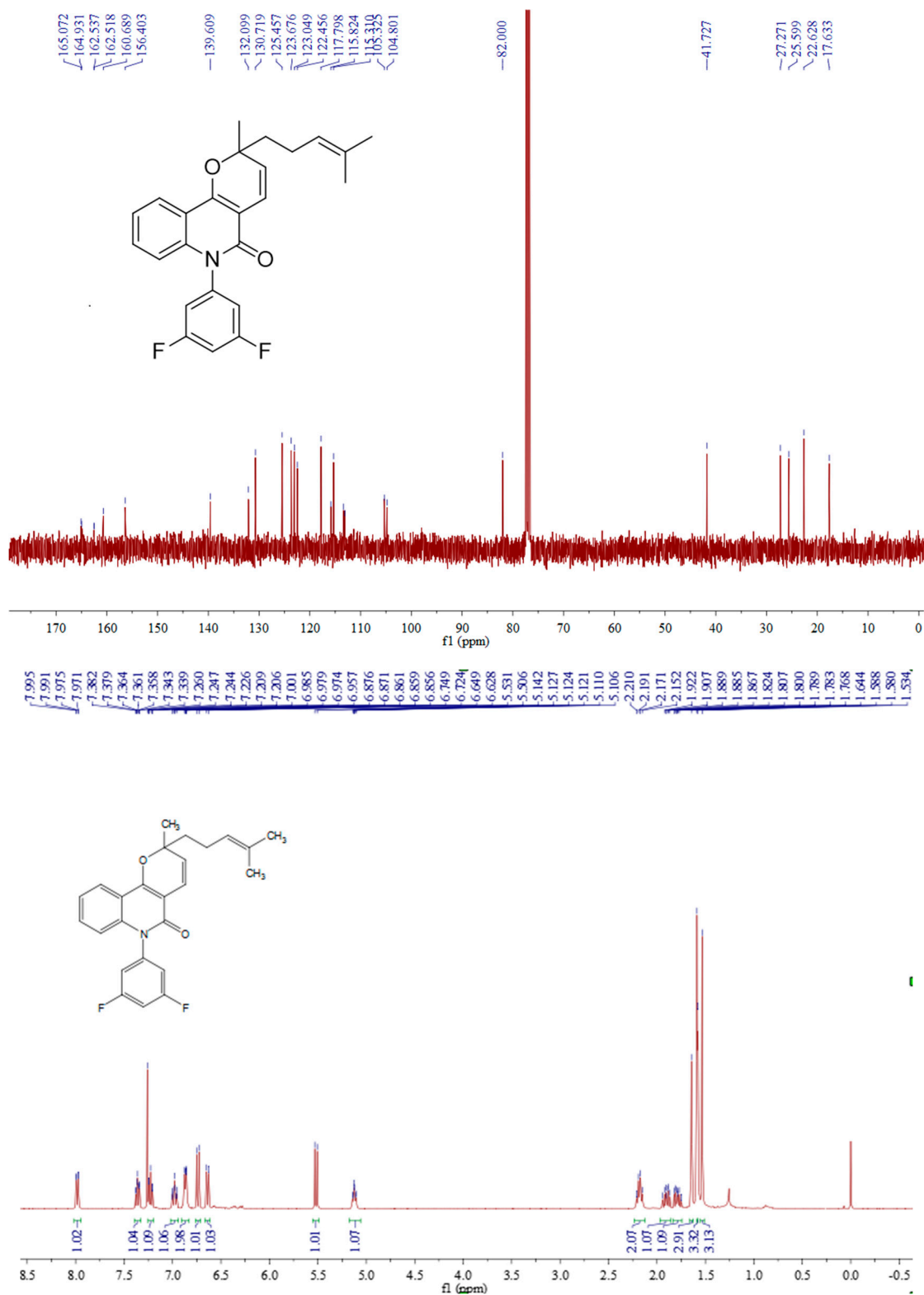
**Figure S7.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3g**



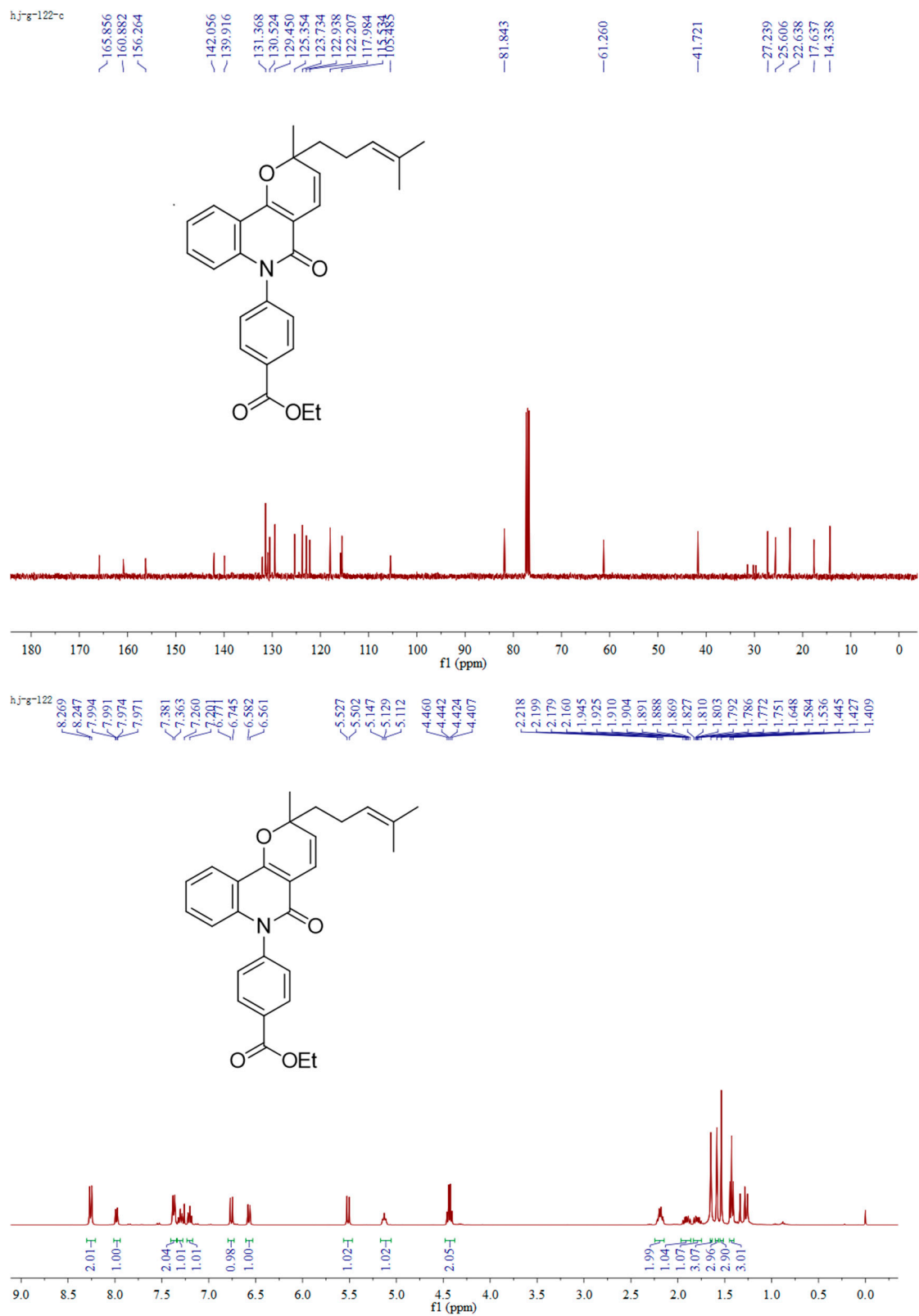
**Figure S8.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound 3h



