

## Supplementary Material

### 2-Oxo-2-(arylamino)ethyl 4-formylbenzoates: Aldehyde precursors for the synthesis of new 2-amino-3-cyano-1,4-dihydropyrans

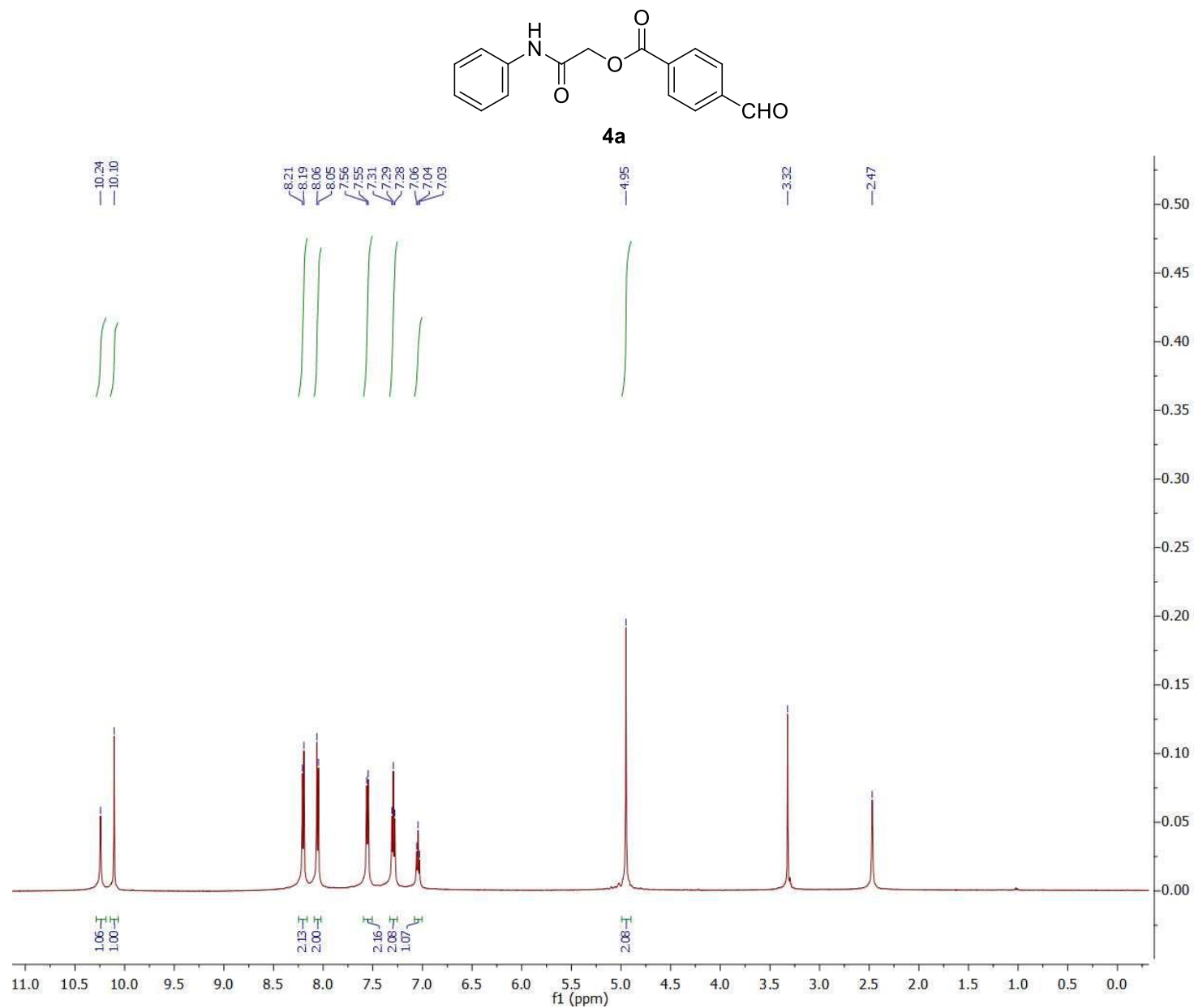
Hadeel F. Hammad, Ahmed F. Darweesh, Mahfouz A. Abdelaziz, Ismail A. Abdelhamid,\* and Ahmed H. M. Elwahy\*

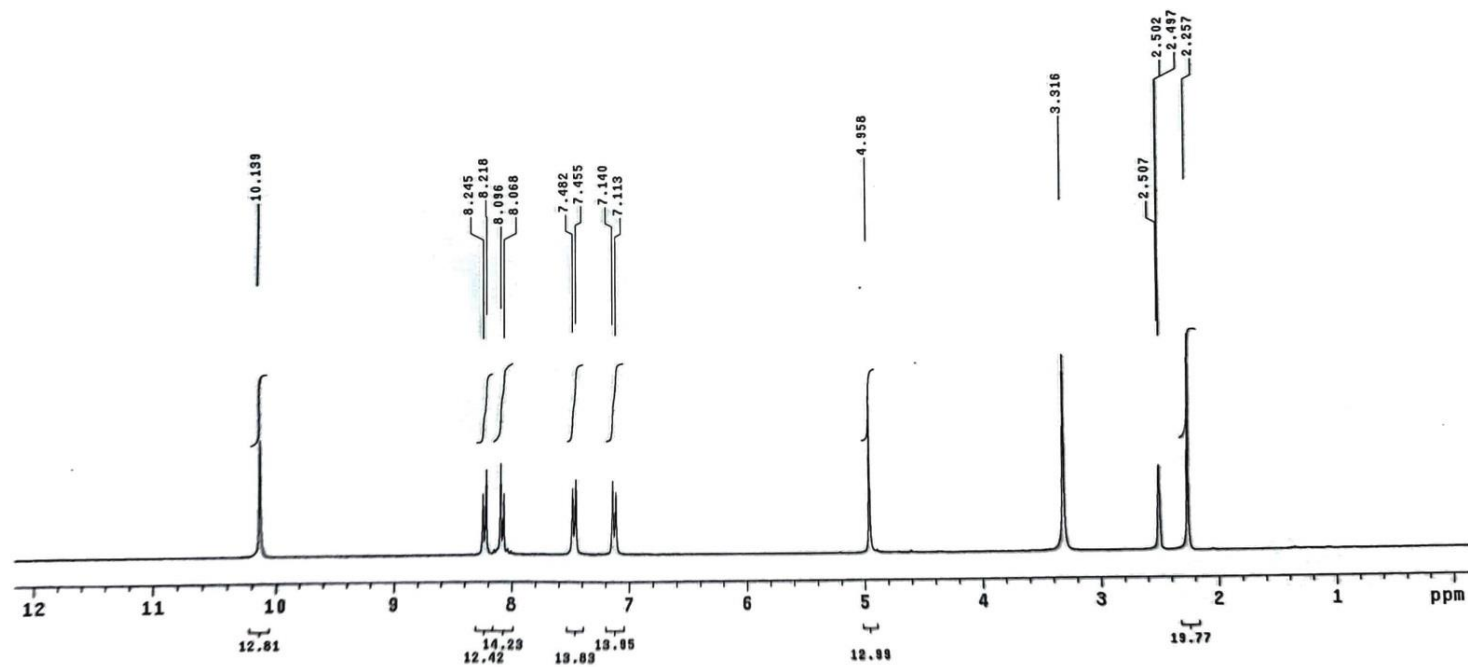
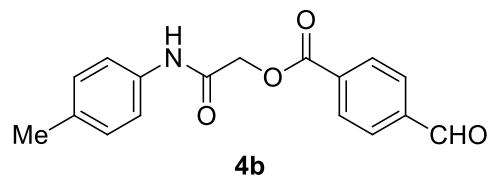
*Chemistry Department, Faculty of Science, Cairo University, Giza, Egypt*

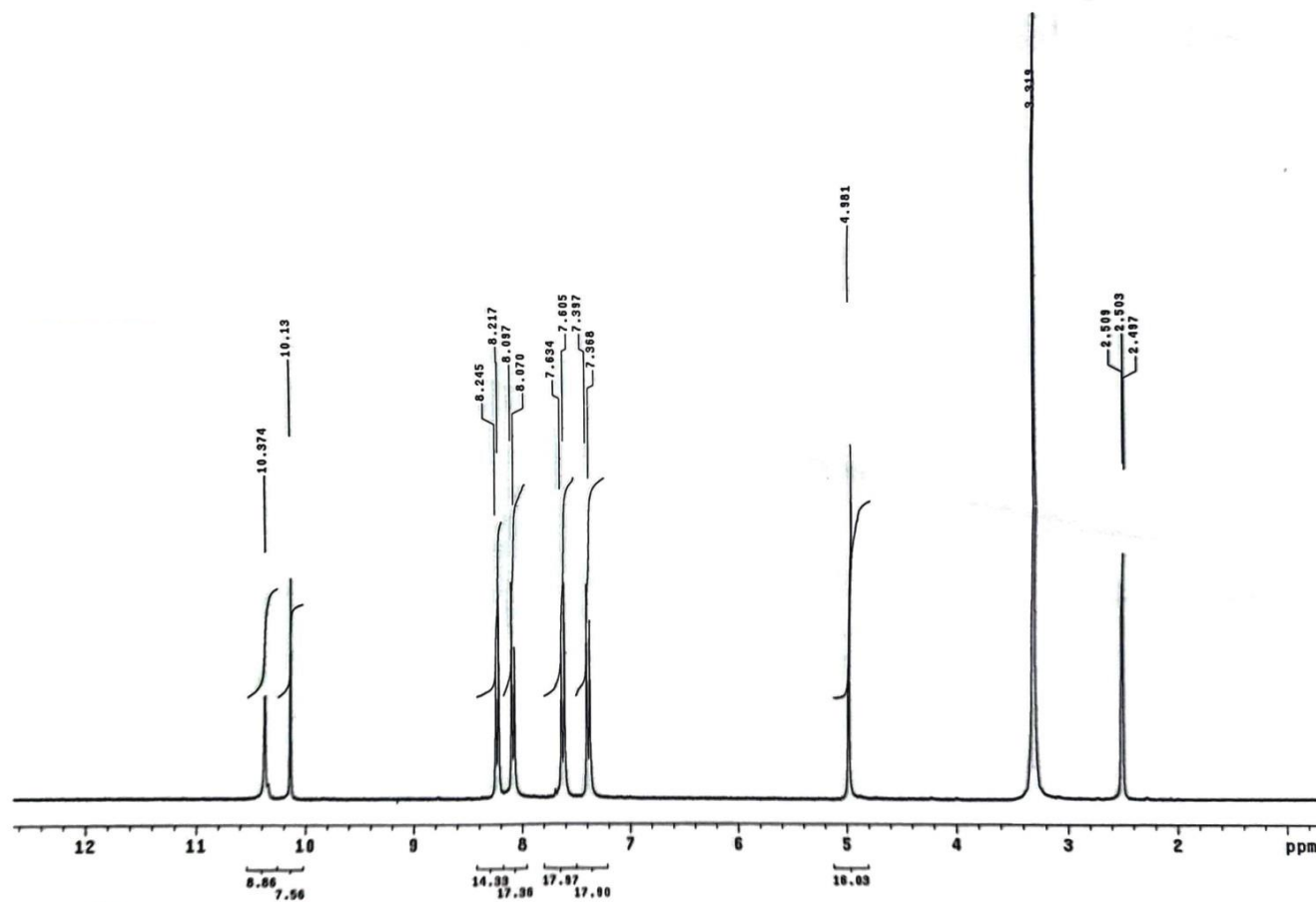
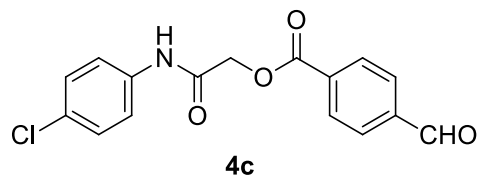
*Email: [ismail\\_shafy@cu.edu.eg](mailto:ismail_shafy@cu.edu.eg); [aelwahy@cu.edu.eg](mailto:aelwahy@cu.edu.eg)*

