

# Supporting Information

## Transition-Metal Free C3-Amidation of quinoxalin-2(1*H*)-ones with Amides Using Selectfluor as a Mild Oxidant

Jin-Wei Yuan,<sup>\*a</sup> Jun-Liang Zhu,<sup>a</sup> Bing Li,<sup>a</sup> Liang-Ru Yang,<sup>a</sup> Pu Mao,<sup>a</sup> Shou-Ren Zhang,<sup>\*b</sup> Yan-Chun  
Li<sup>b</sup> and Ling-Bo Qu<sup>c</sup>

<sup>a</sup> School of Chemistry & Chemical Engineering, Henan University of Technology; Academician  
Workstation for Natural Medicinal Chemistry of Henan Province, Zhengzhou 450001, China

<sup>b</sup> Henan Key Laboratory of Nanocomposites and Applications; Institute of Nanostructured  
Functional Materials, Huanghe Science and Technology College, Zhengzhou 450006, China

<sup>c</sup> College of Chemistry and Molecular Engineering, Zhengzhou University, Zhengzhou 450001,  
China

**\*Corresponding authors:**

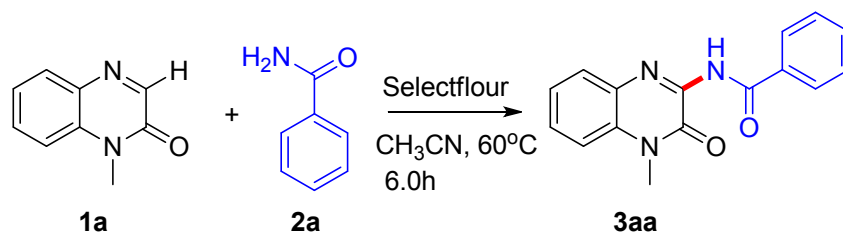
E-mail: [yuanjinweigs@126.com](mailto:yuanjinweigs@126.com) (Jin-Wei Yuan)

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## Optimization of reaction conditions



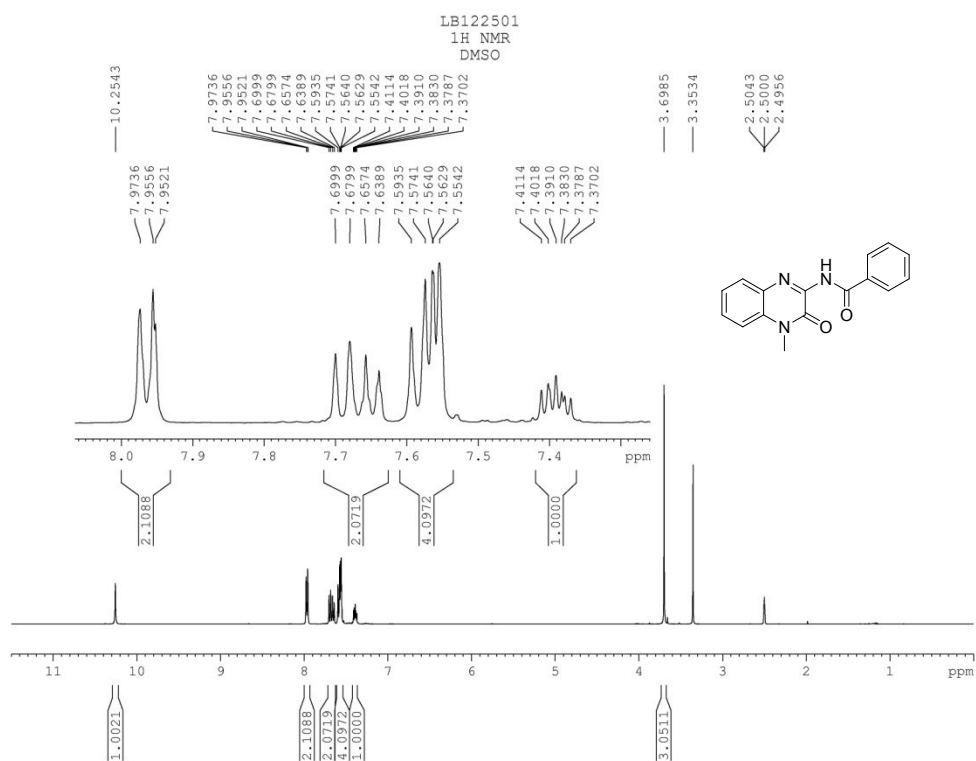
**Table S1** Screening the amount of **1a** and **2a**<sup>a</sup>

| Entry | The molar amount of<br><b>1a</b> and <b>2a</b> | Yields (%) <sup>b</sup> |
|-------|------------------------------------------------|-------------------------|
| 1     | 1:0.5                                          | 45                      |
| 2     | 1:1                                            | 75                      |
| 3     | 1:1.5                                          | 85                      |
| 4     | 1:2                                            | 85                      |
| 5     | 1:2.5                                          | 85                      |

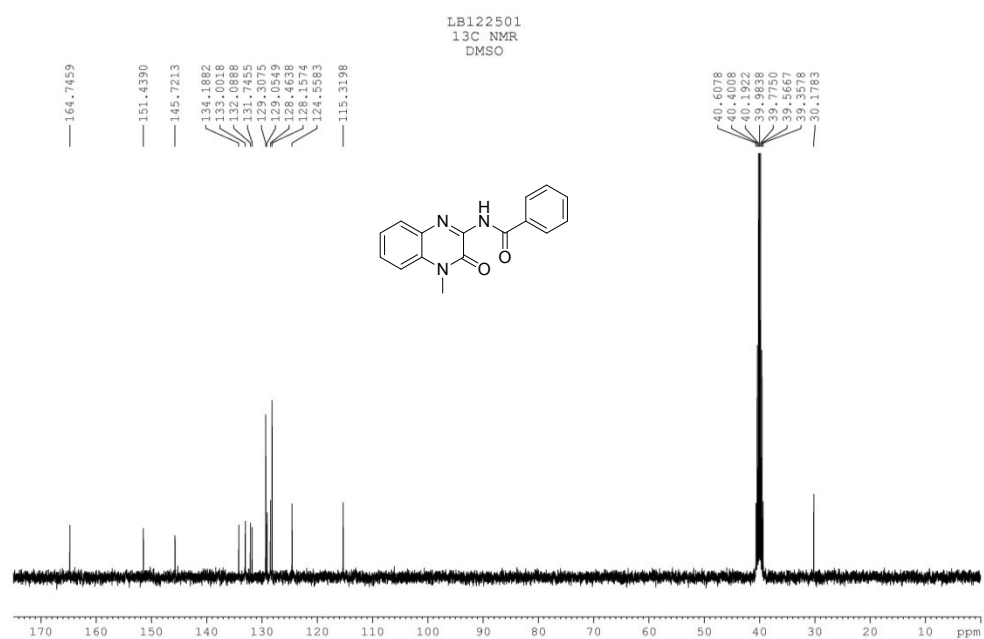
<sup>[a]</sup> Reaction conditions: 1-methylquinoxalin-2(1*H*)-one **1a** (0.2 mmol, 32.0 mg), benzamide **2a**, Selectfluor agent (0.3 mmol, 106.2 mg) in  $\text{CH}_3\text{CN}$  (2.0 mL) at  $60^\circ\text{C}$  for 6.0 h.

<sup>[b]</sup> Isolated yield.