**Figure S9.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3i**

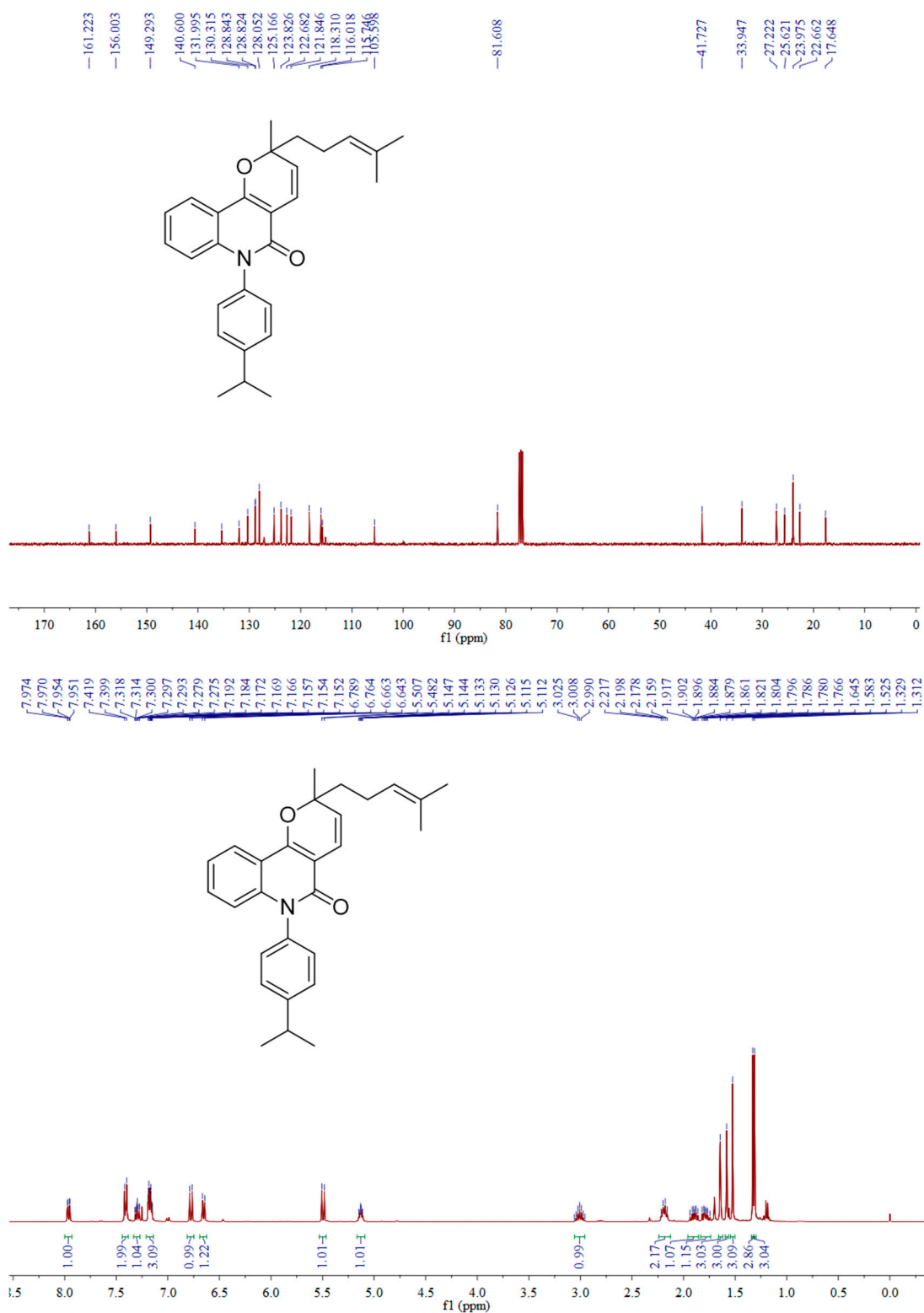


**Figure S10.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound 3j

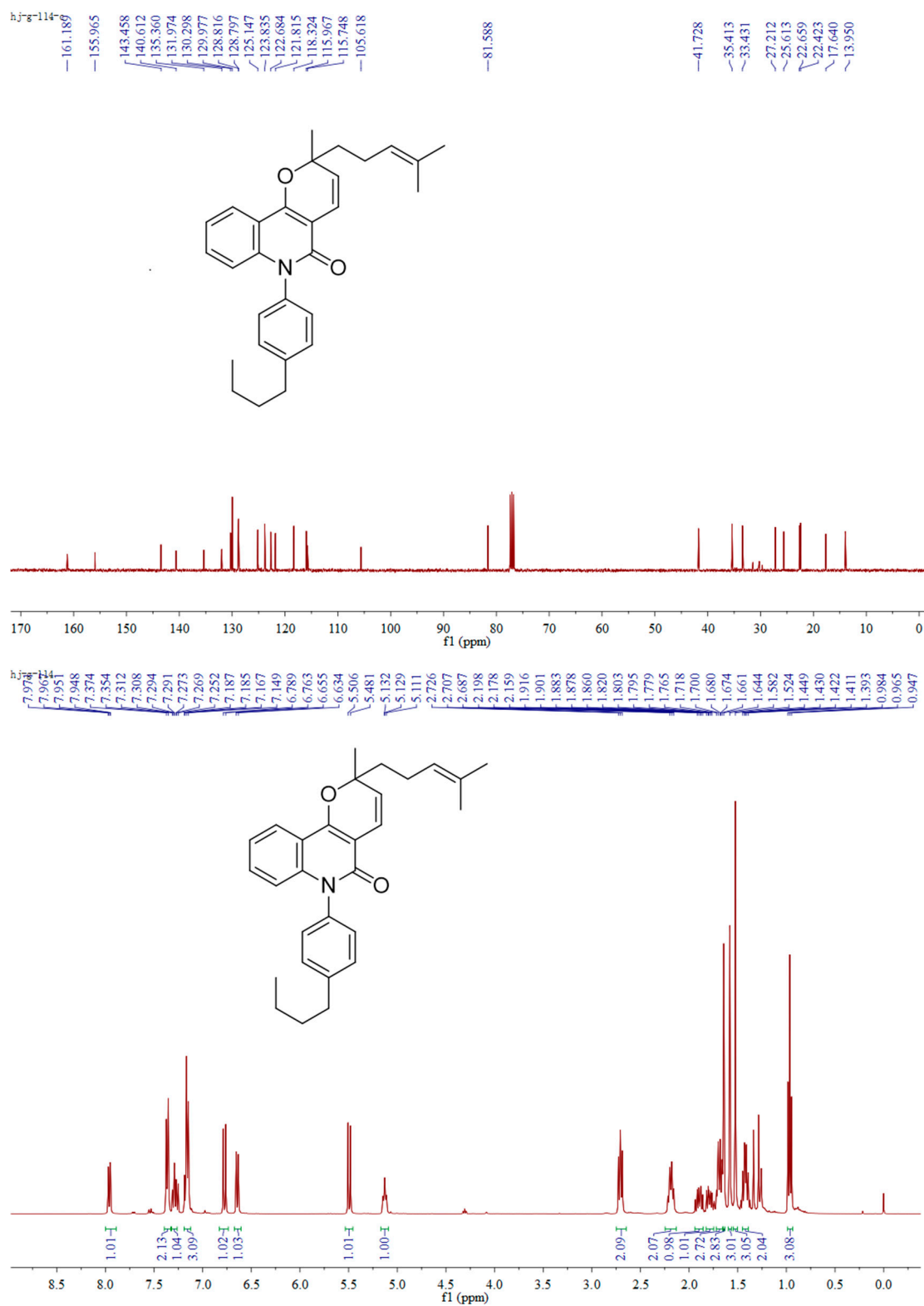


**Figure S11.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound 3k

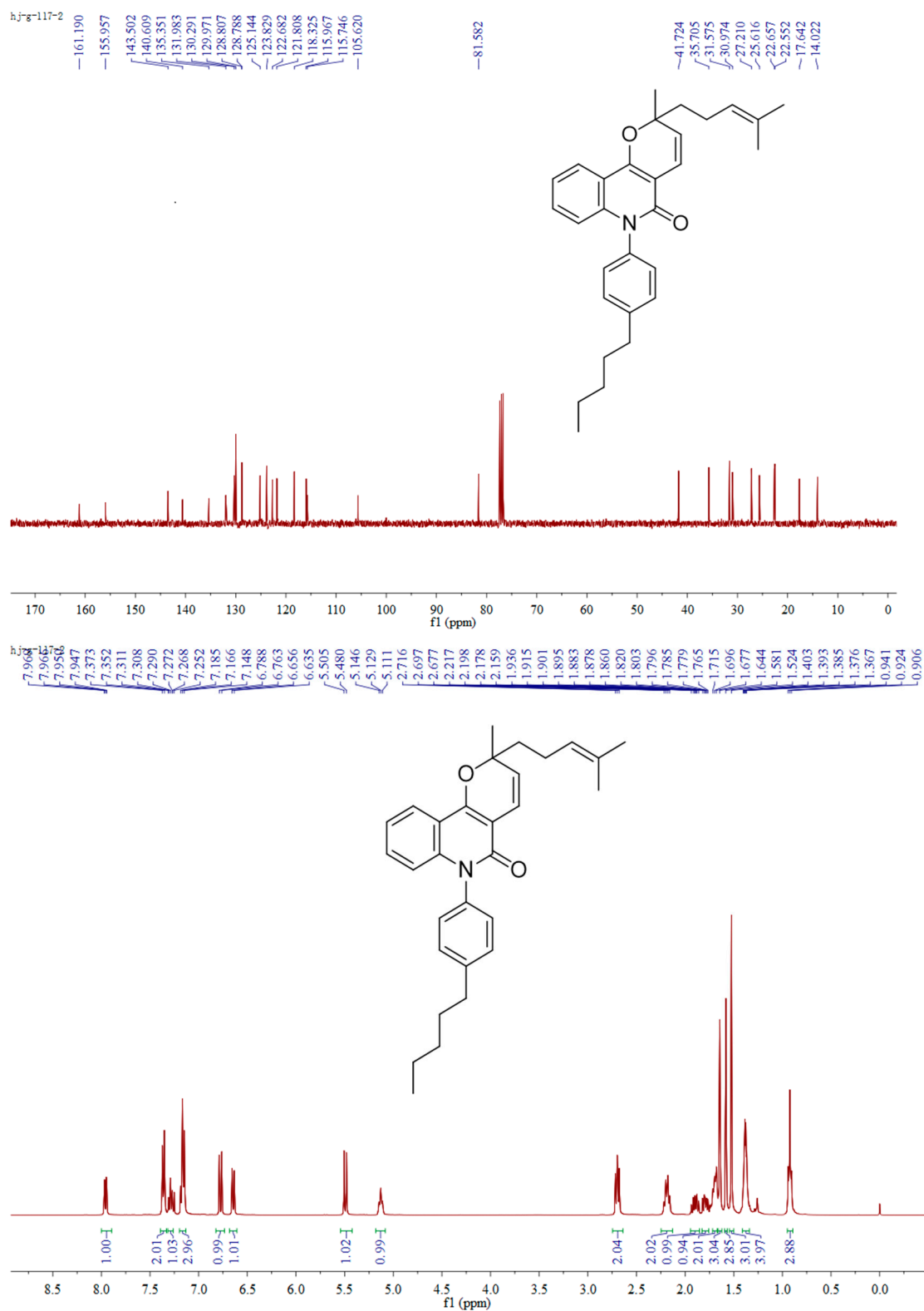




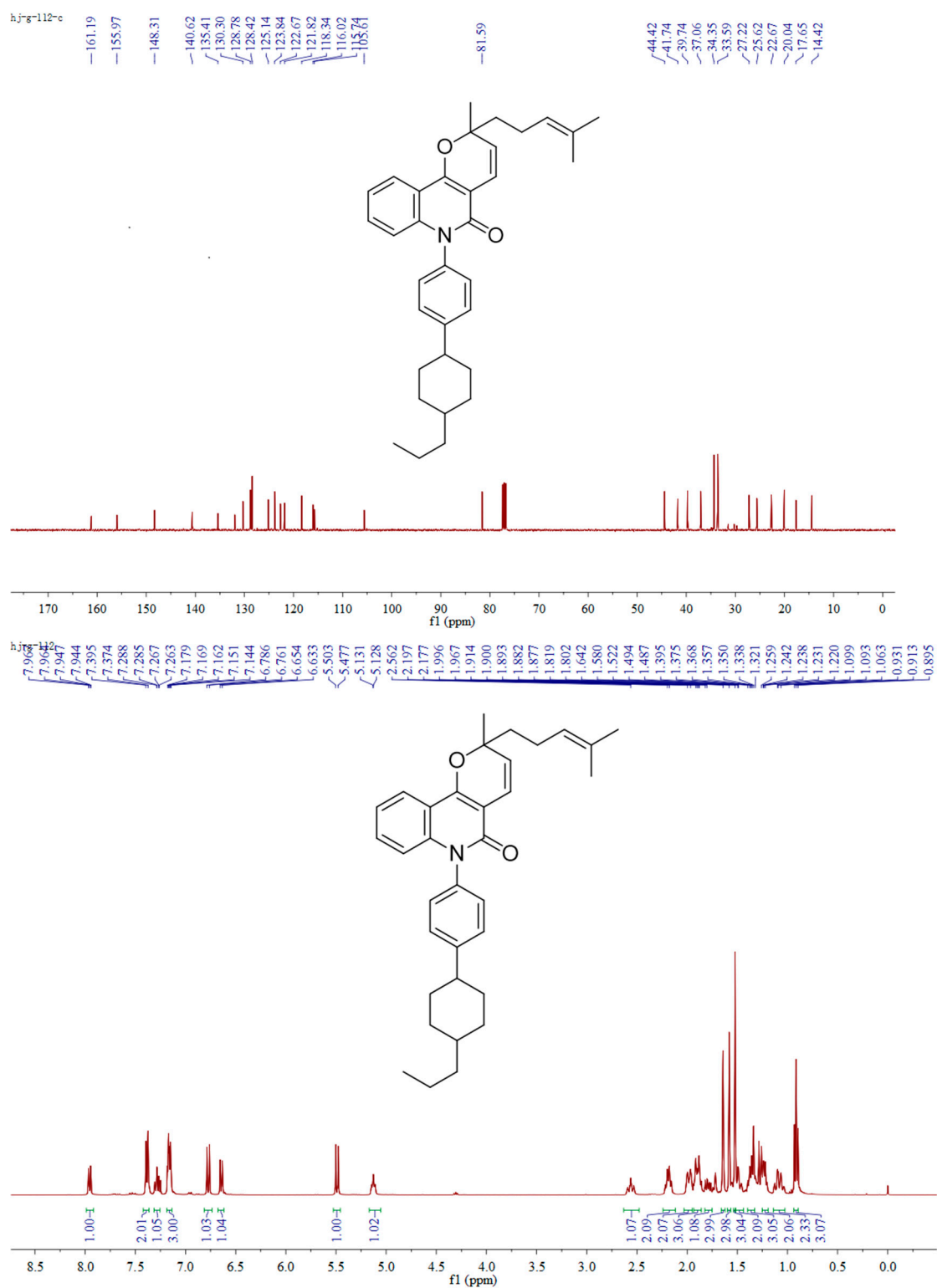
**Figure S12.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **31**