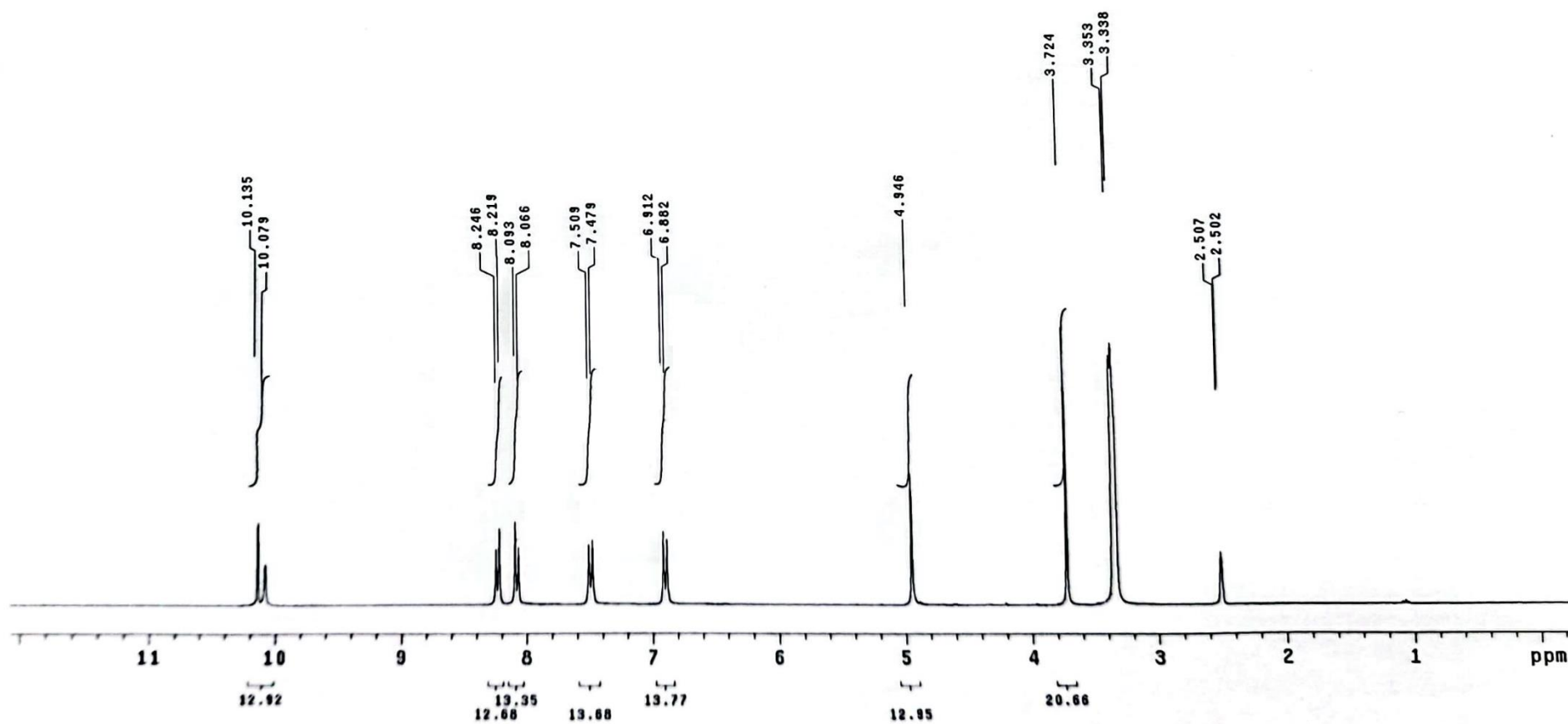
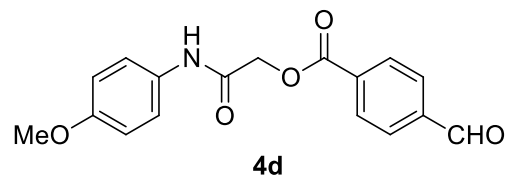
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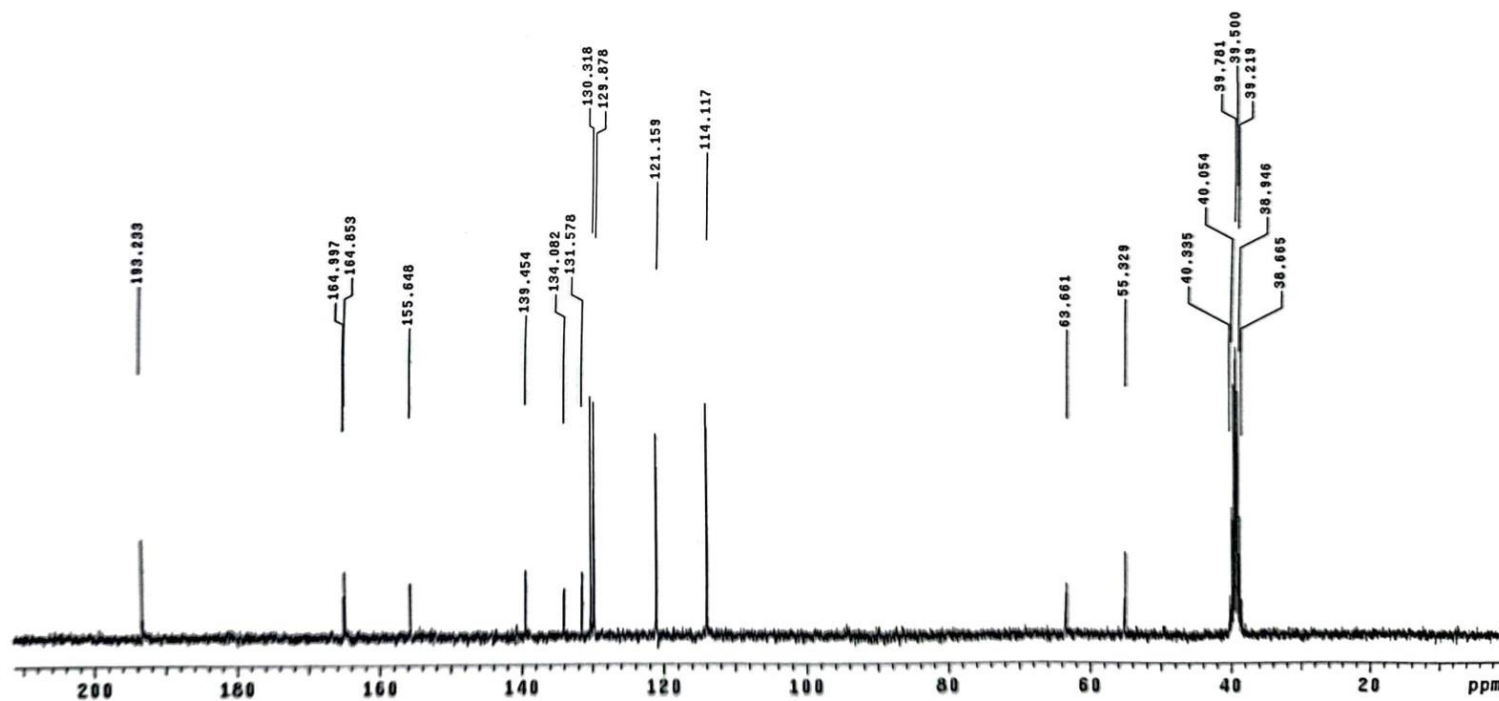
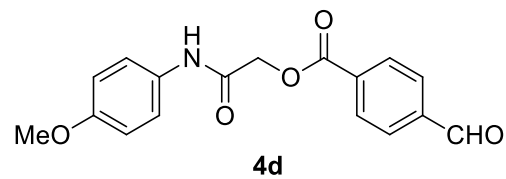
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| <sup>1</sup> H- and <sup>13</sup> C-NMR spectra ..... | S2 |
|-------------------------------------------------------|----|