### NMR spectra of products 3



**Fig. 1**  $^1\text{H}$  NMR spectrum of compound **3aa**



**Fig. 2**  $^{13}\text{C}$  NMR spectrum of compound **3aa**

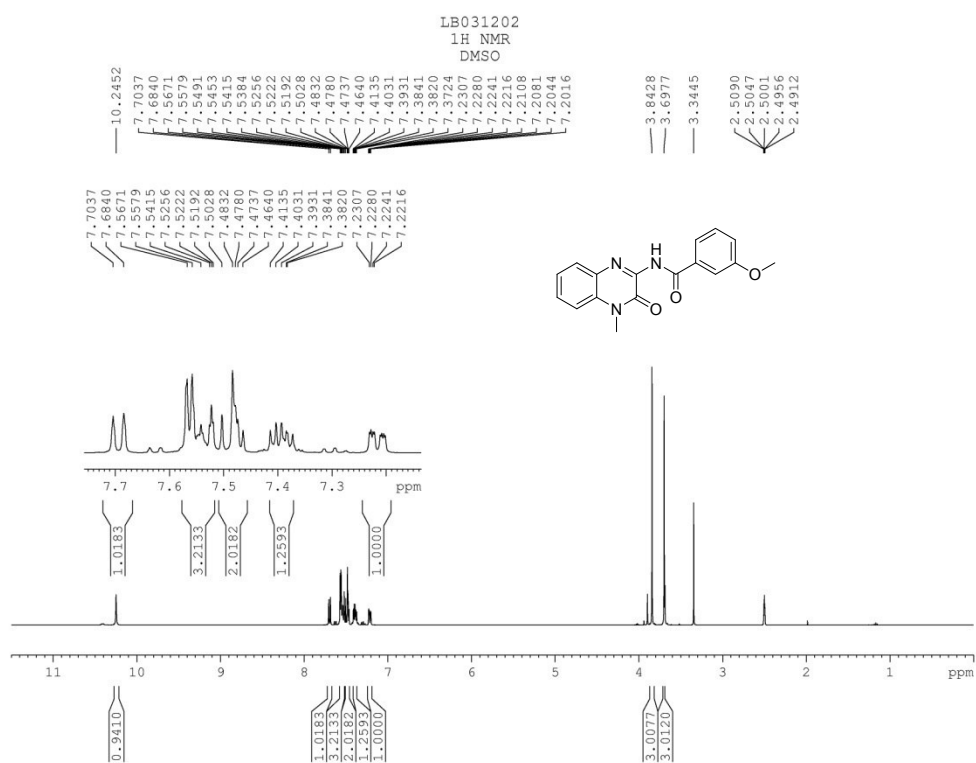


Fig. 3  $^1\text{H}$  NMR spectrum of compound 3ab

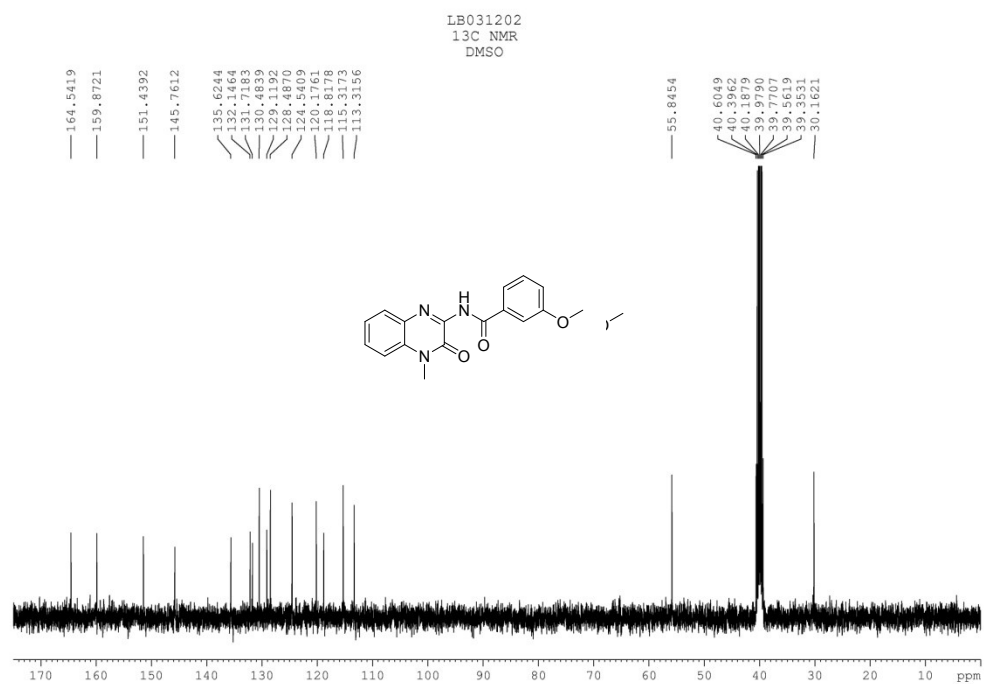


Fig. 4  $^{13}\text{C}$  NMR spectrum of compound 3ab



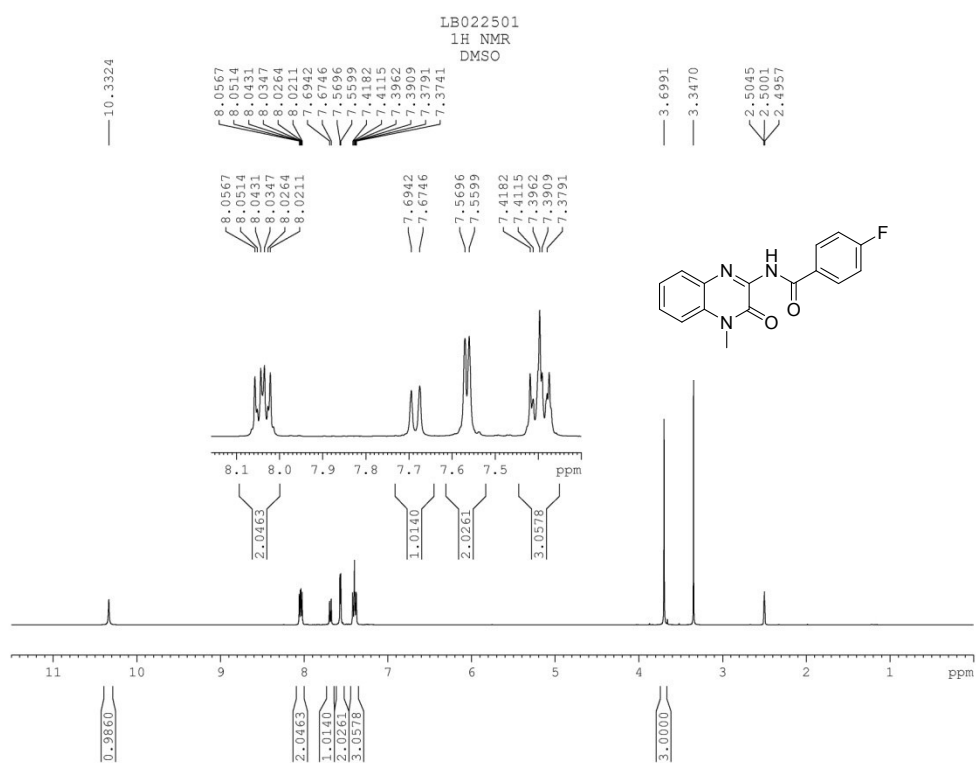


Fig. 7  $^1\text{H}$  NMR spectrum of compound 3ad