**Figure S13.**  $^{13}\text{C}$  NMR and  $^1\text{H}$  NMR ( $\text{CDCl}_3$ ) spectrum of compound **3m**



**Figure S14.**  $^{13}\text{C}$  NMR and  $^1\text{H}$  NMR ( $\text{CDCl}_3$ ) spectrum of compound **3n**



**Figure S15.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **30**

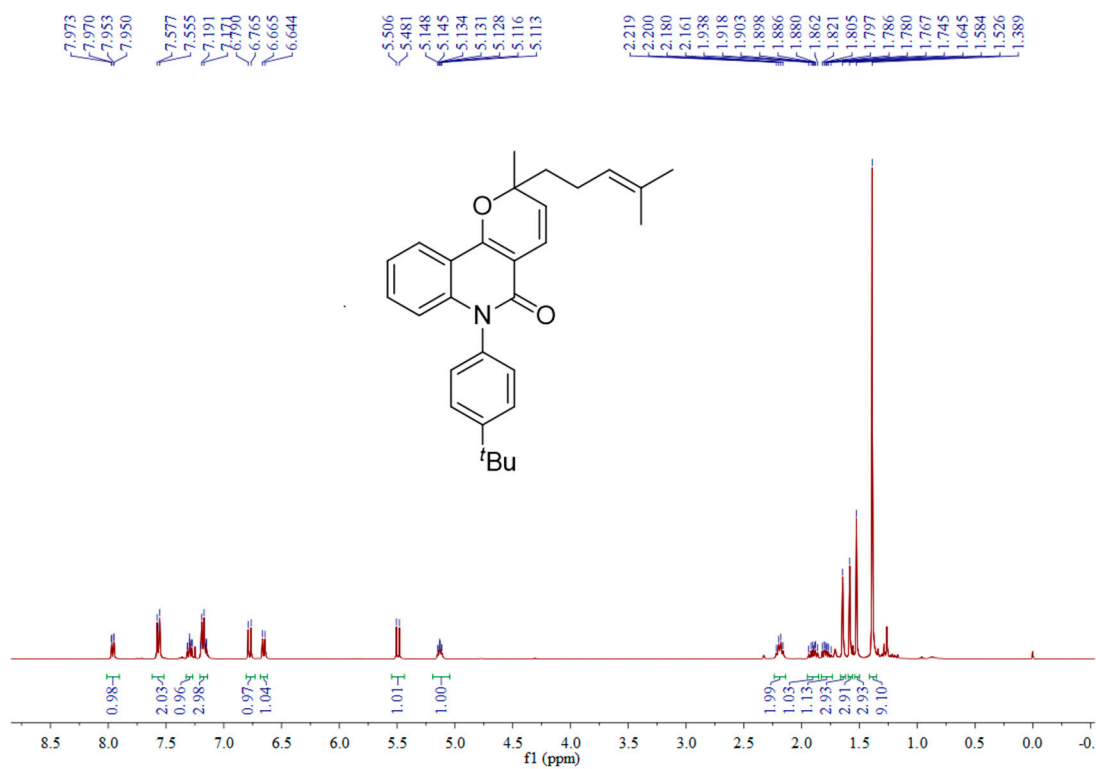
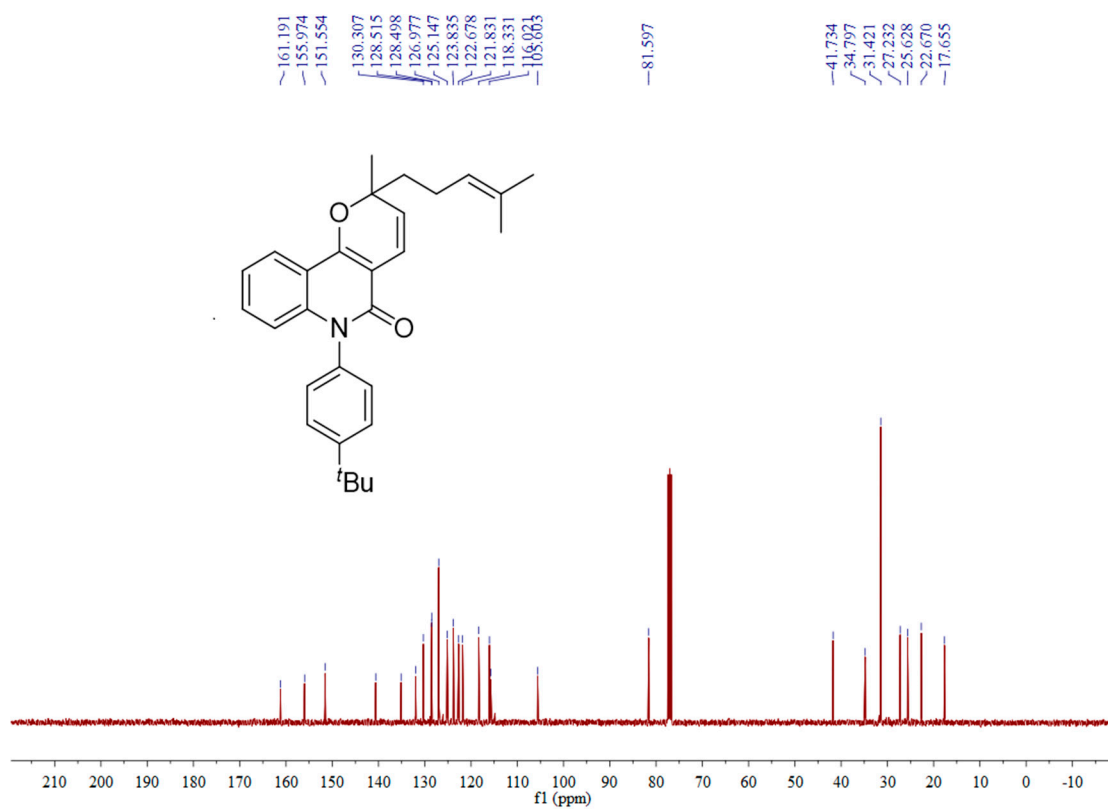
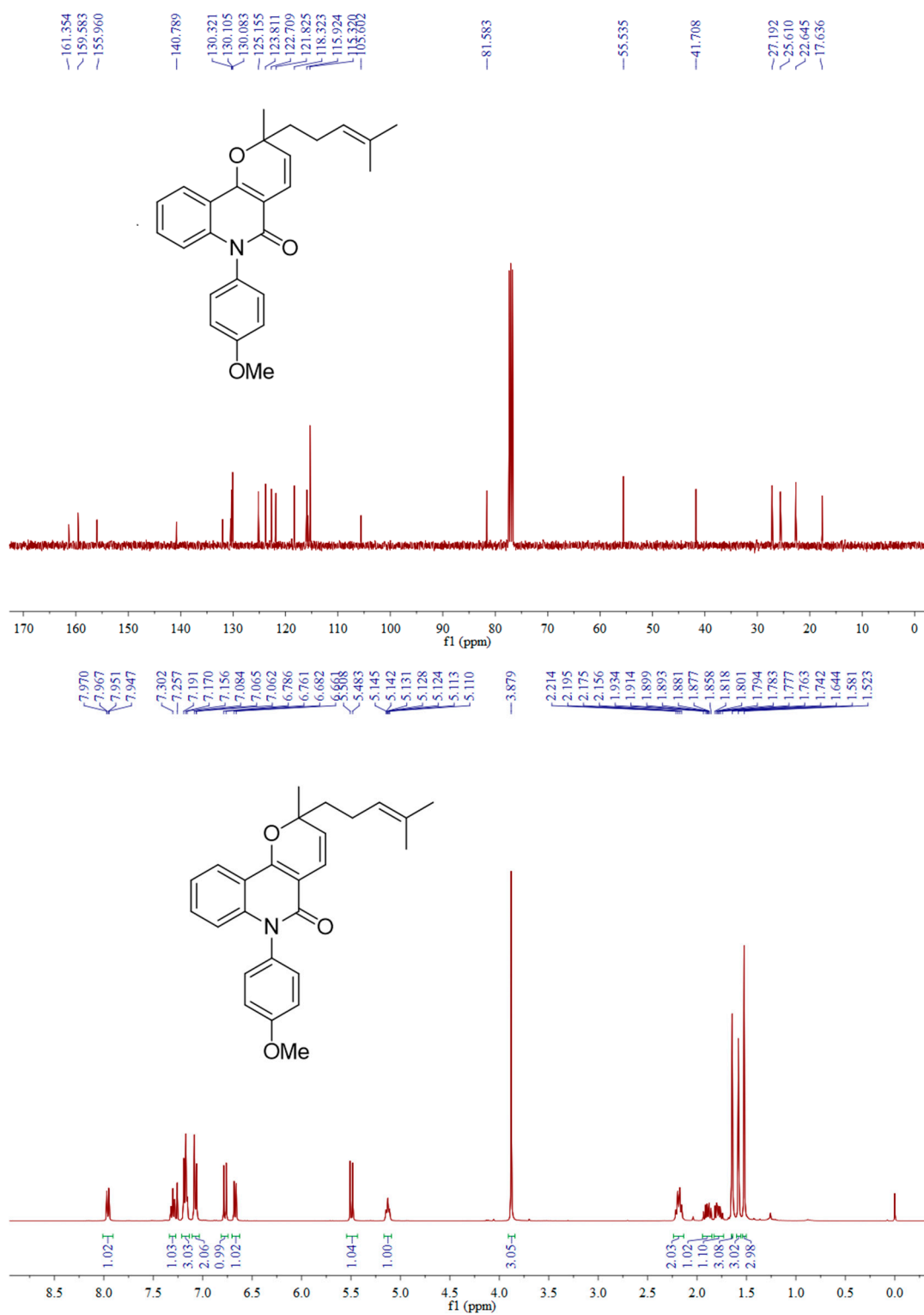
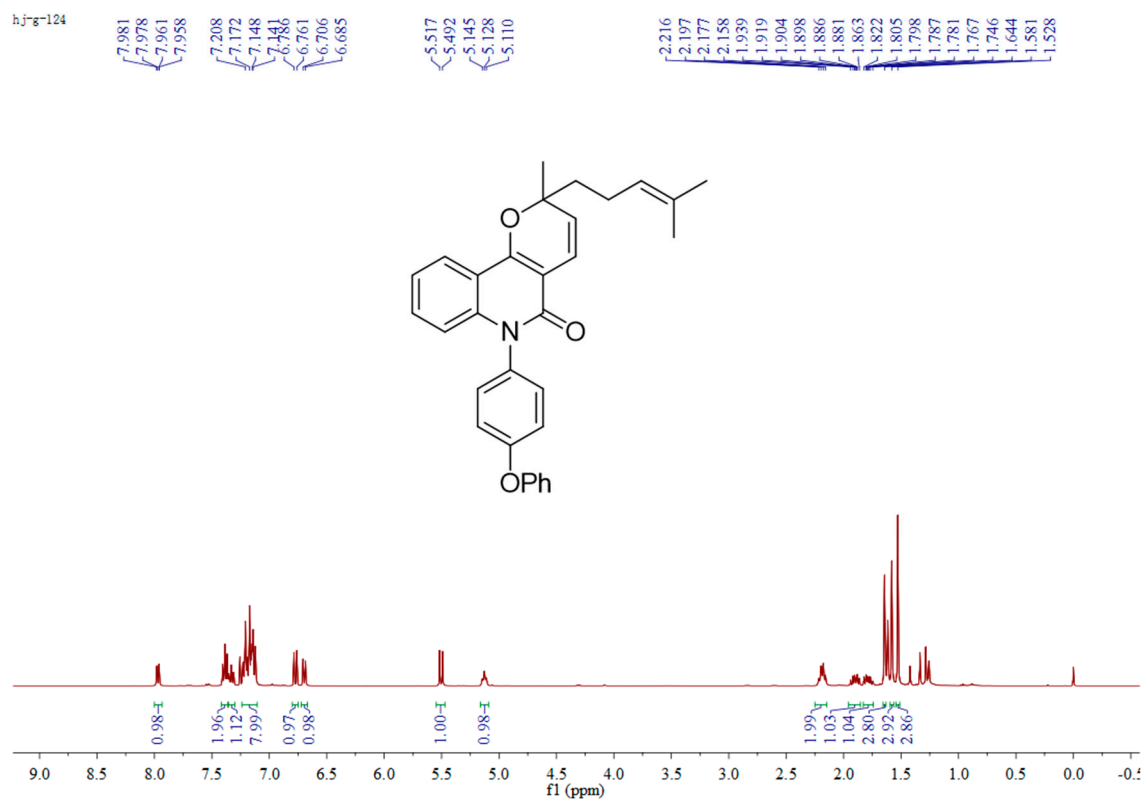
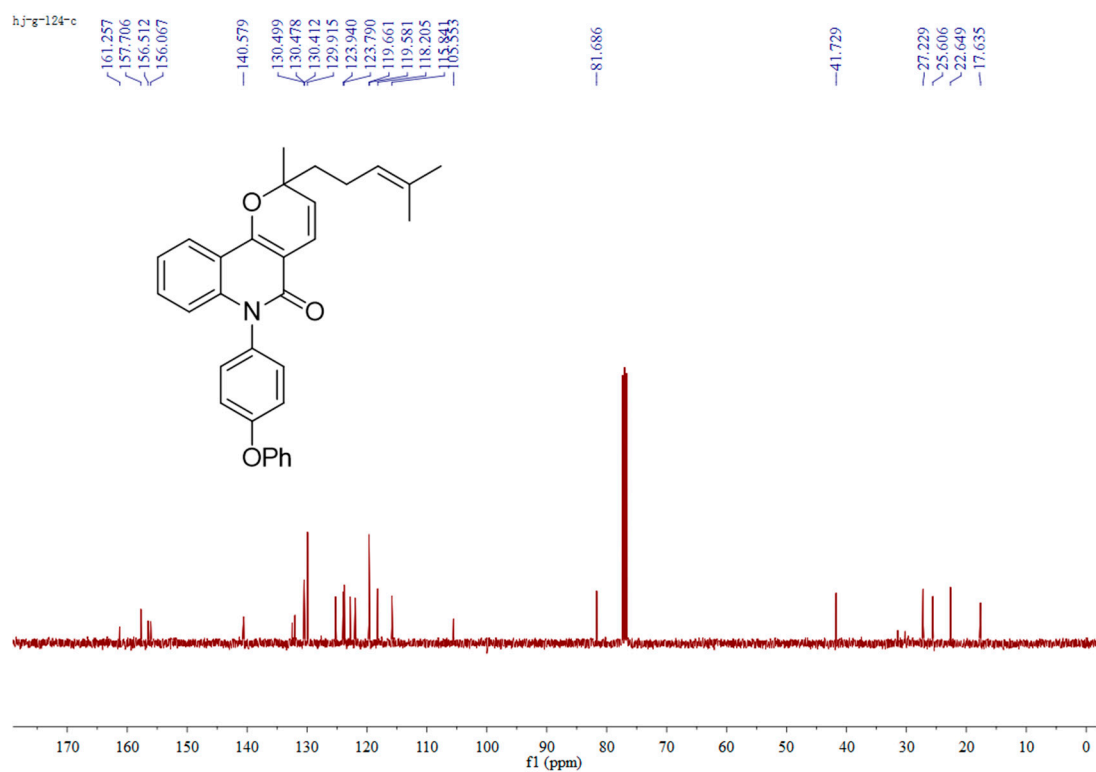