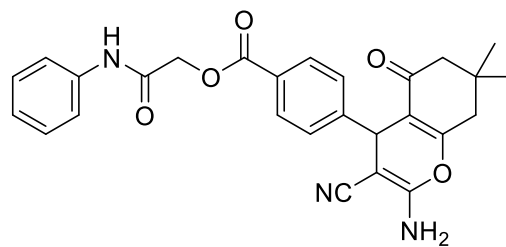
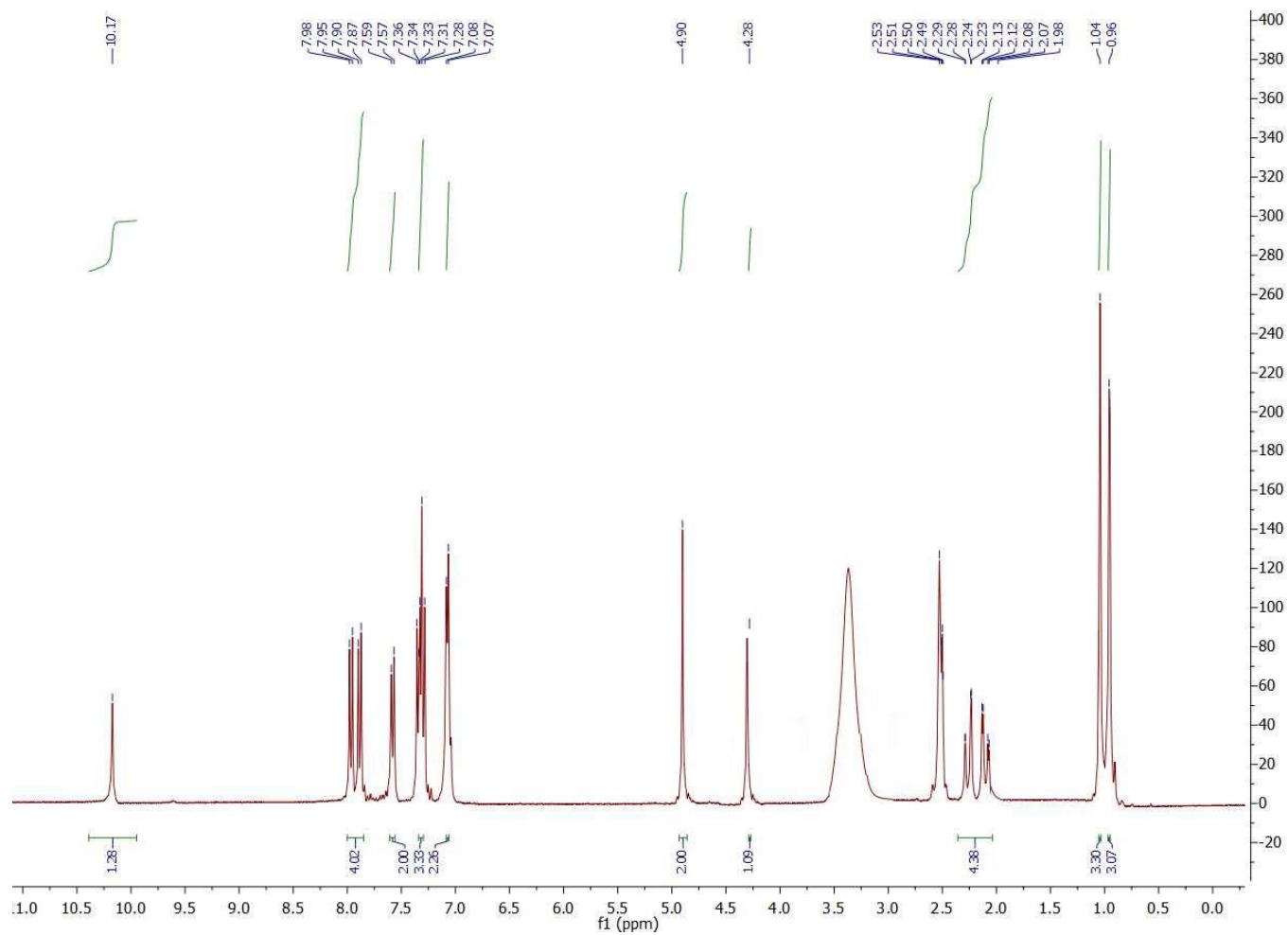
<sup>1</sup>H NMR of **4a**

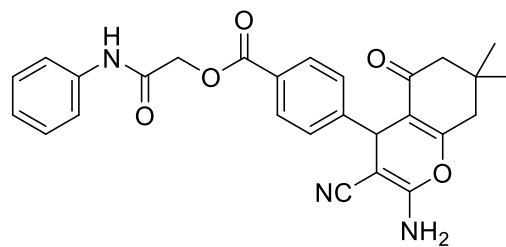
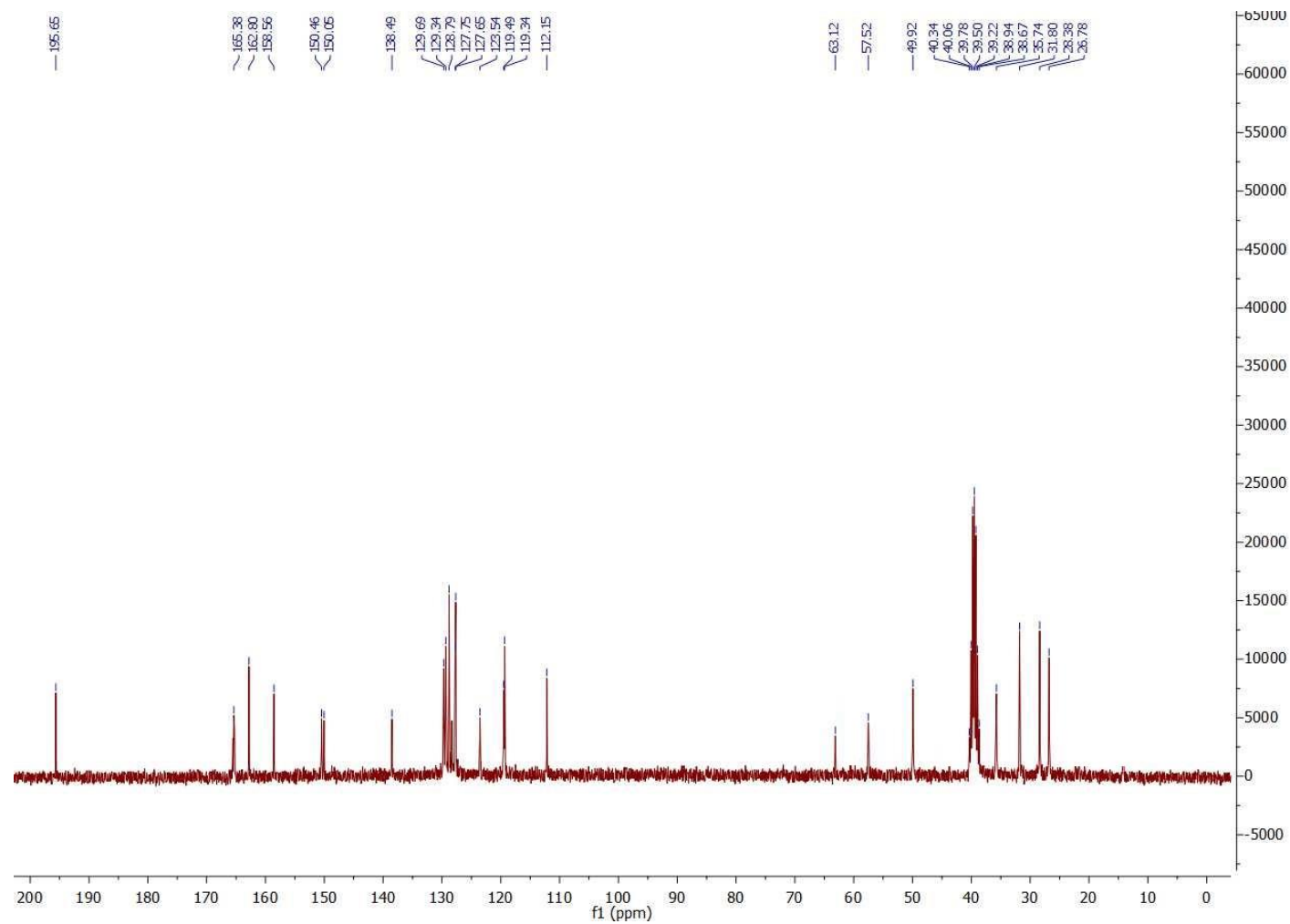
<sup>1</sup>H NMR of **4b**