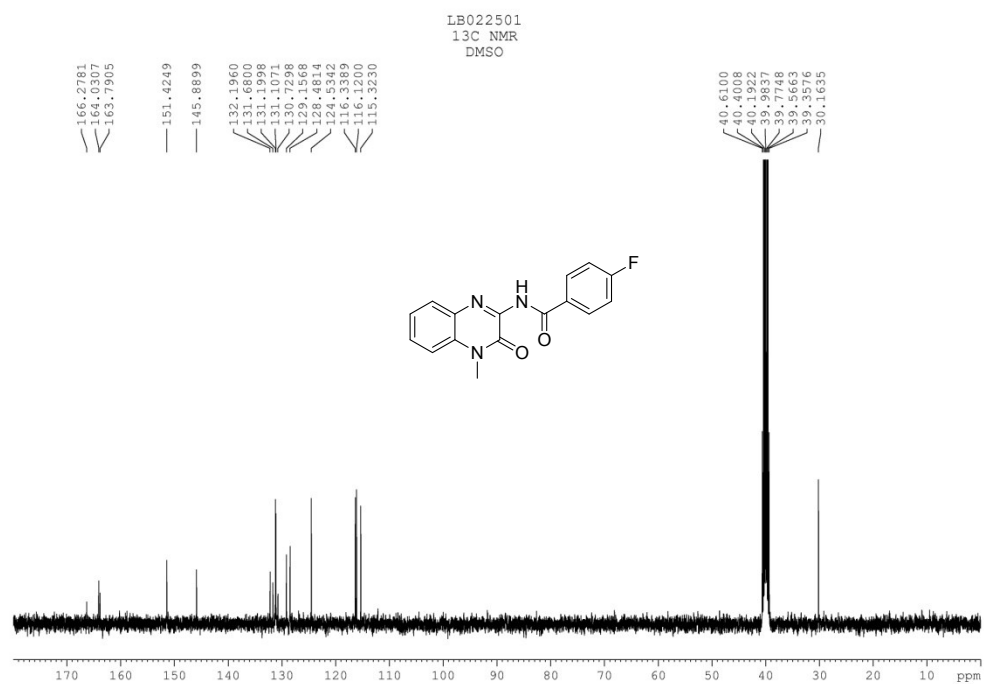


Fig. 8  $^{13}\text{C}$  NMR spectrum of compound 3ad

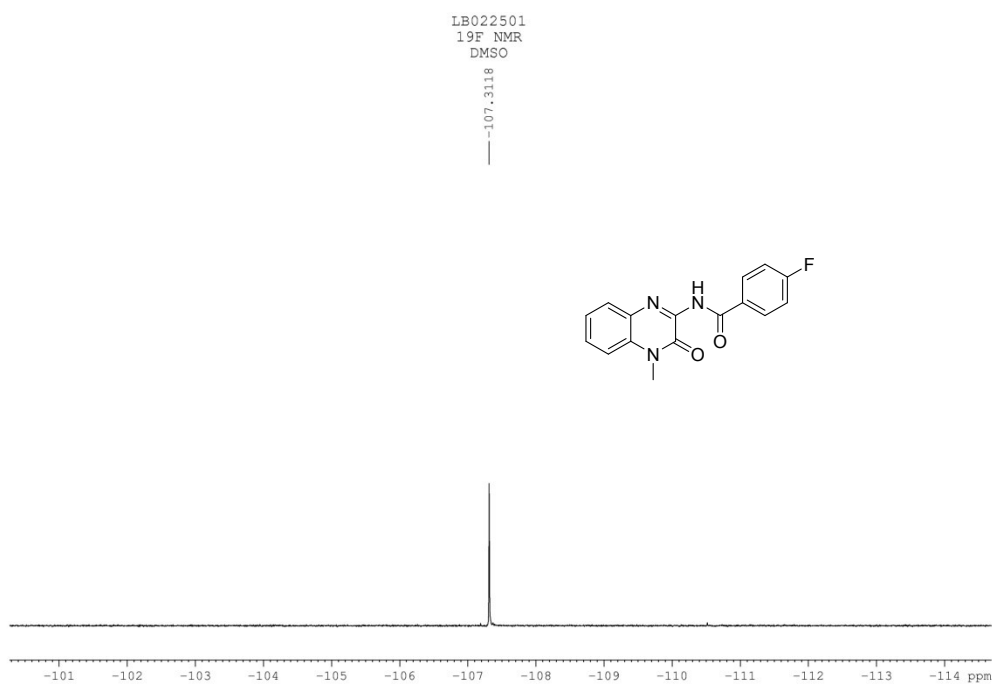


Fig. 9 <sup>19</sup>F NMR spectrum of compound 3ad

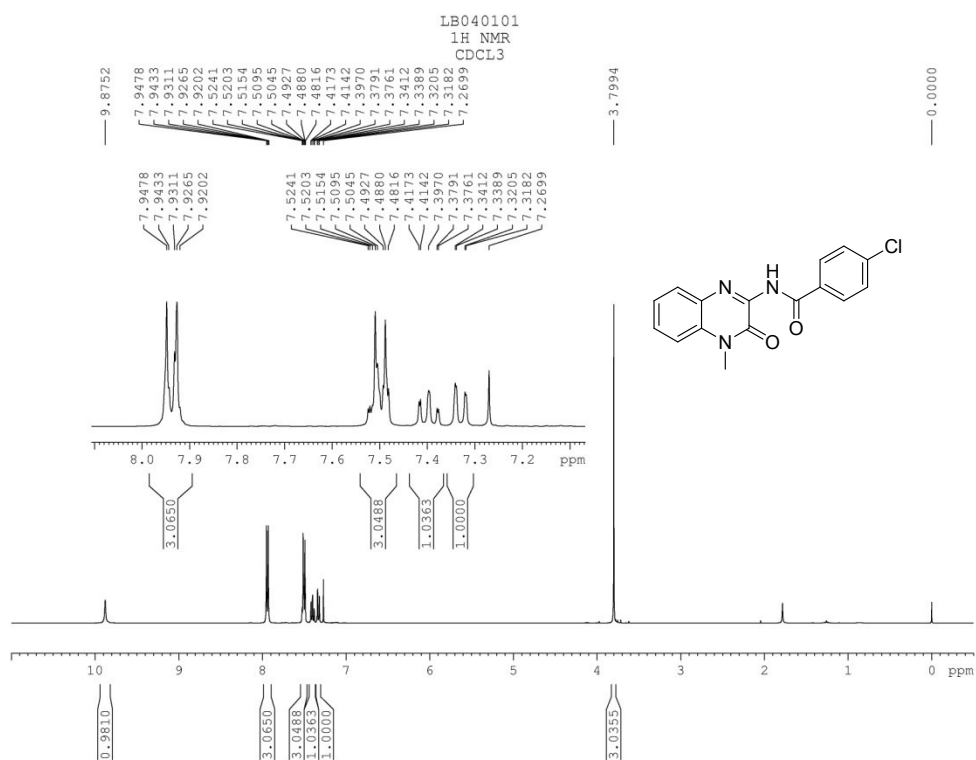


Fig. 10 <sup>1</sup>H NMR spectrum of compound 3ae

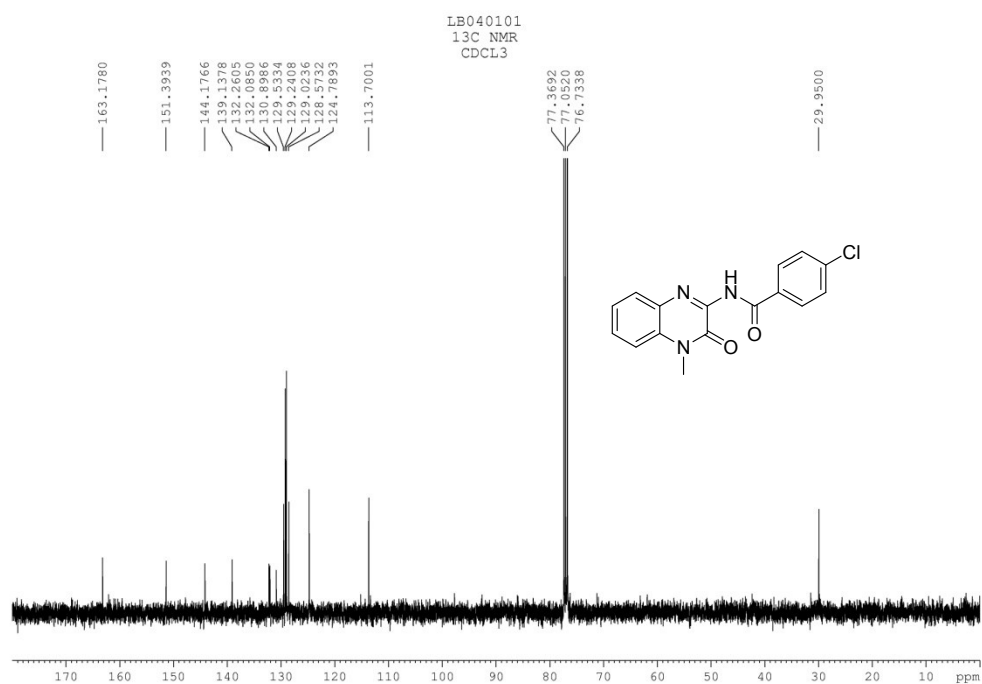


Fig. 11 <sup>13</sup>C NMR spectrum of compound 3ae

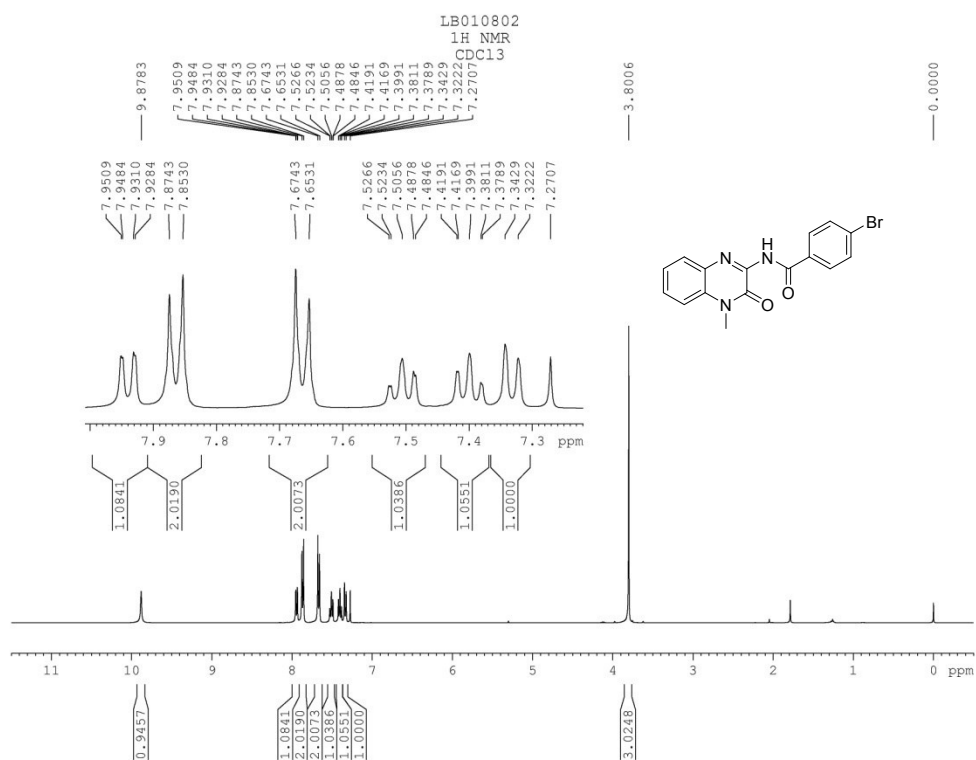