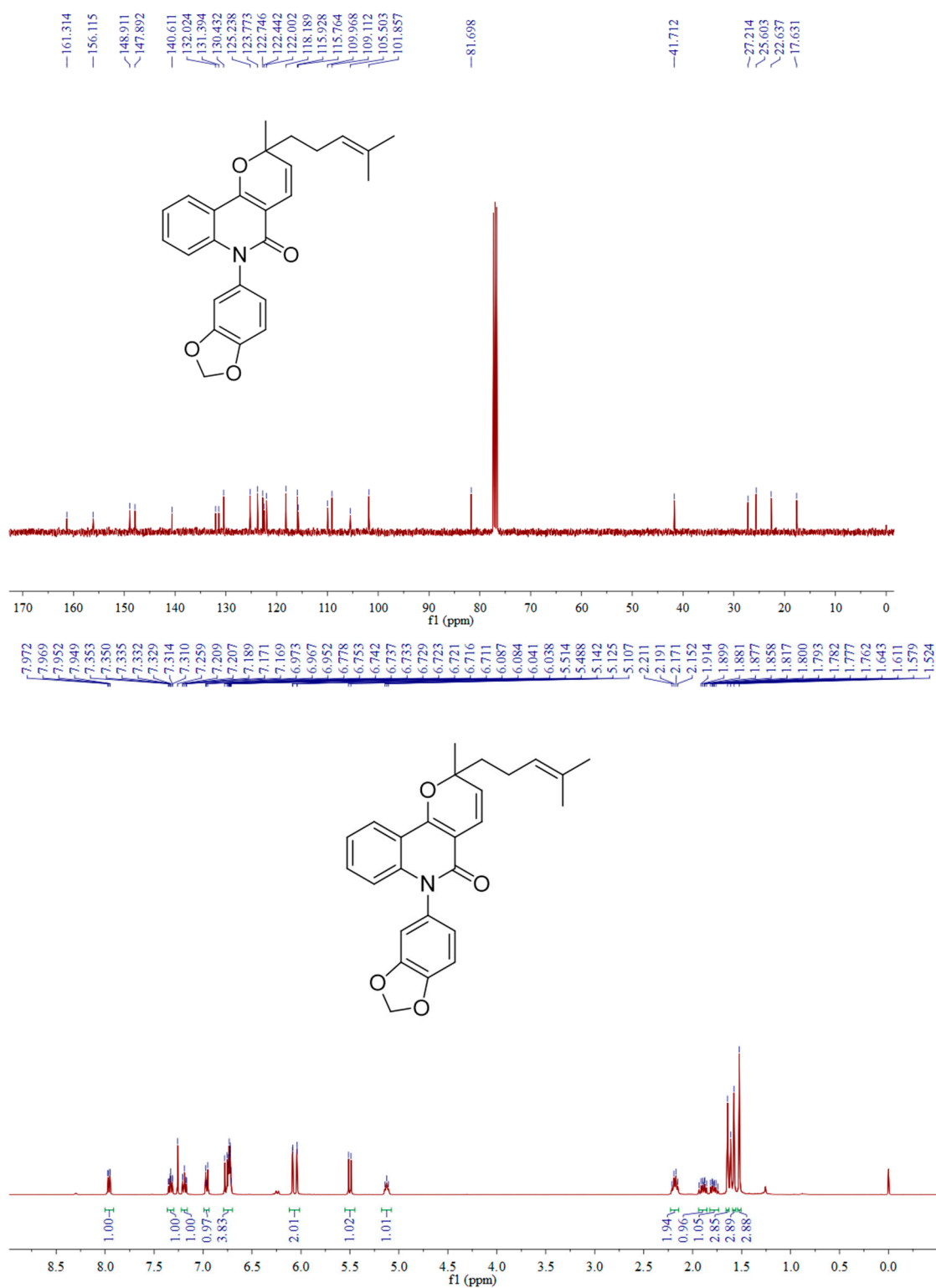
Figure S16. <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound 3p