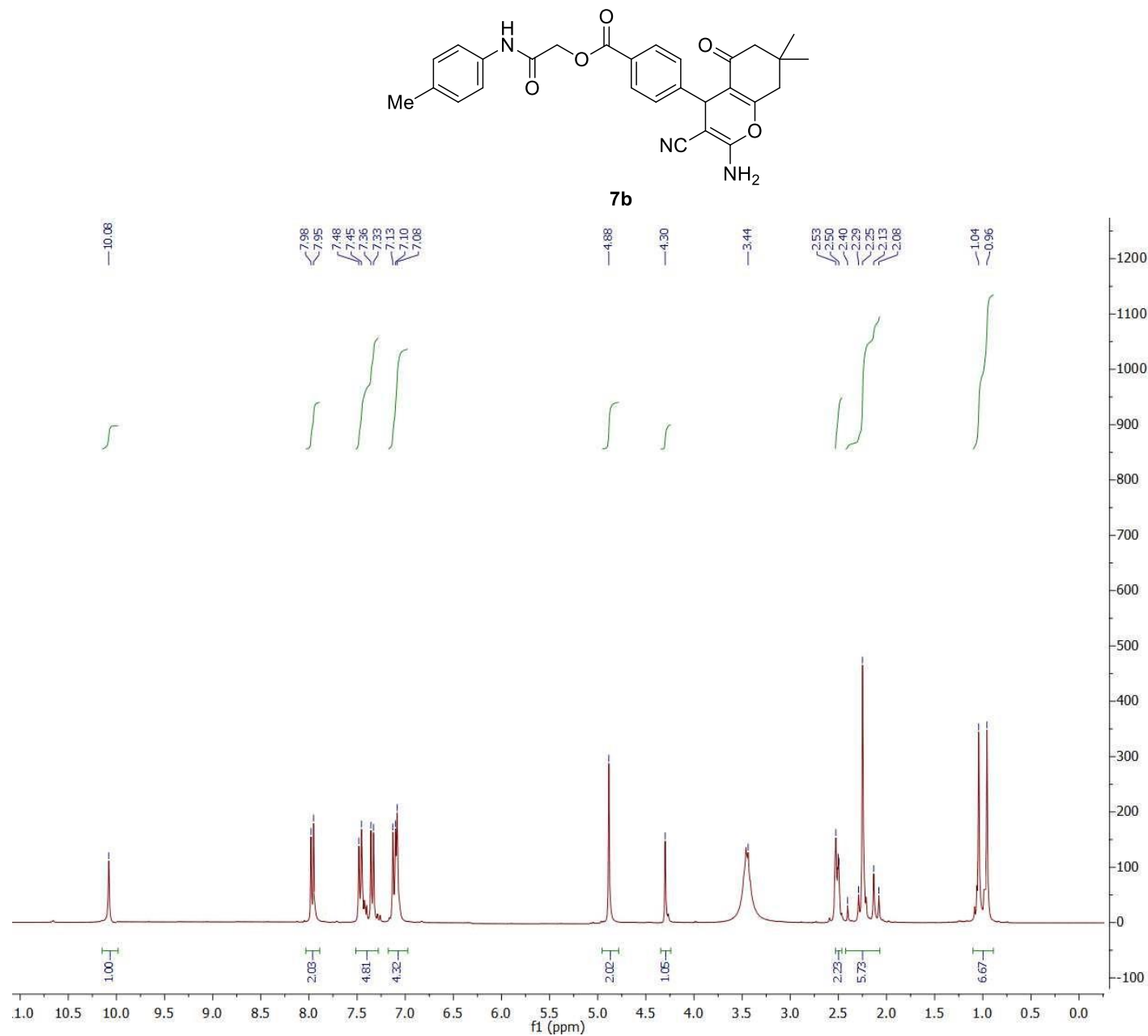
<sup>1</sup>H NMR of **4c**

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

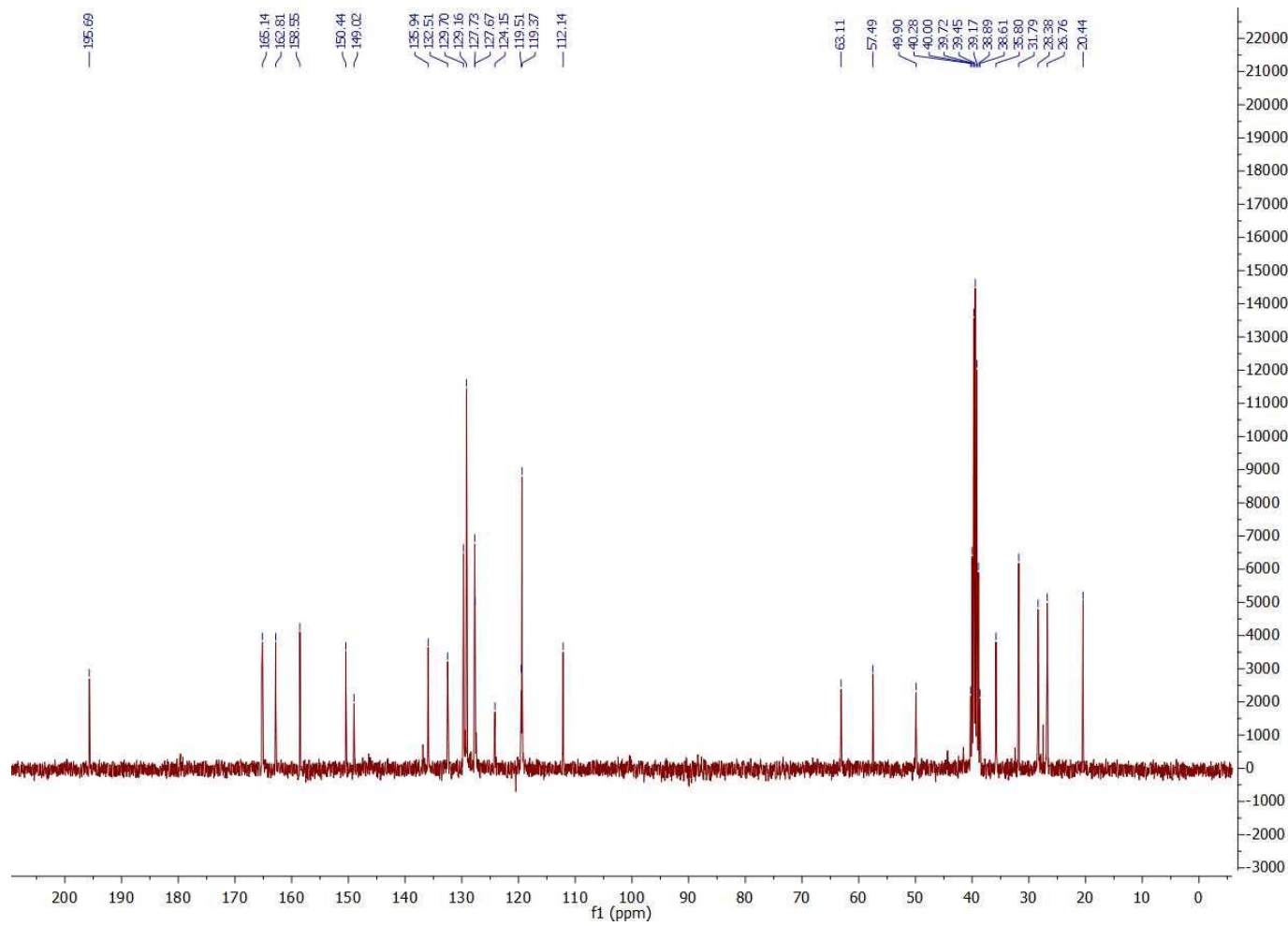
<sup>13</sup>C NMR of **4d**

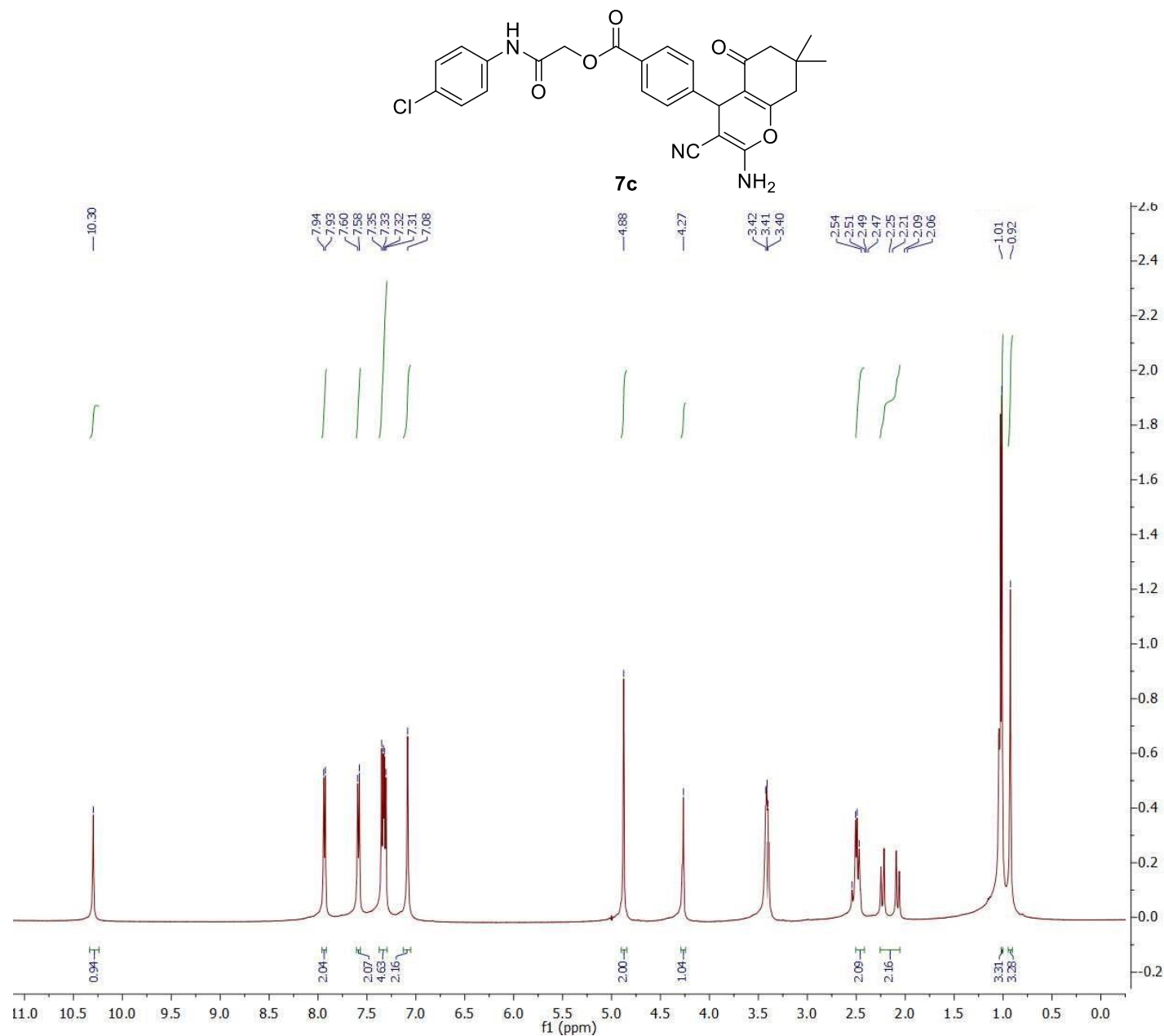