Fig. 12 <sup>1</sup>H NMR spectrum of compound 3af



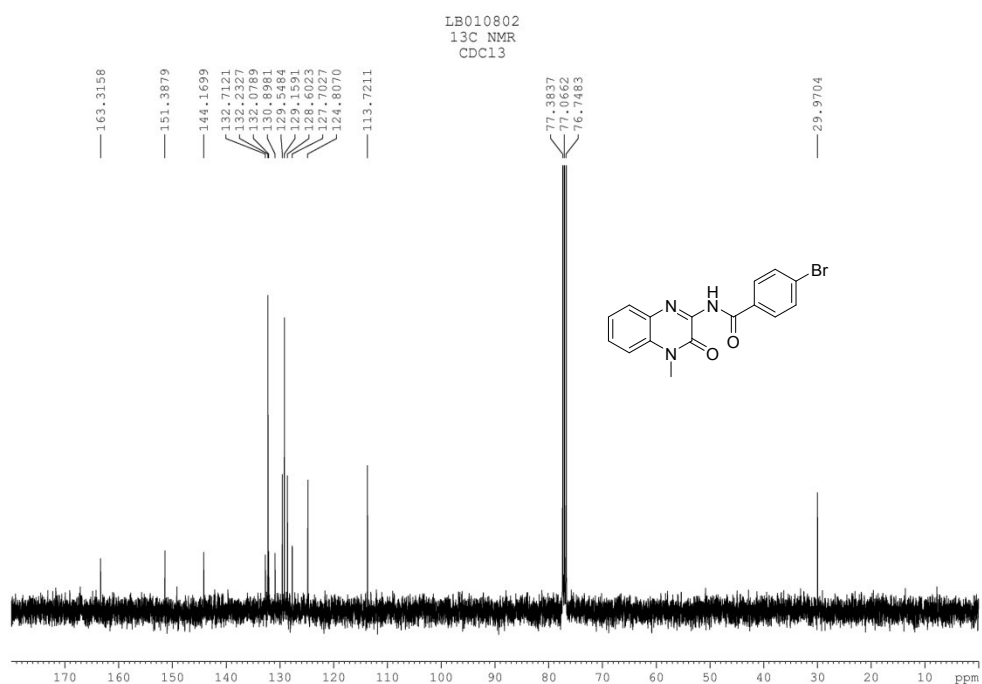
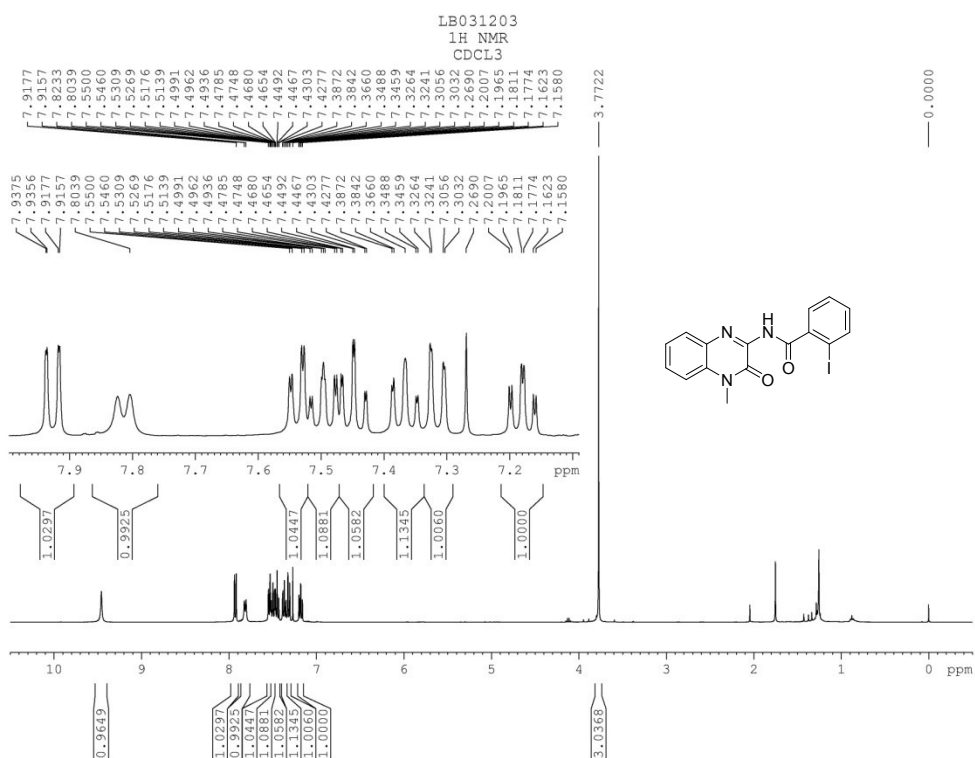
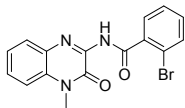


Fig. 13 <sup>13</sup>C NMR spectrum of compound 3af



Fig. 14 <sup>1</sup>H NMR spectrum of compound 3ag



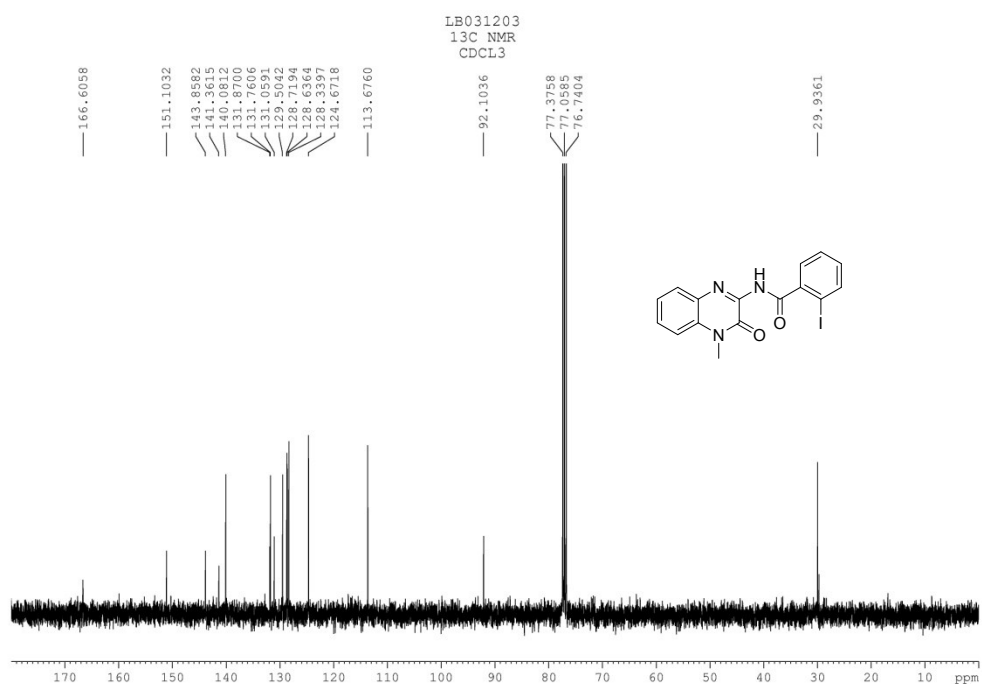
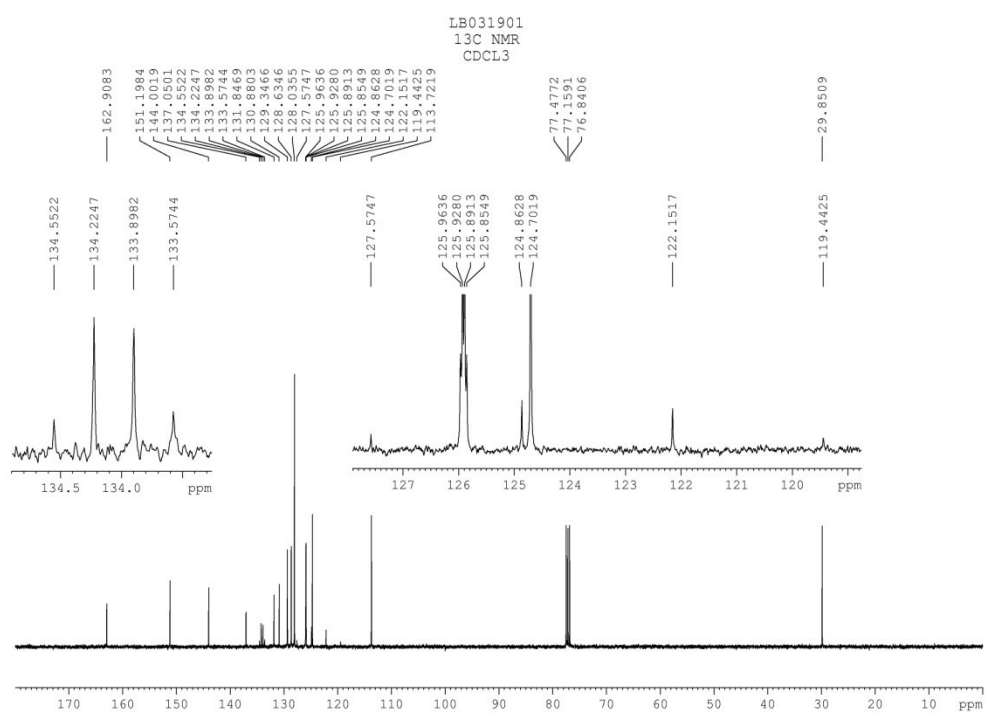


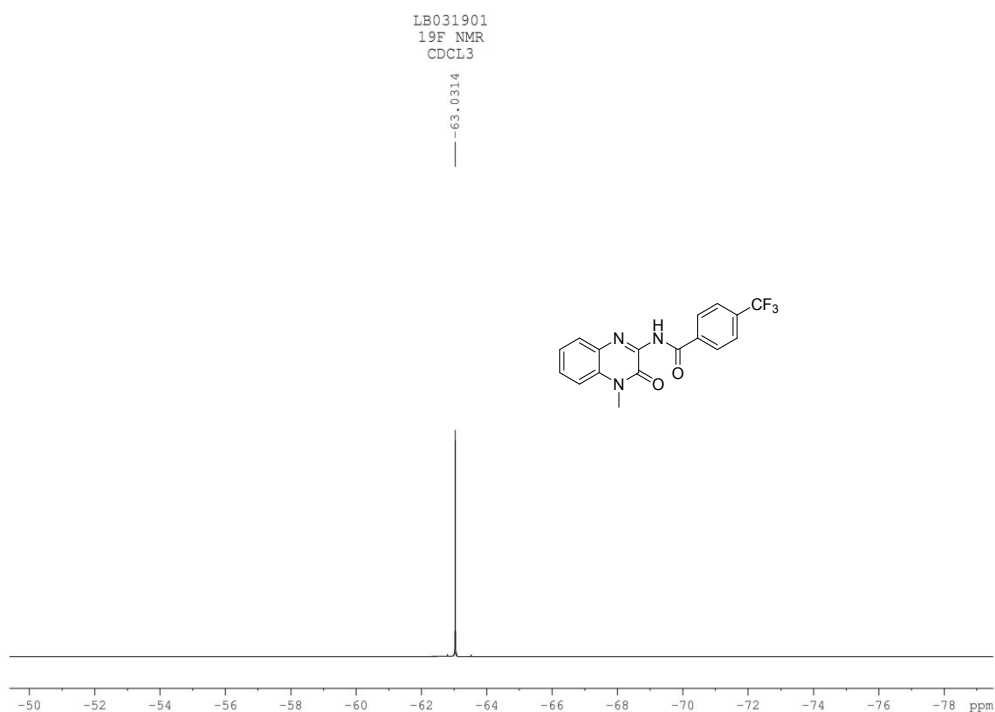
Fig. 17 <sup>13</sup>C NMR spectrum of compound 3ah