**Figure S17.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3q**

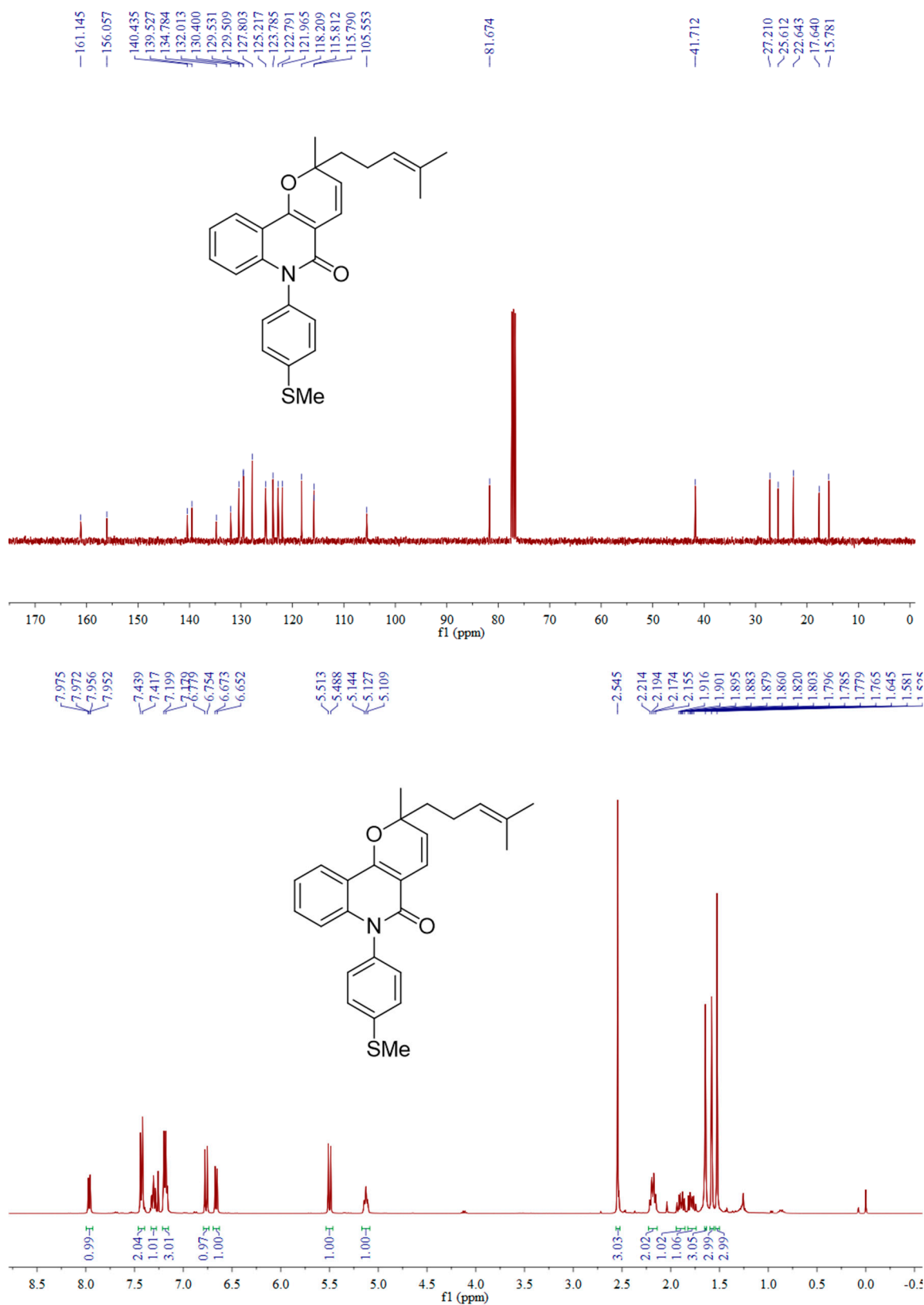


**Figure S18.**  $^{13}\text{C}$  NMR and  $^1\text{H}$  NMR (CDCl<sub>3</sub>) spectrum of compound **3r**

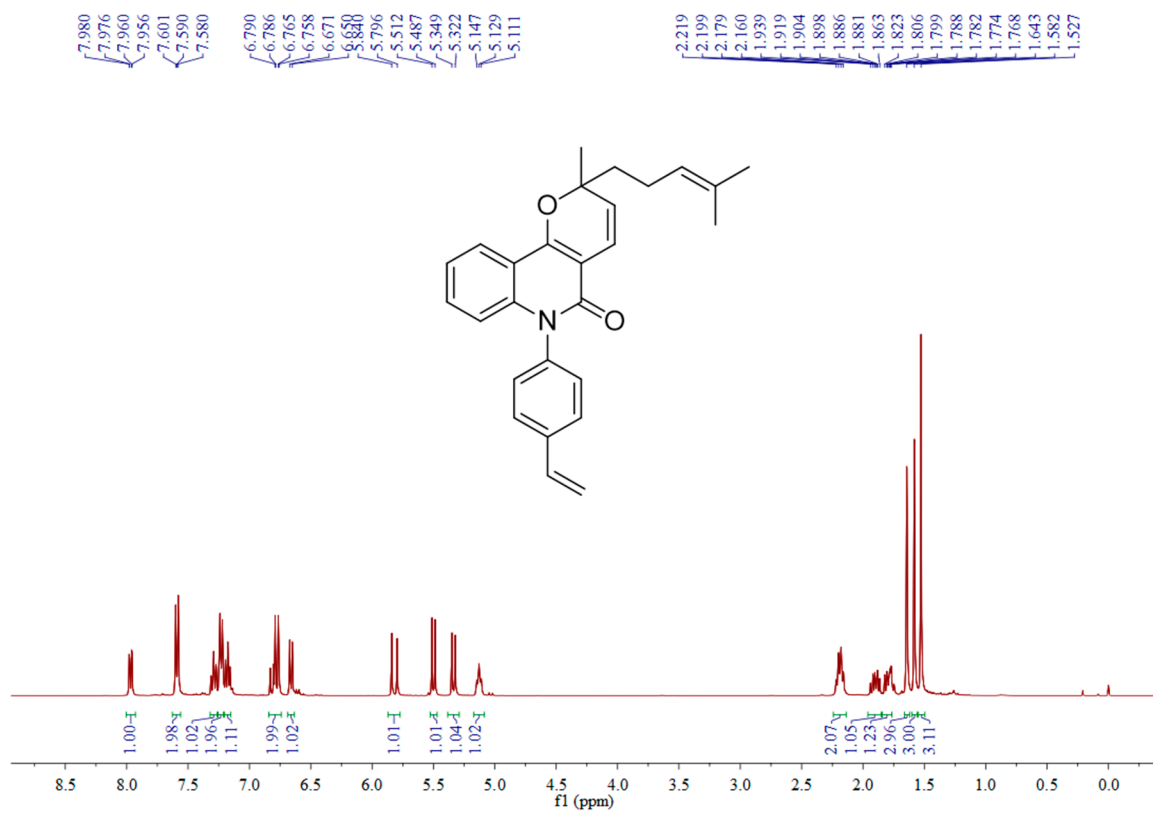
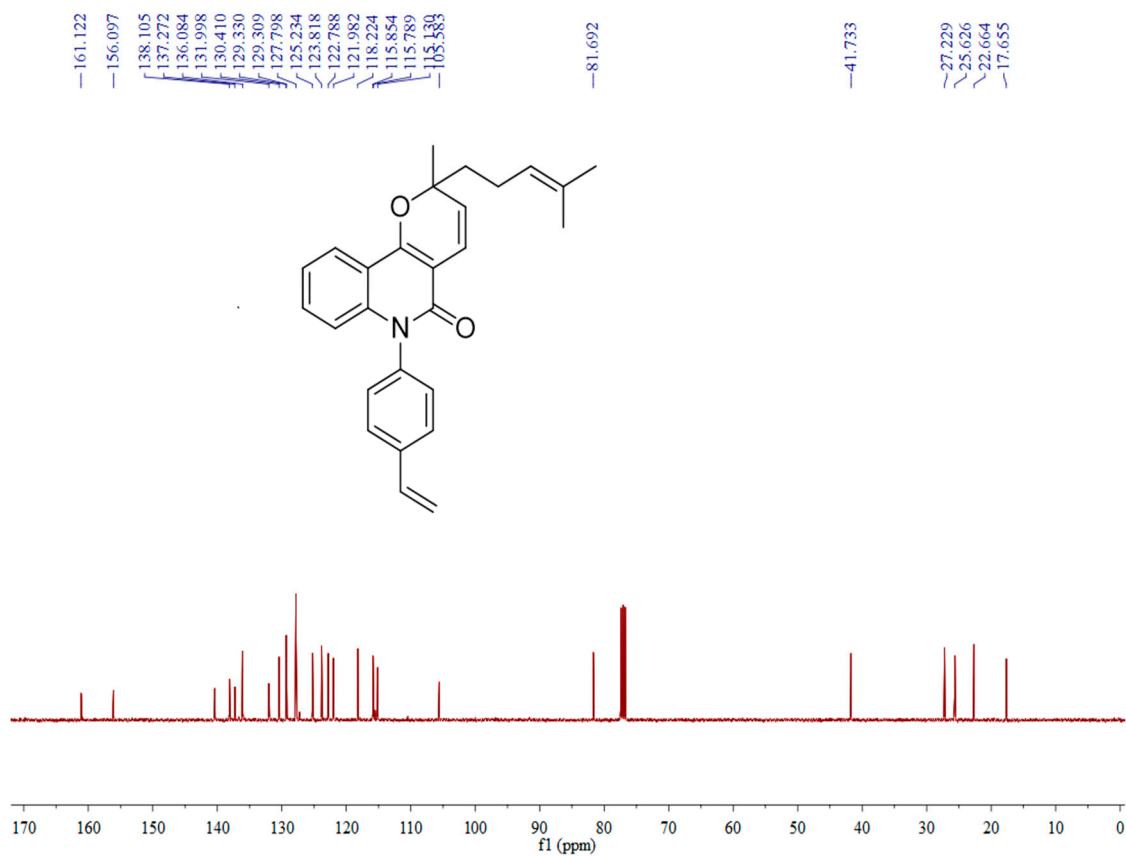