**7a**<sup>1</sup>H NMR of **7a**

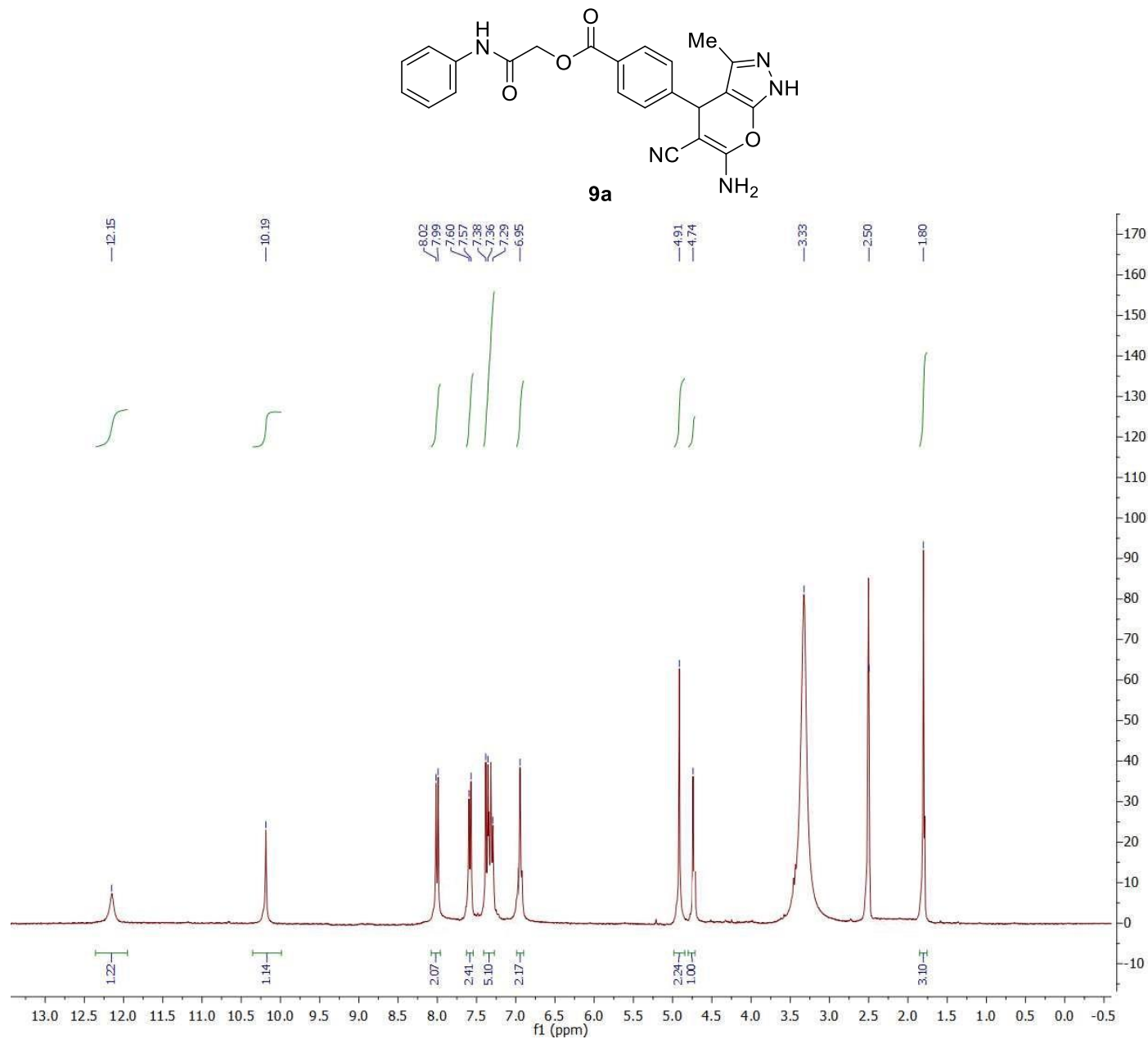
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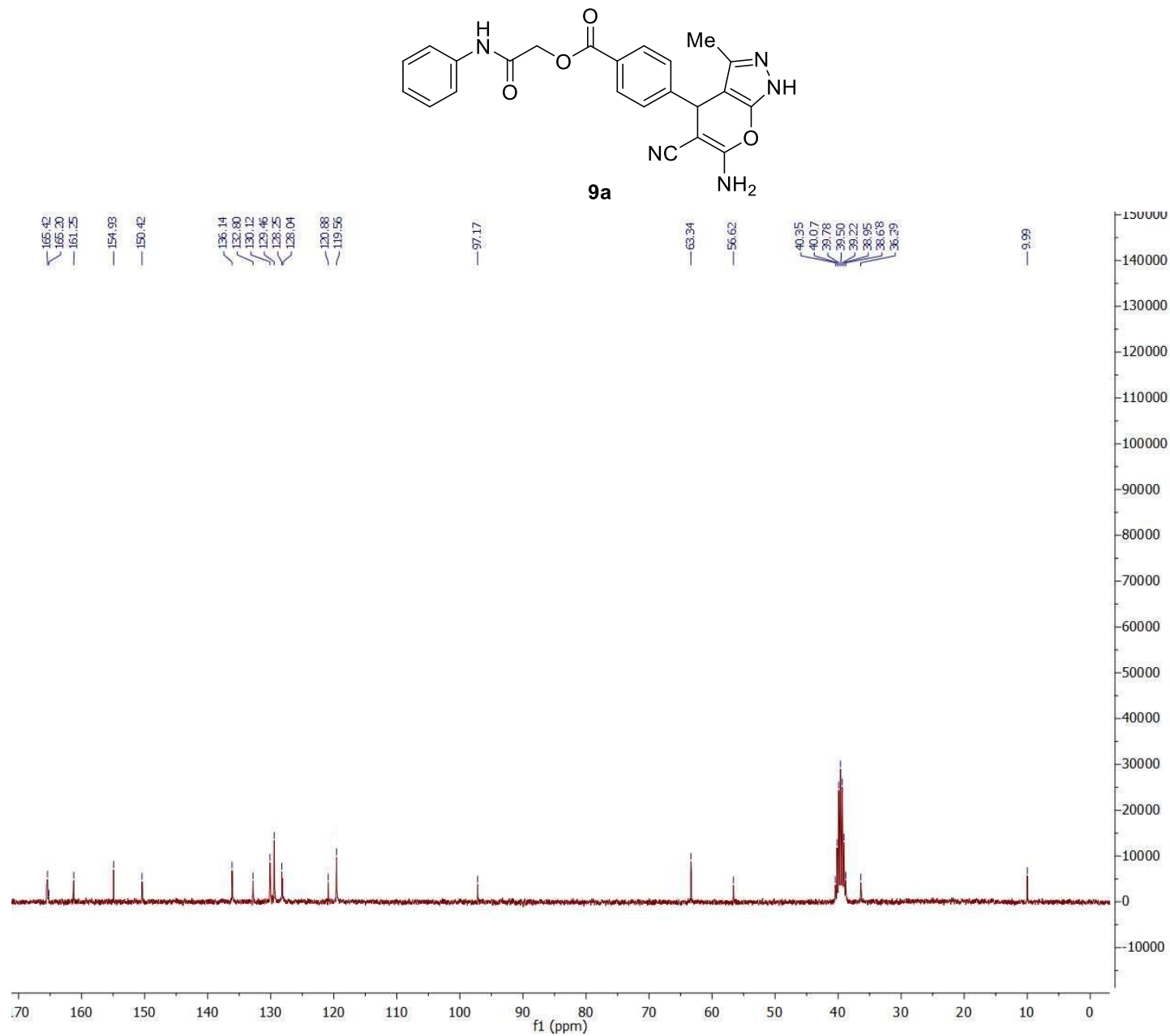
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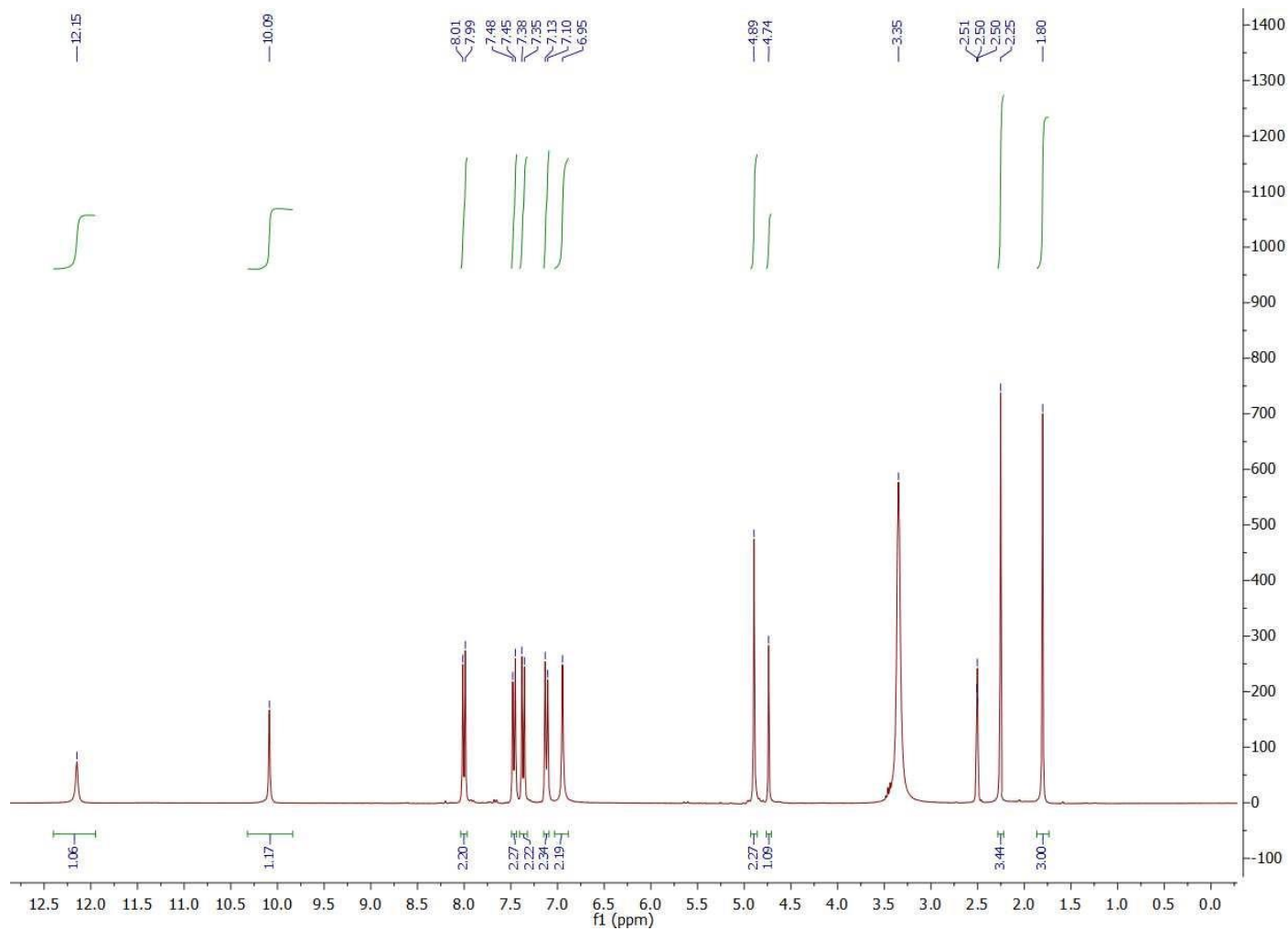
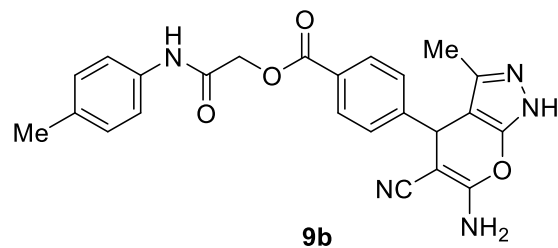
**7b**