Fig. 18 <sup>1</sup>H NMR spectrum of compound 3ai



**Fig. 19**  $^{13}\text{C}$  NMR spectrum of compound **3ai**



**Fig. 20**  $^{19}\text{F}$  NMR spectrum of compound **3ai**

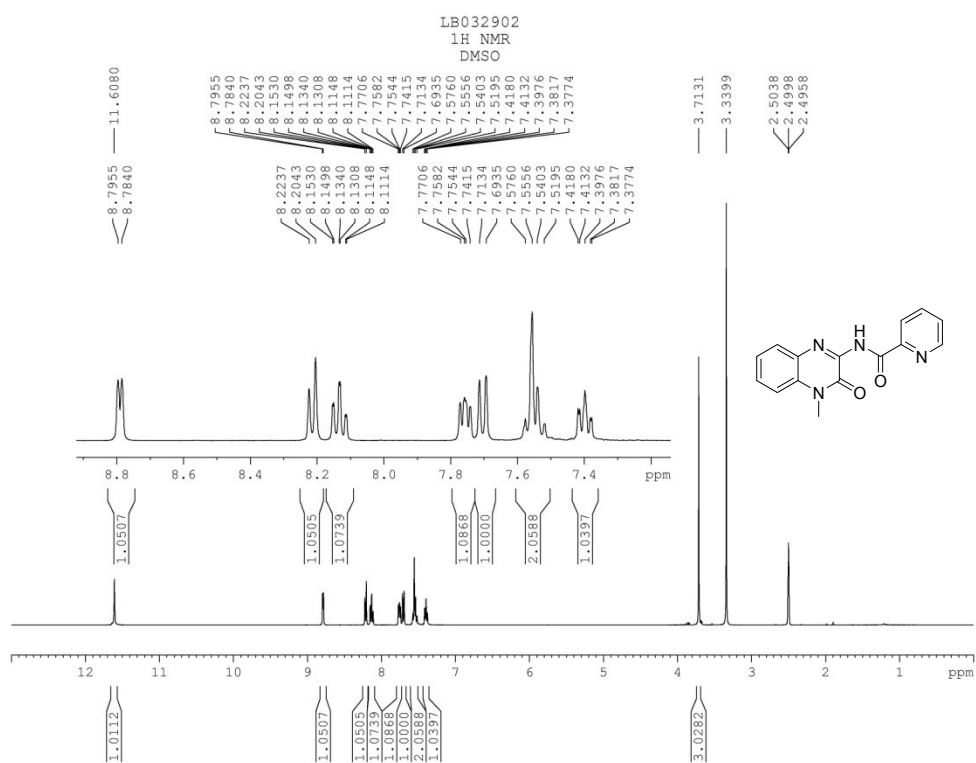


Fig. 21 <sup>1</sup>H NMR spectrum of compound 3aj