**Figure S19.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound 3s

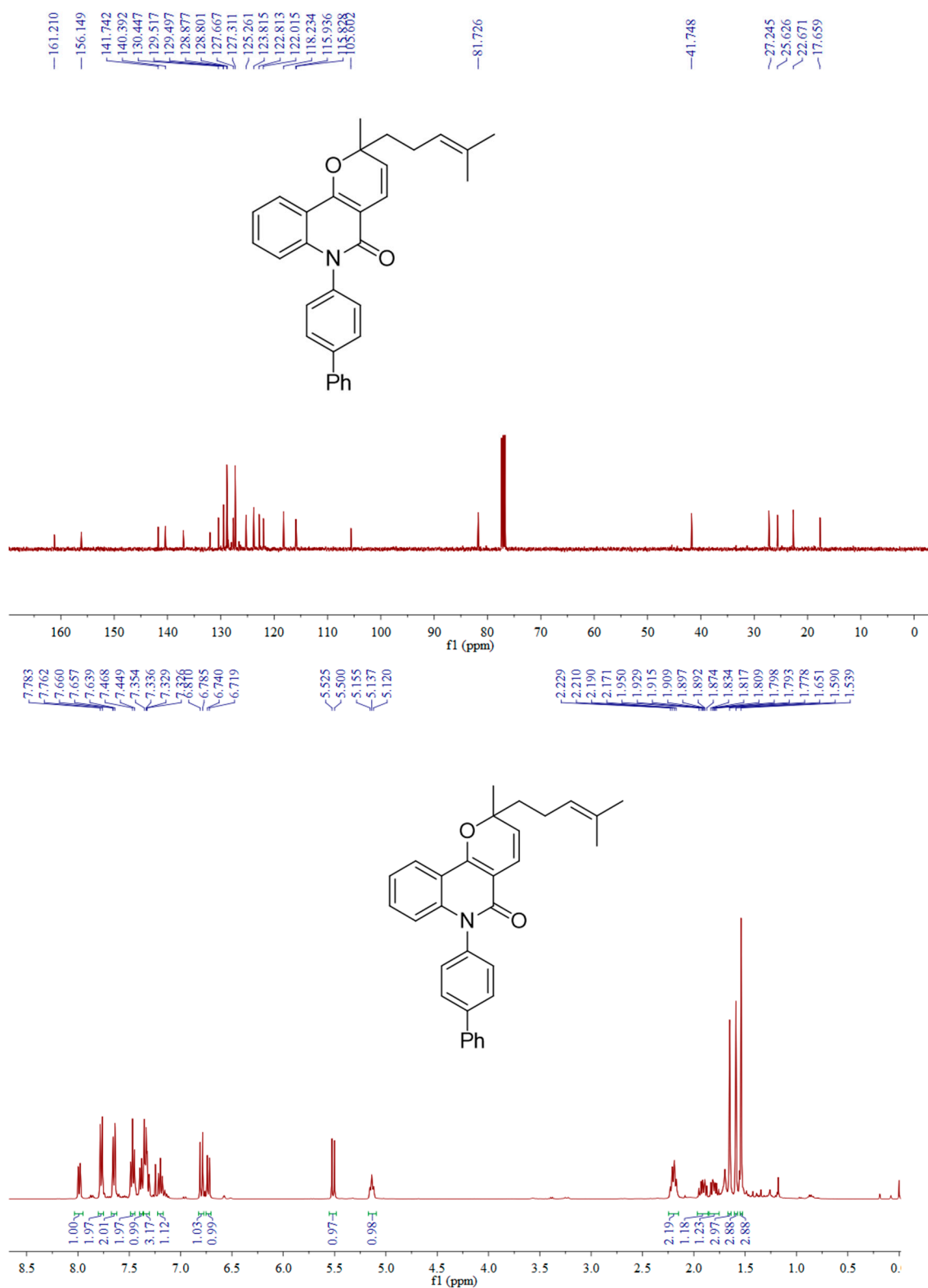




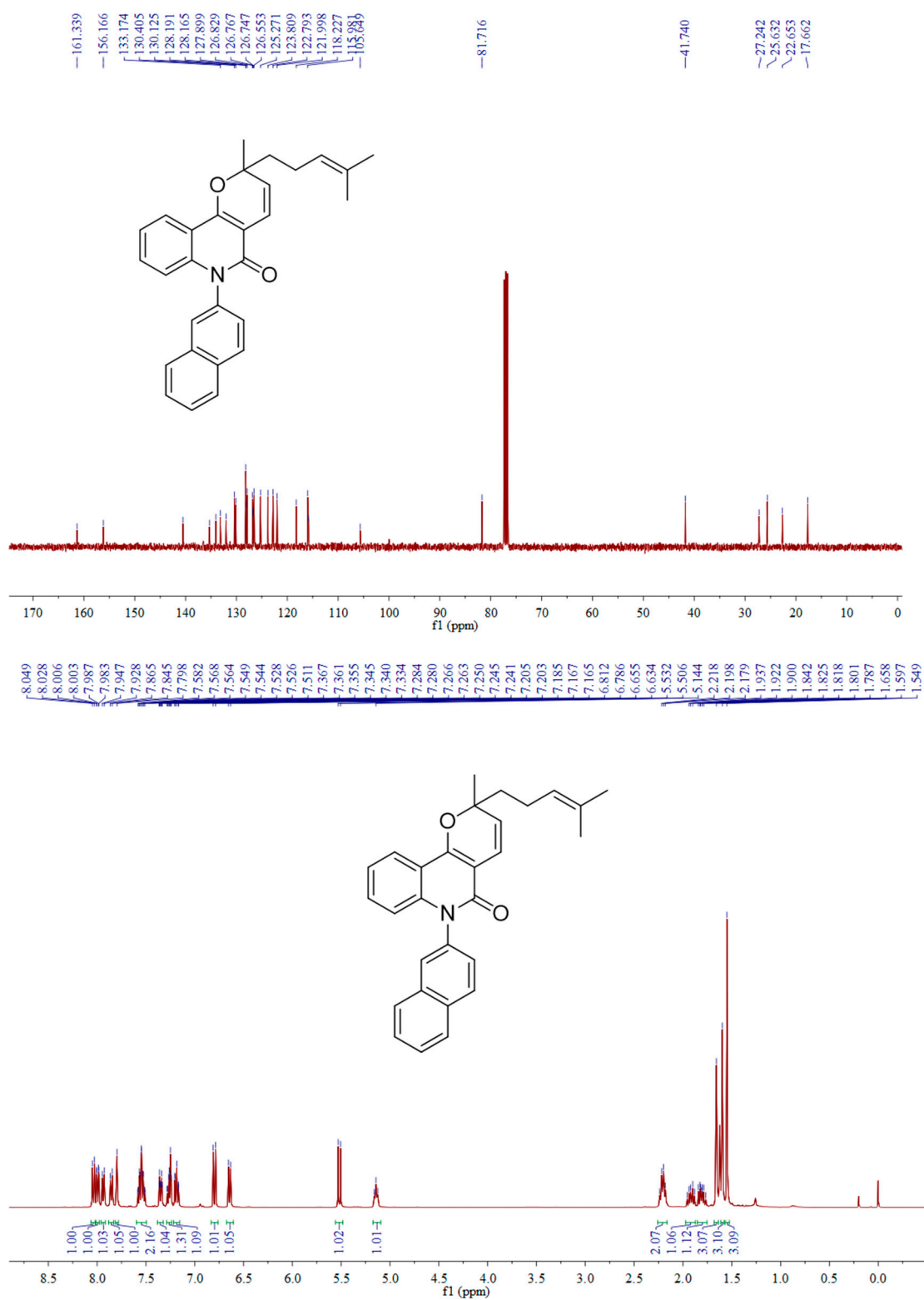
**Figure S20.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3t**