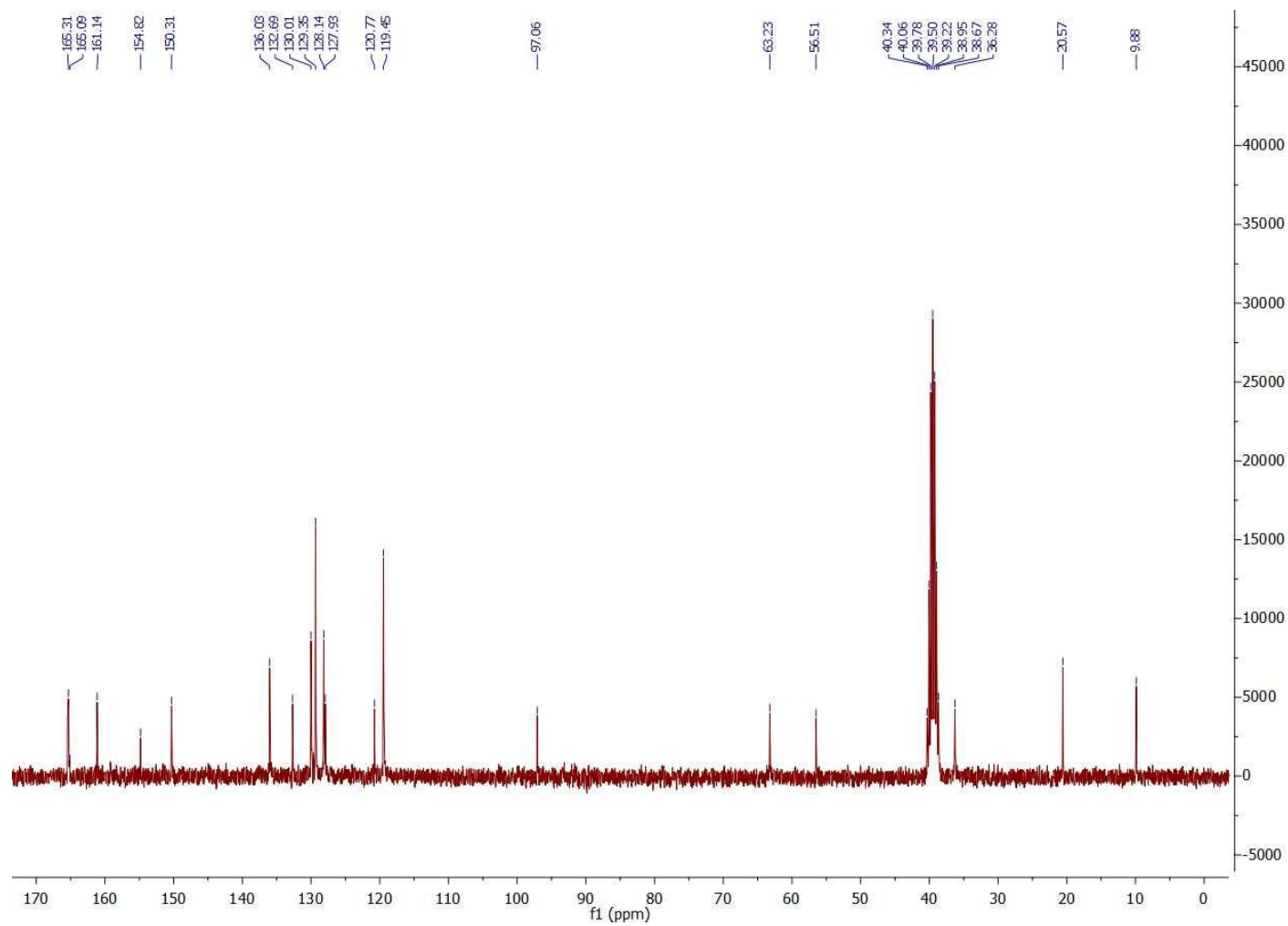
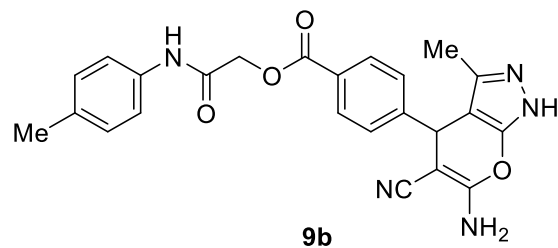
 $^{13}\text{C}$  NMR of **7b**