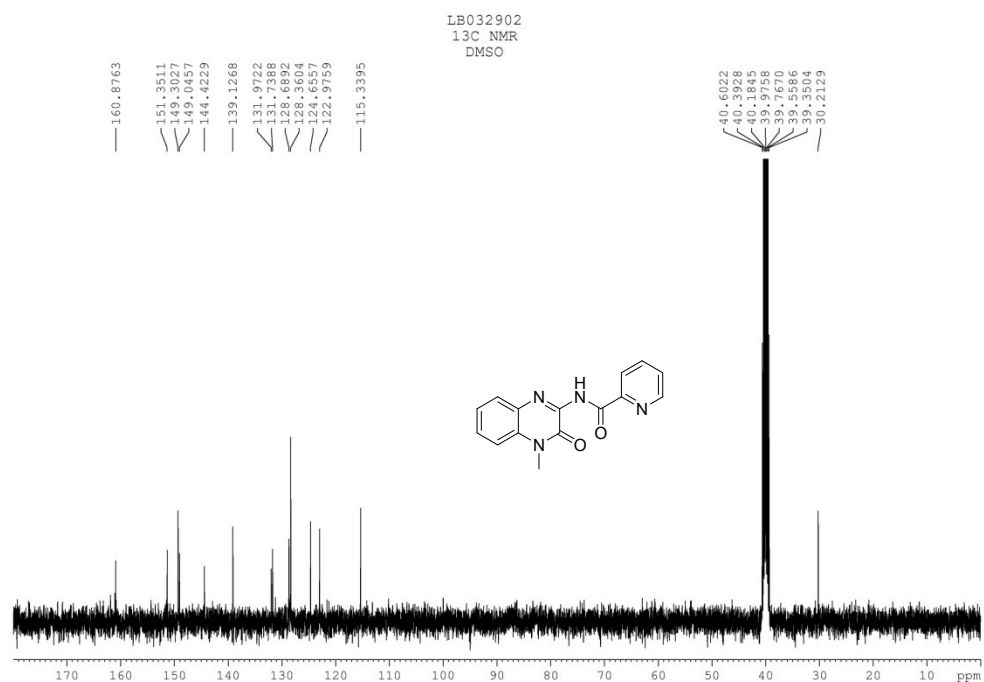


Fig. 22 <sup>13</sup>C NMR spectrum of compound 3aj

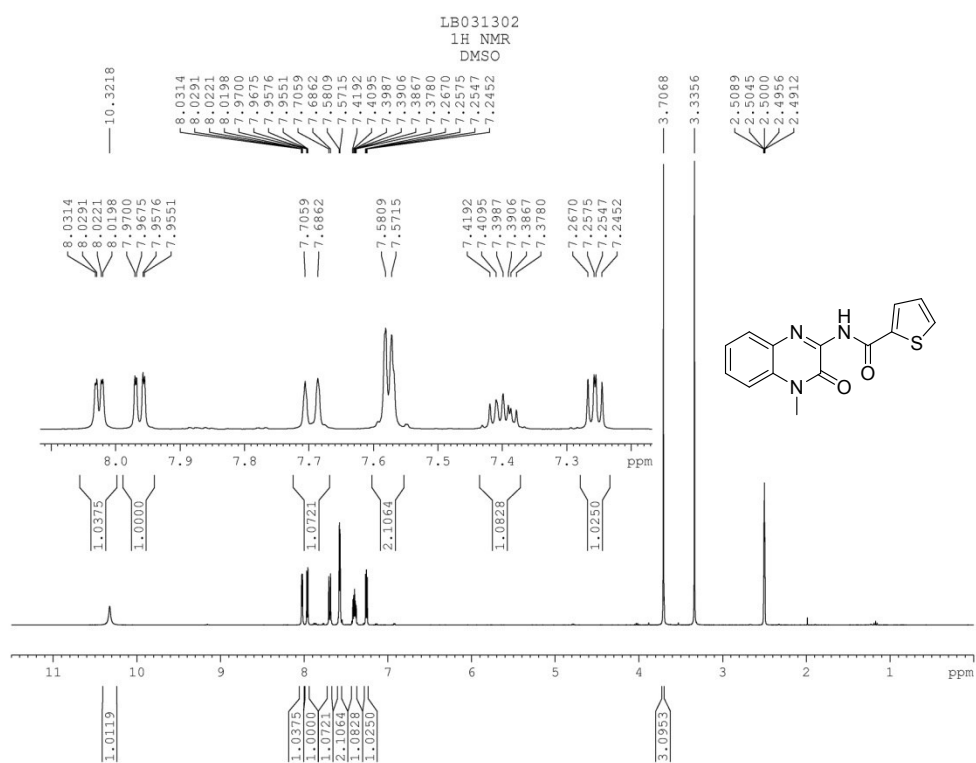
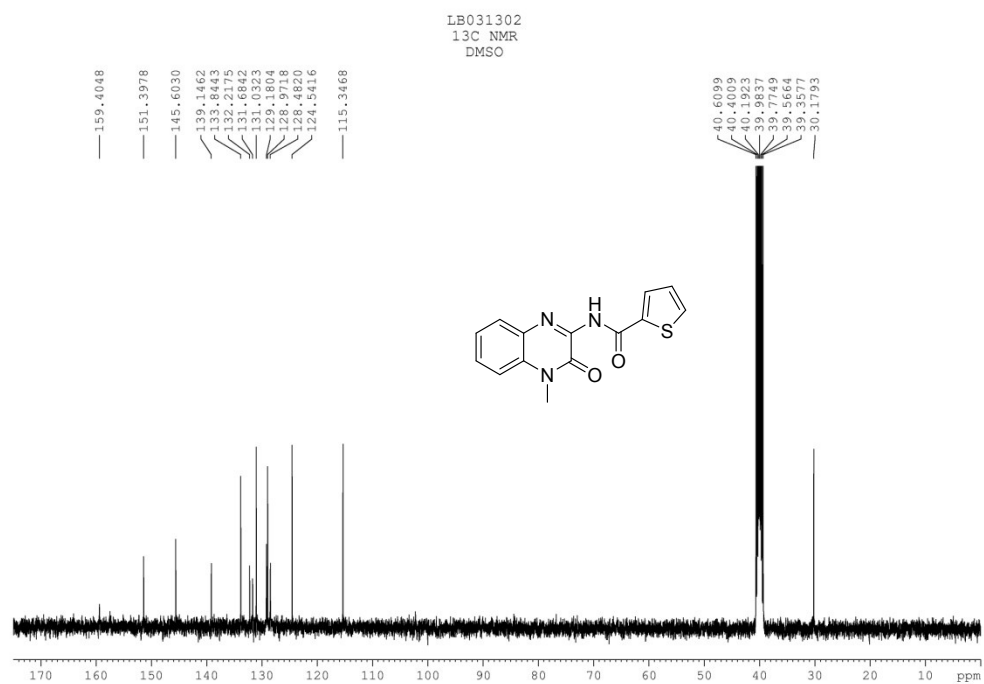
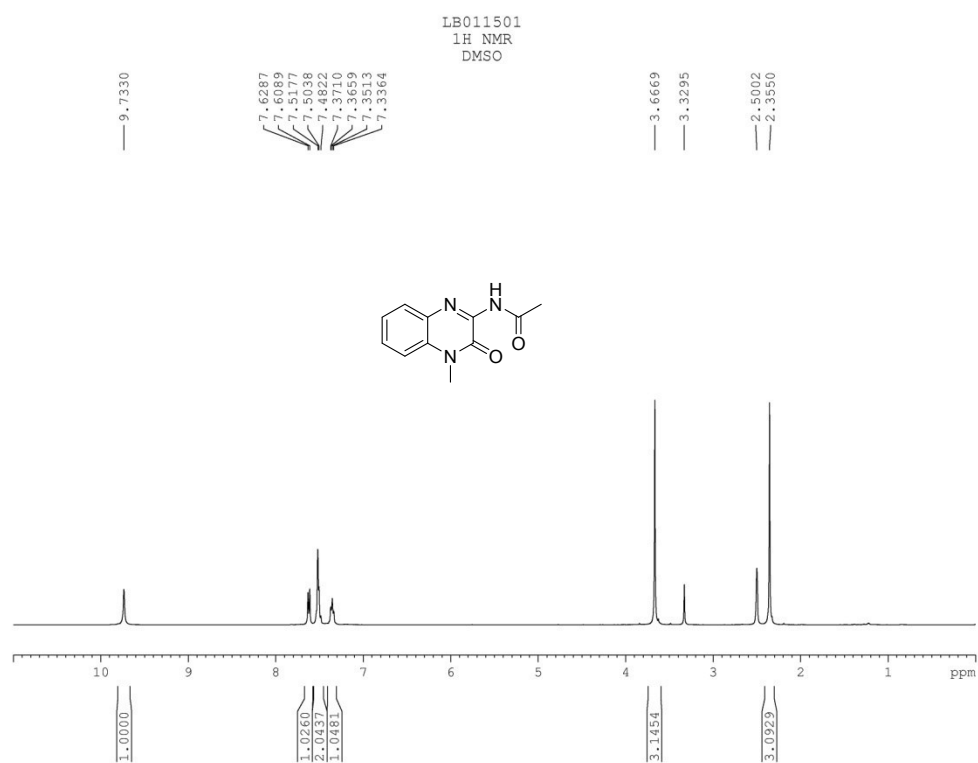
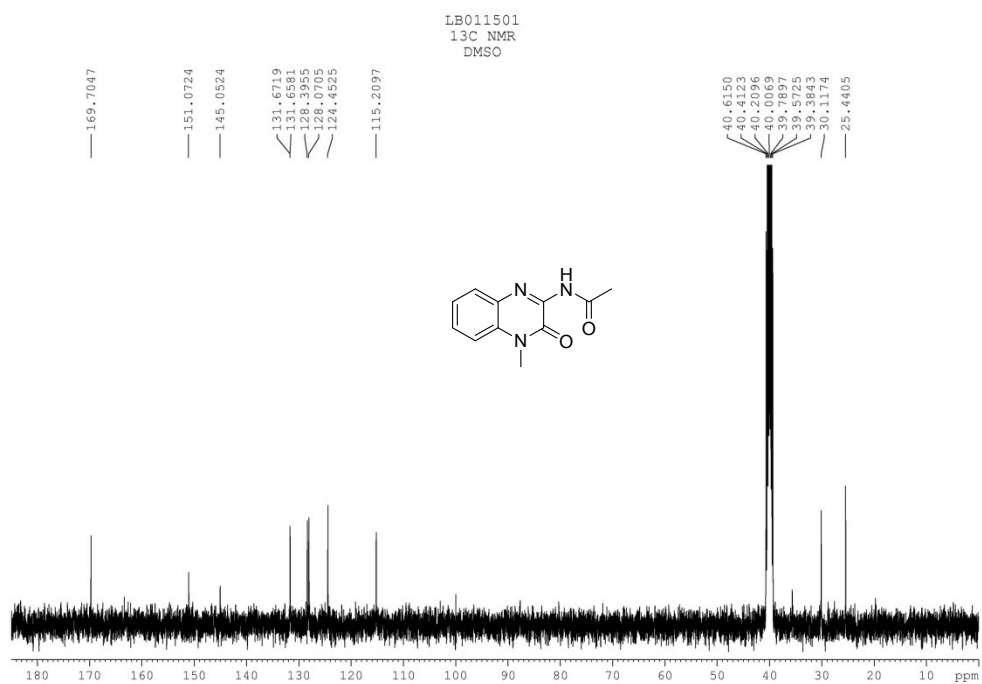