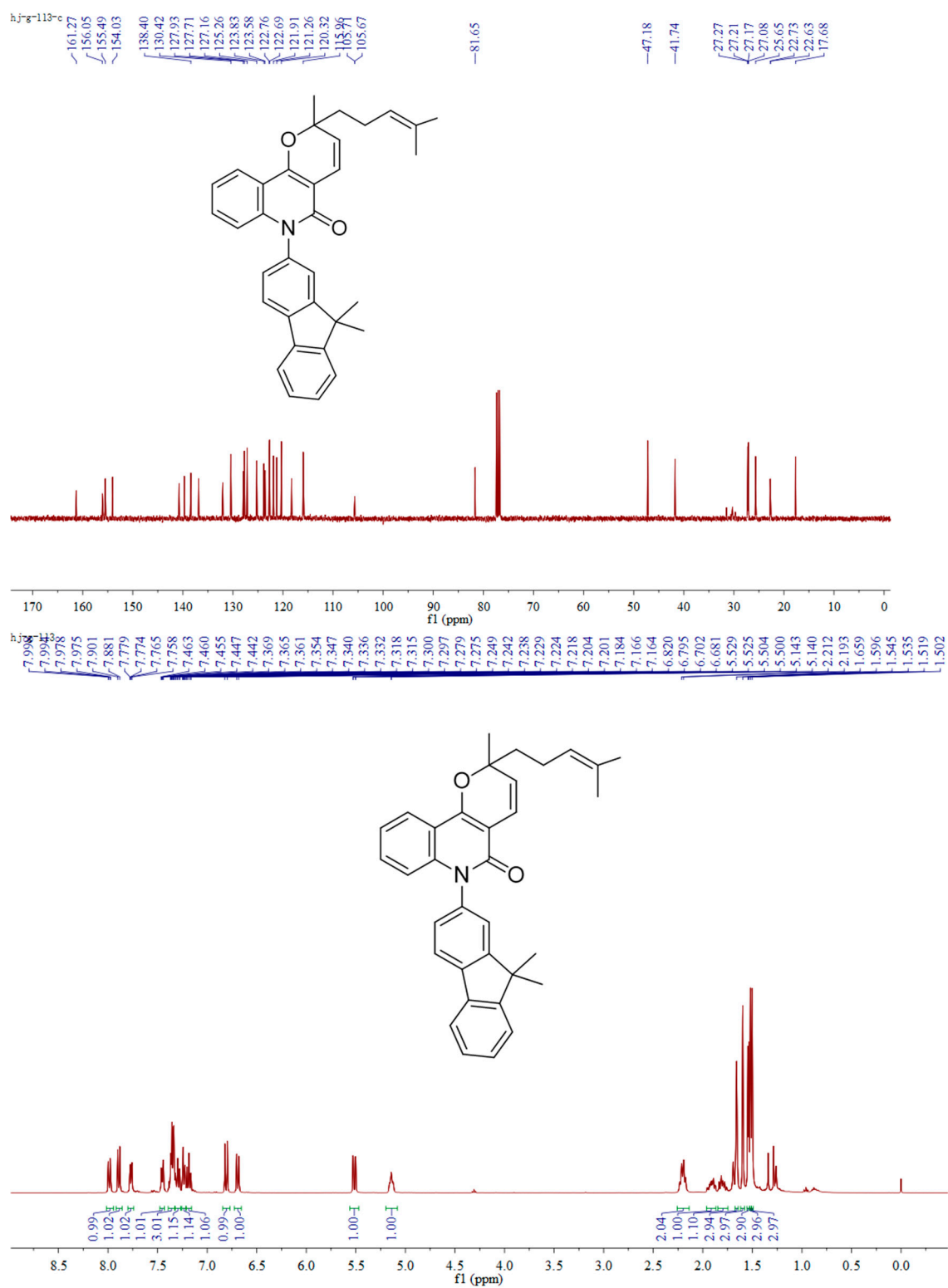
**Figure S21.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3u**



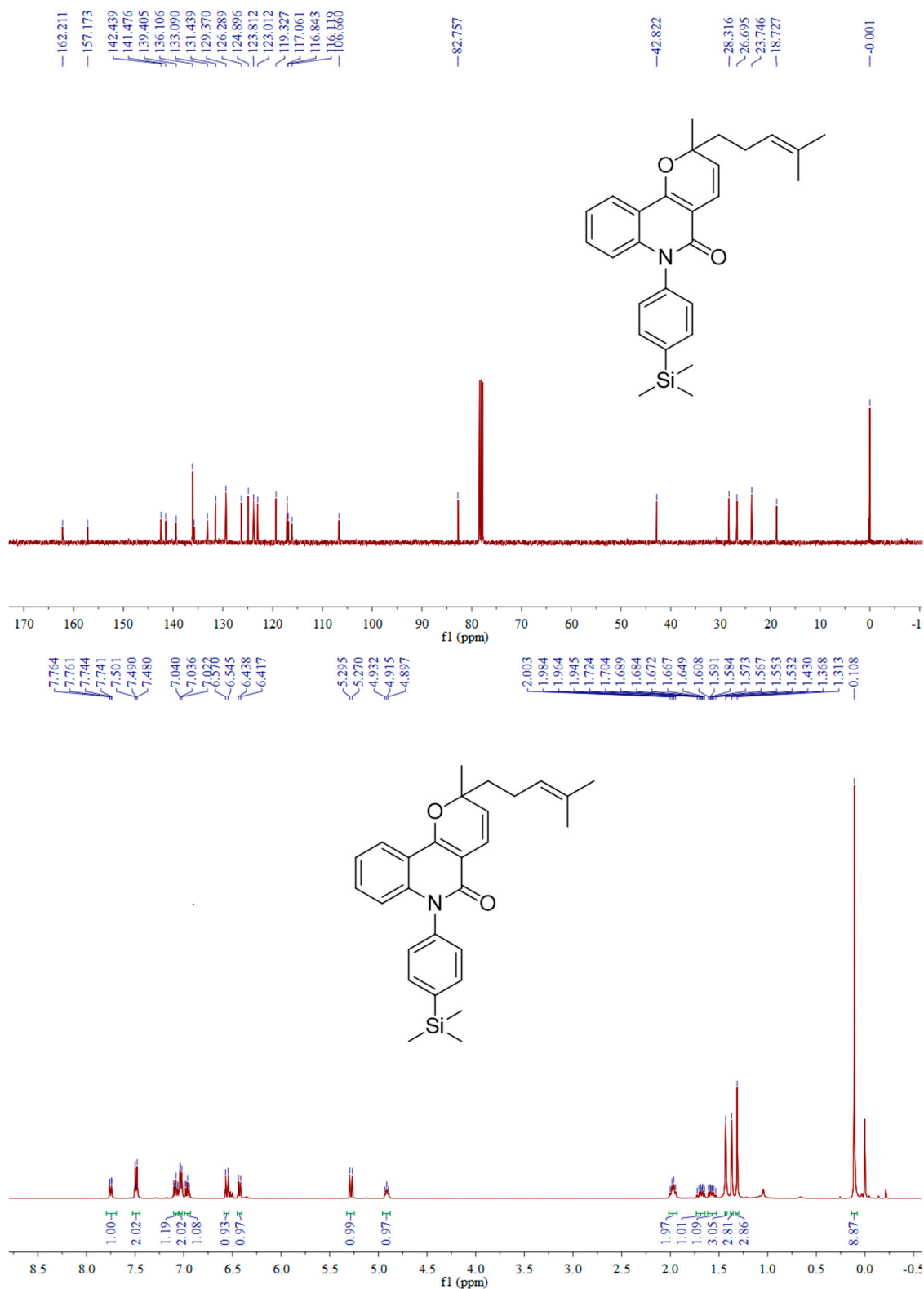
**Figure S22.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3v**



**Figure S23.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3w**



**Figure S24.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3x**



**Figure S25.** <sup>13</sup>C NMR and <sup>1</sup>H NMR (CDCl<sub>3</sub>) spectrum of compound **3y**