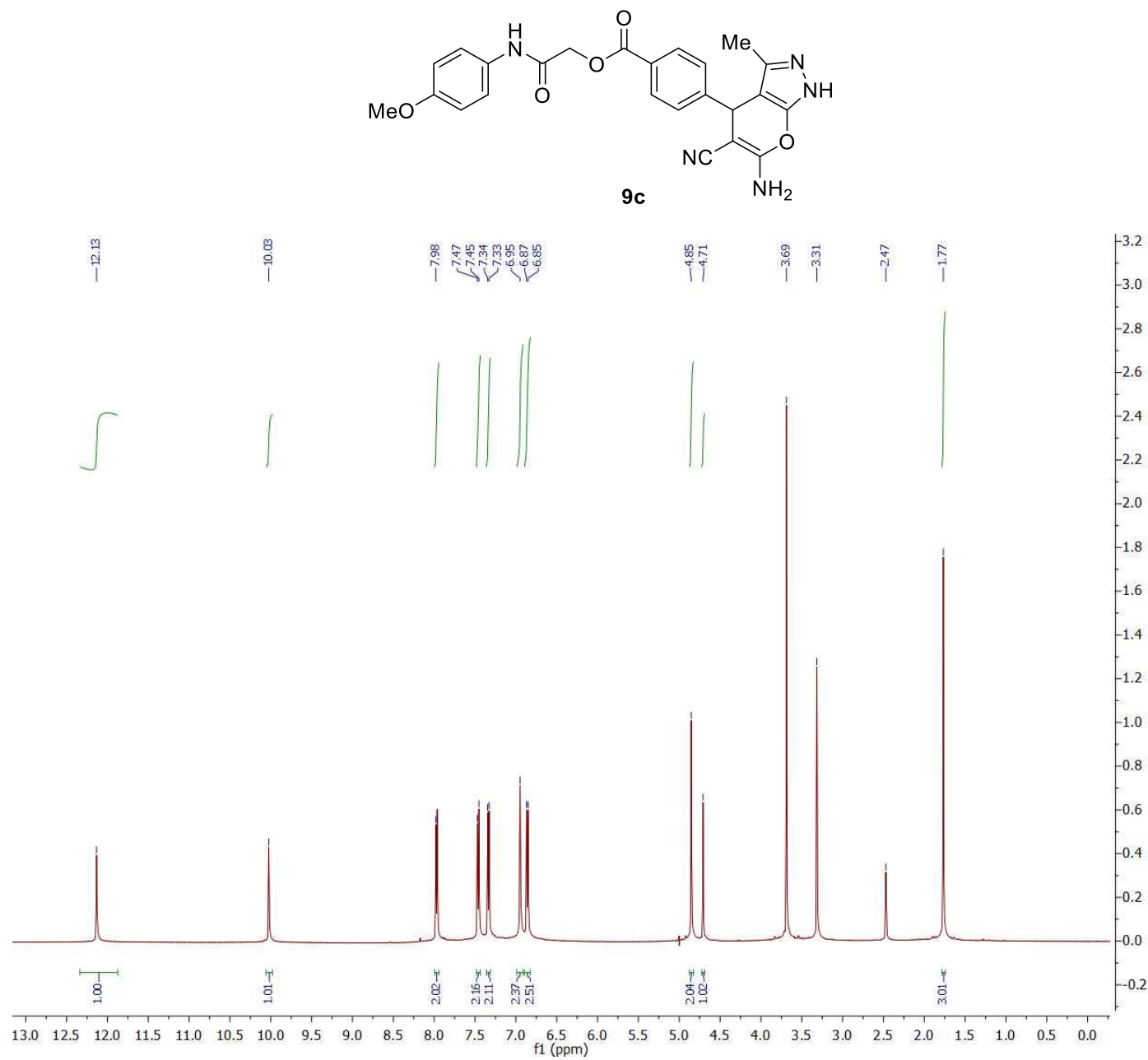
 $^1\text{H}$  NMR of **7c**

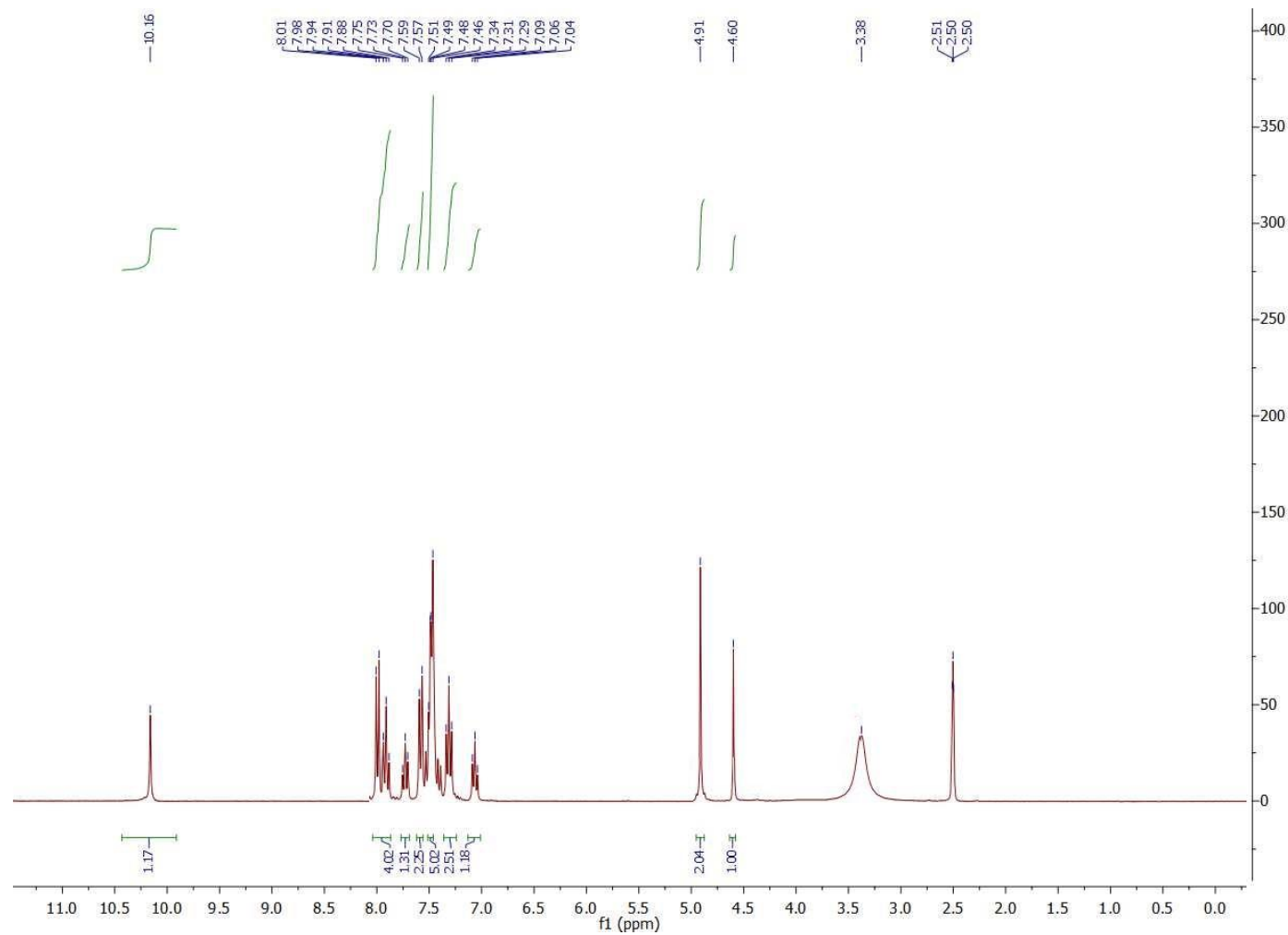
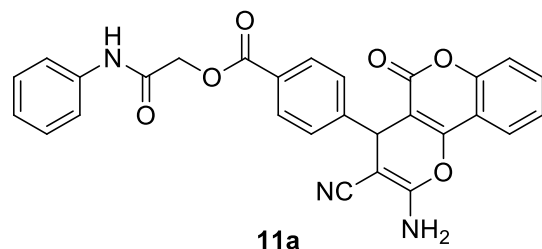
<sup>1</sup>H NMR of **9a**

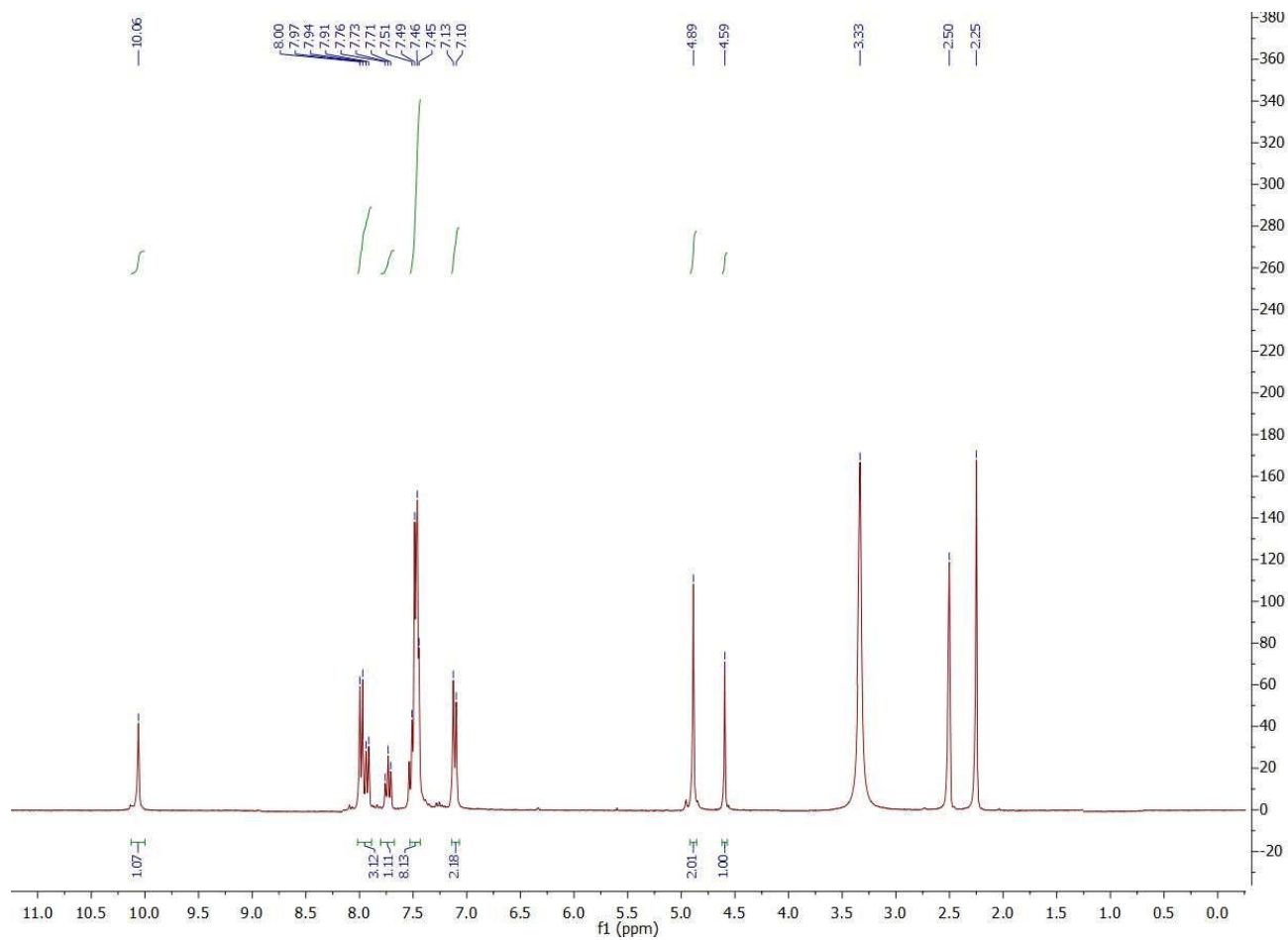
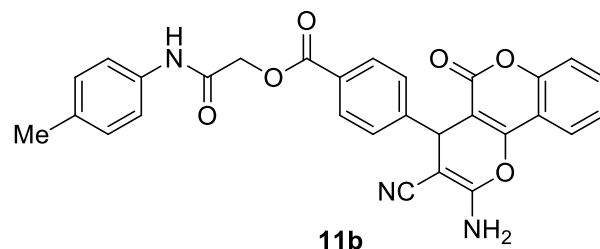
 $^{13}\text{C}$  NMR of **9a**

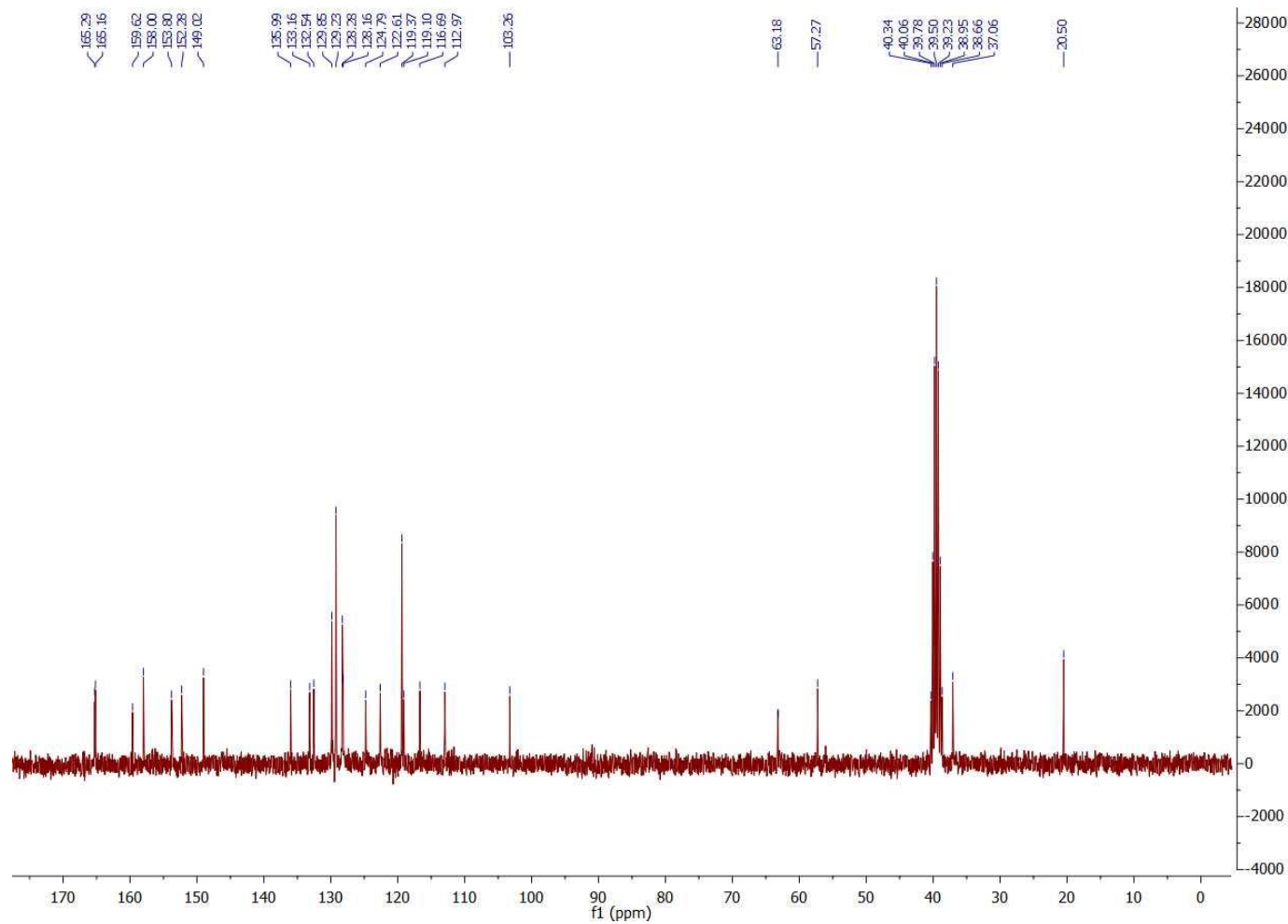
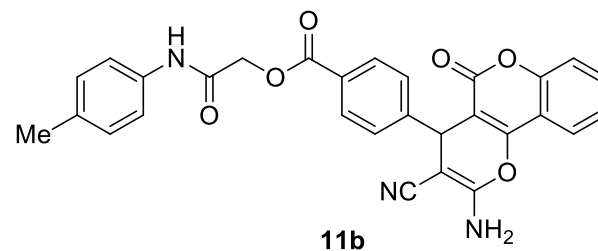
<sup>1</sup>H NMR of **9b**