Fig. 23 <sup>1</sup>H NMR spectrum of compound 3ak





**Fig. 25**  $^1\text{H}$  NMR spectrum of compound **3al**



**Fig. 26**  $^{13}\text{C}$  NMR spectrum of compound **3al**

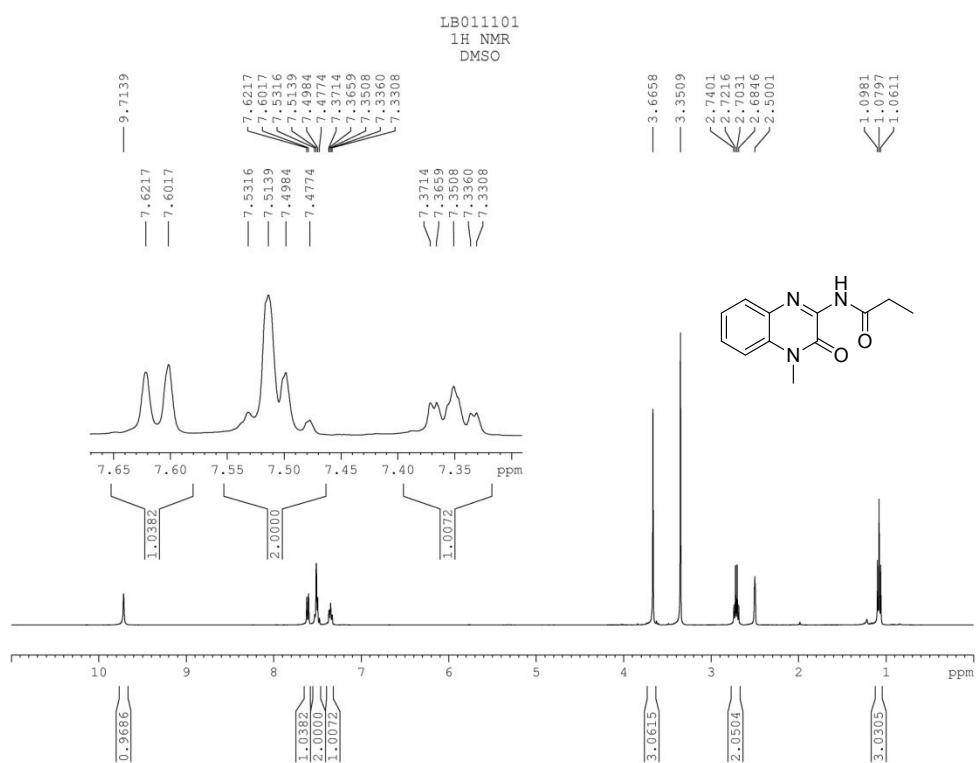


Fig. 27  $^1\text{H}$  NMR spectrum of compound 3am

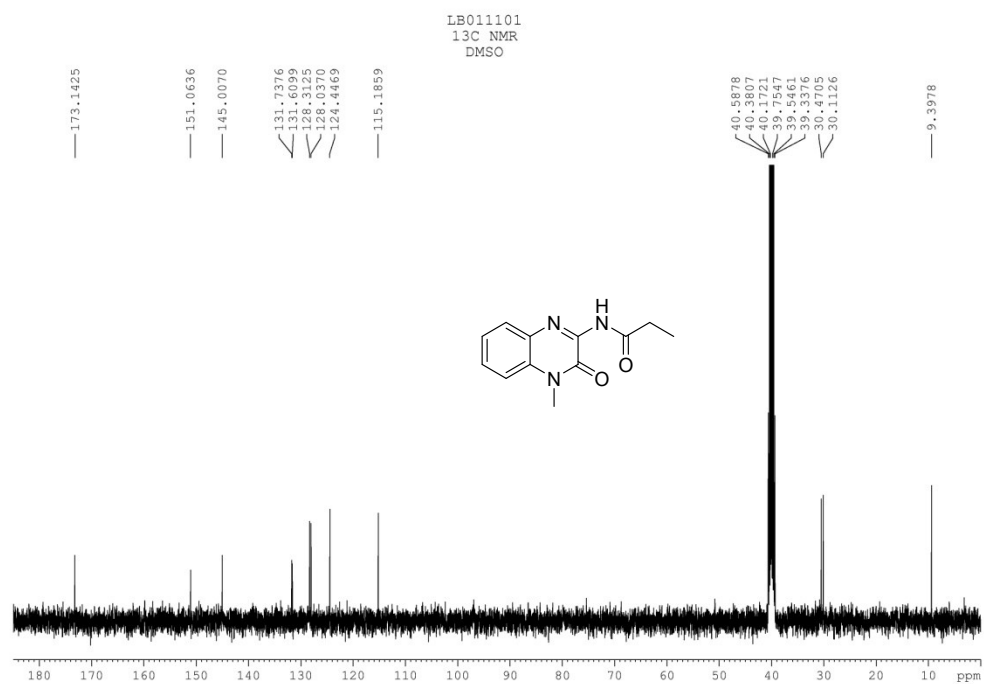


Fig. 28  $^{13}\text{C}$  NMR spectrum of compound 3am



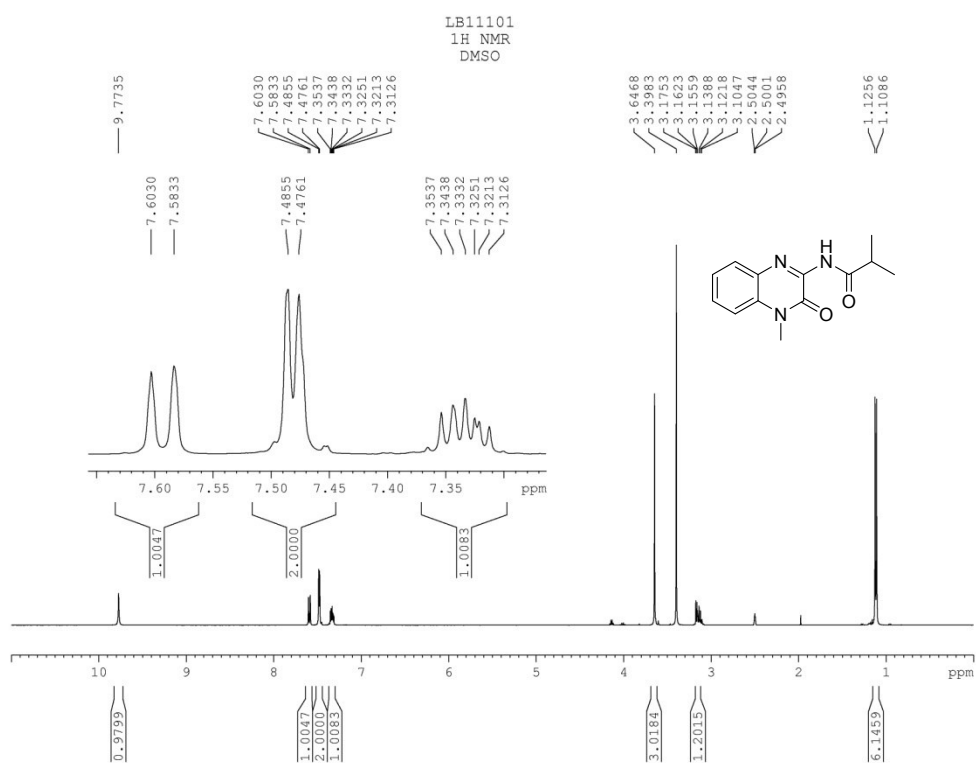


Fig. 29  $^1\text{H}$  NMR spectrum of compound 3an

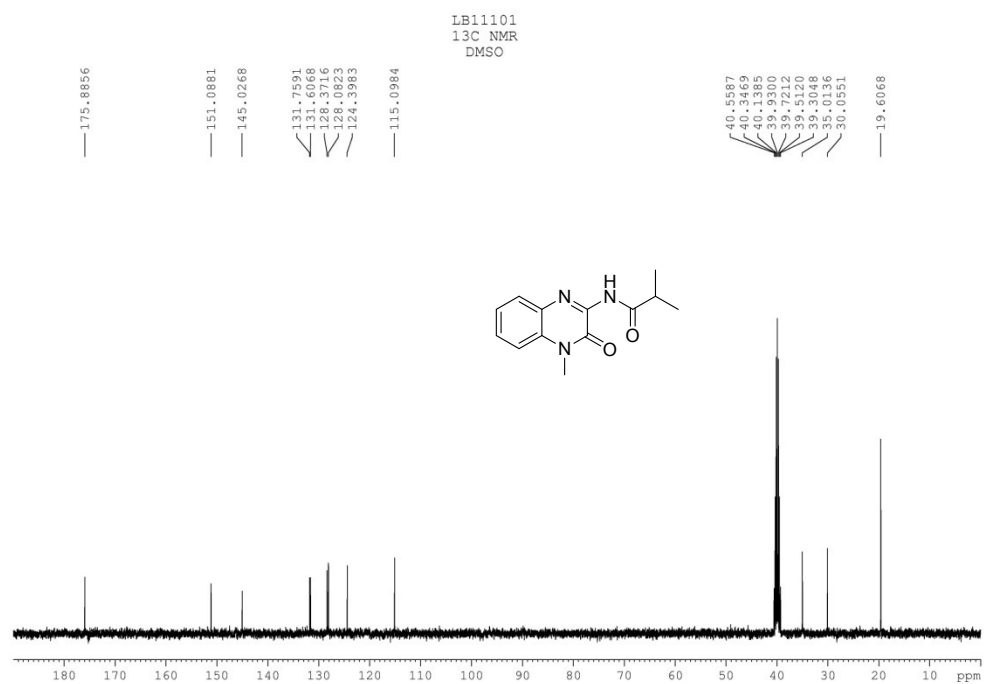