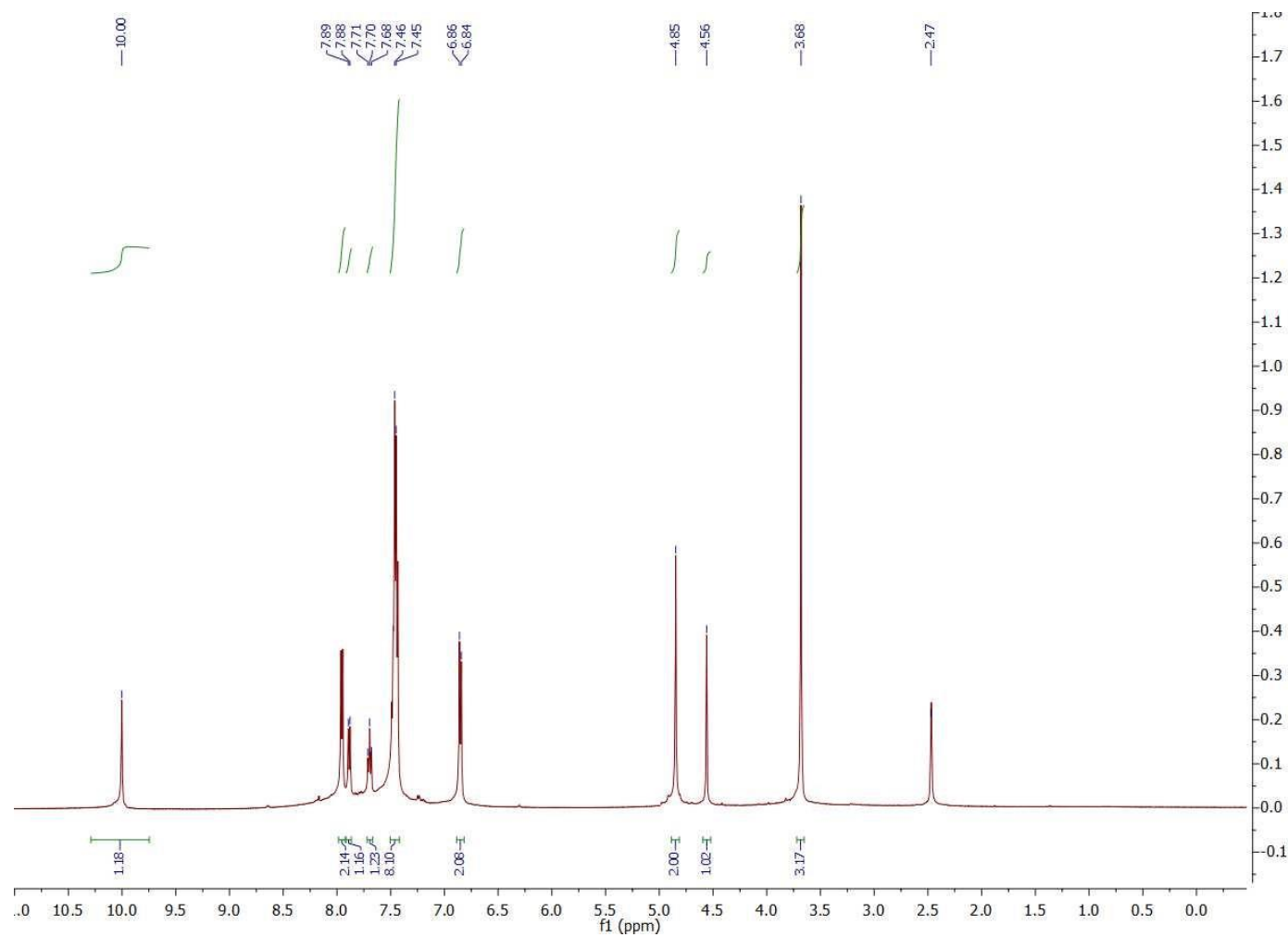
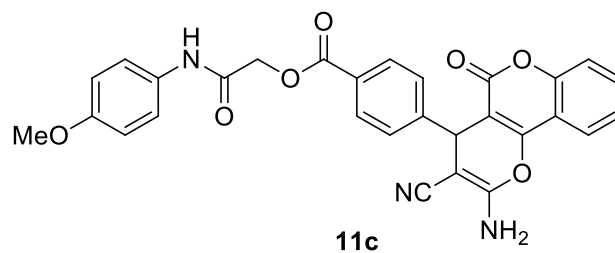
<sup>13</sup>C NMR of **9b**

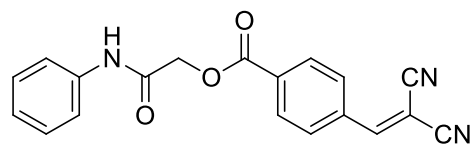
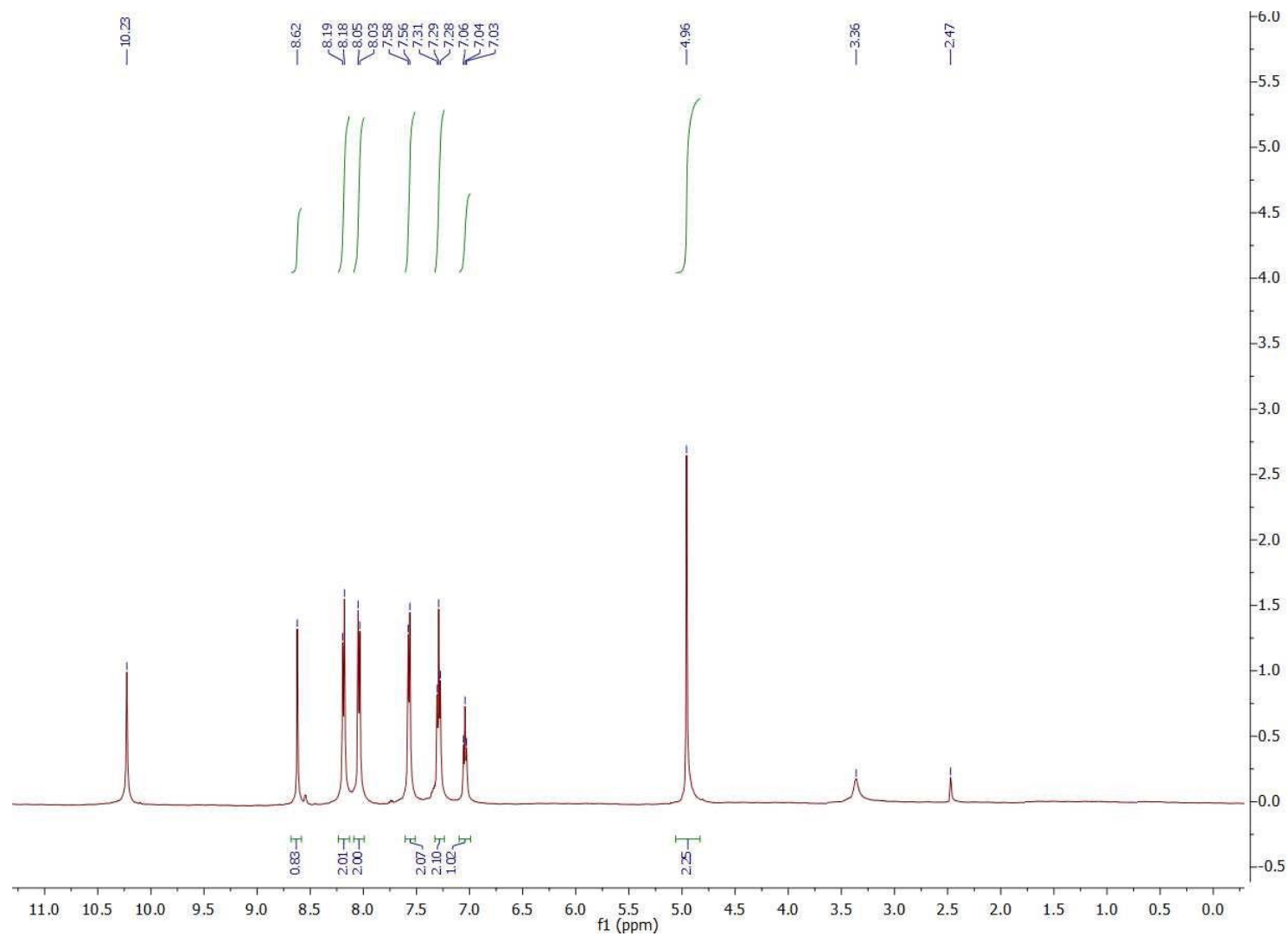
<sup>1</sup>H NMR of **9c**

<sup>1</sup>H NMR of **11a**

<sup>1</sup>H NMR of **11b**

<sup>13</sup>C NMR of **11b**

<sup>1</sup>H NMR of **11c**

**16**<sup>1</sup>H NMR of **16**