Fig. 30  $^{13}\text{C}$  NMR spectrum of compound 3an

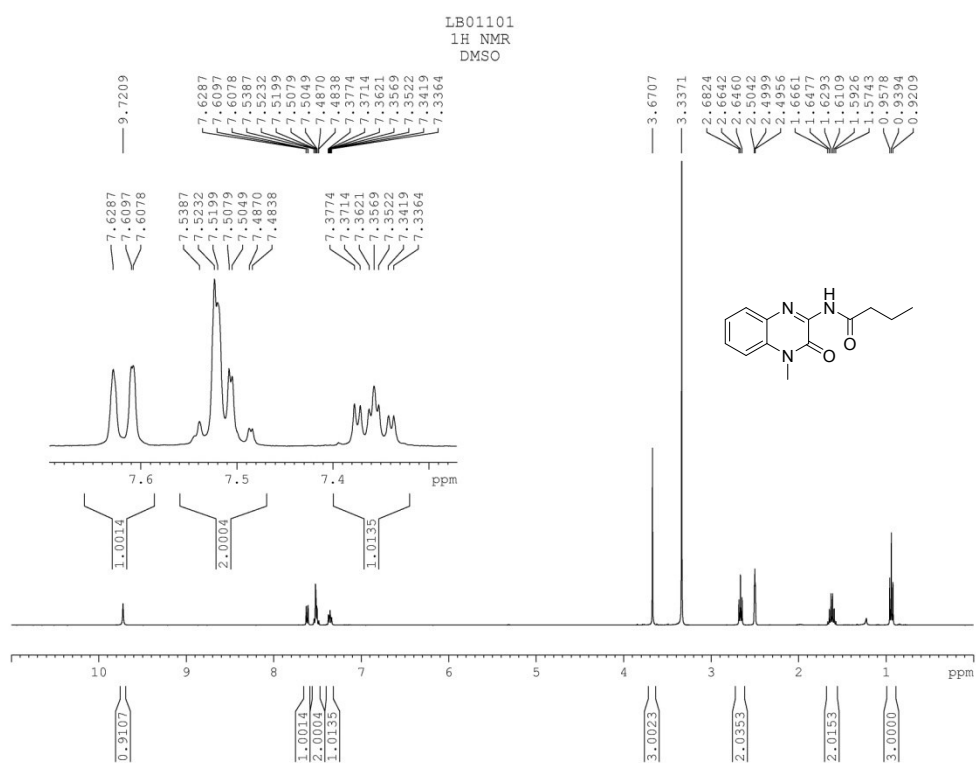


Fig. 29  $^1\text{H}$  NMR spectrum of compound 3ao

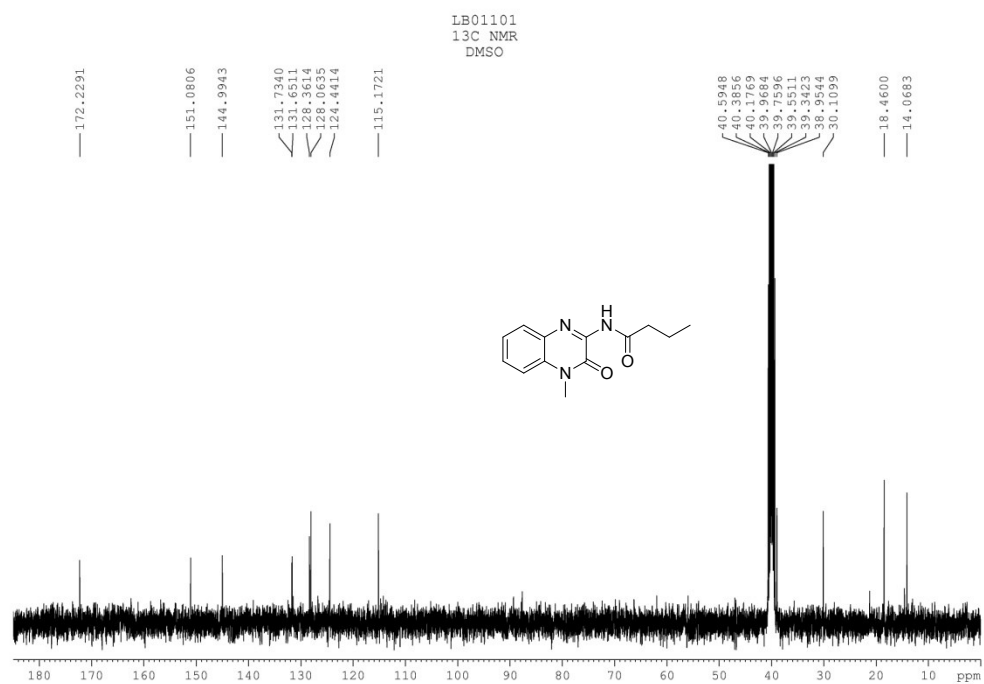


Fig. 30  $^{13}\text{C}$  NMR spectrum of compound 3ao

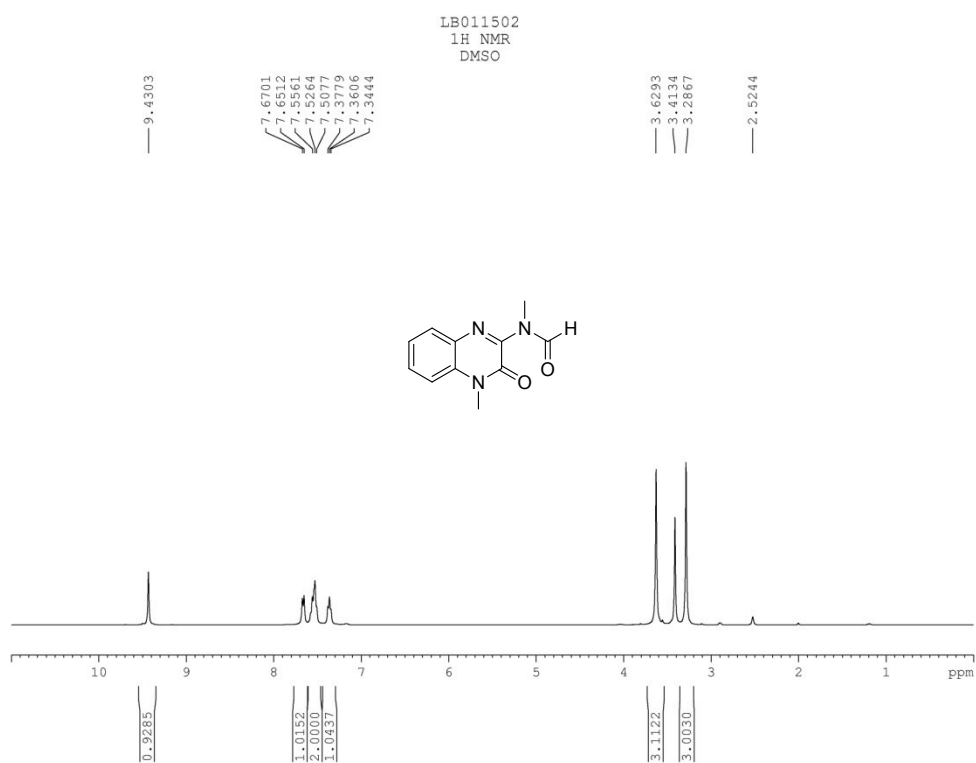


Fig. 33 <sup>1</sup>H NMR spectrum of compound 3ap

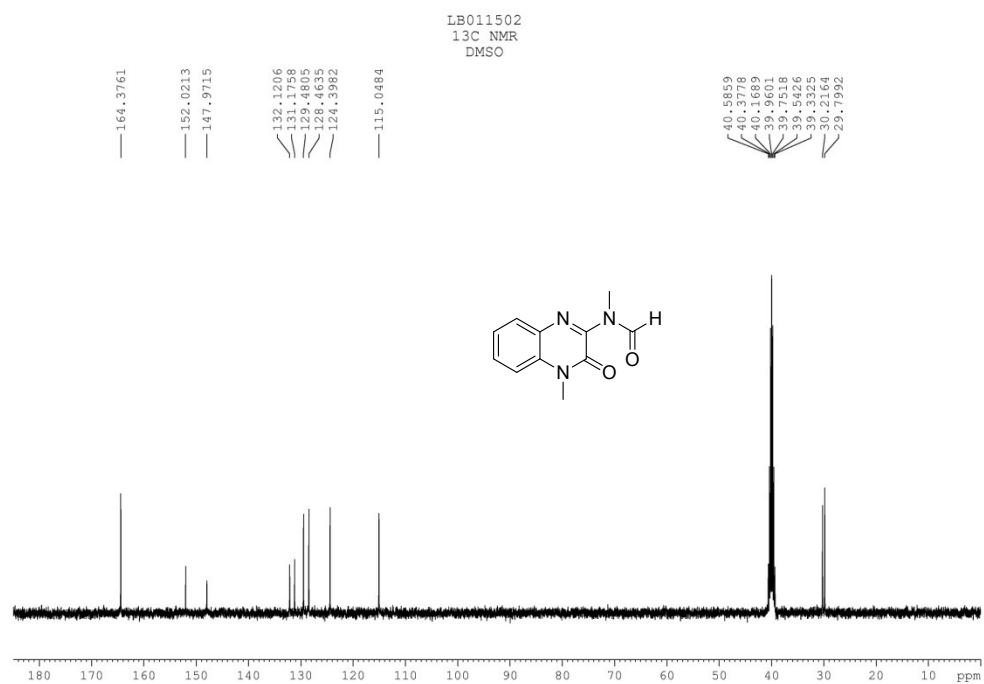


Fig. 34 <sup>13</sup>C NMR spectrum of compound 3ap

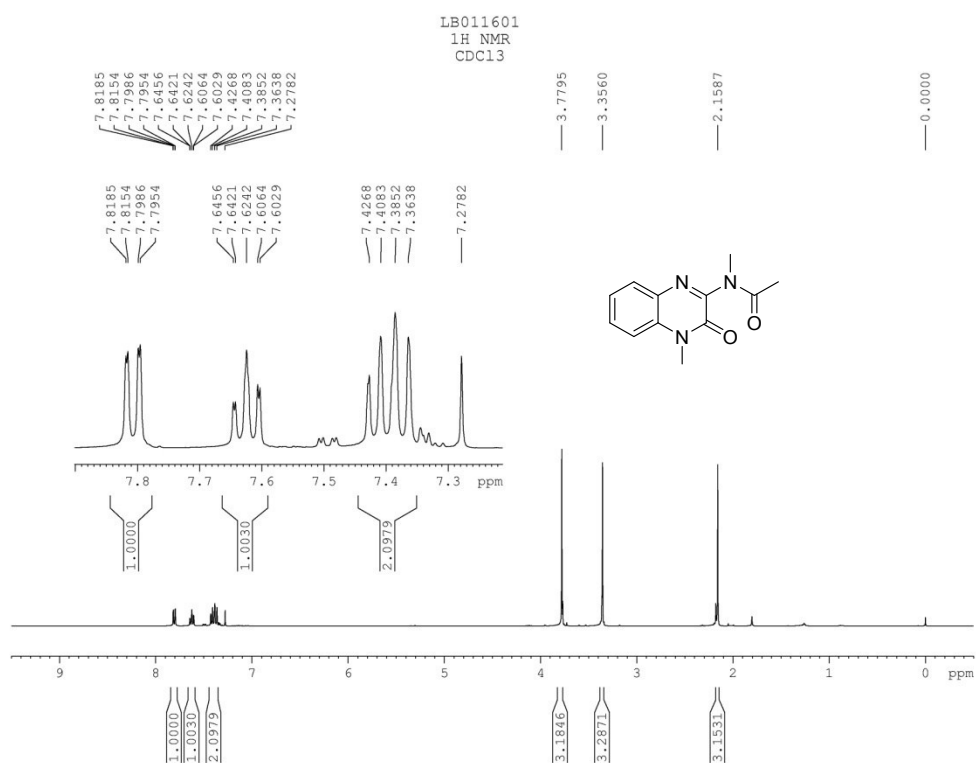


Fig. 35  $^1\text{H}$  NMR spectrum of compound 3aq

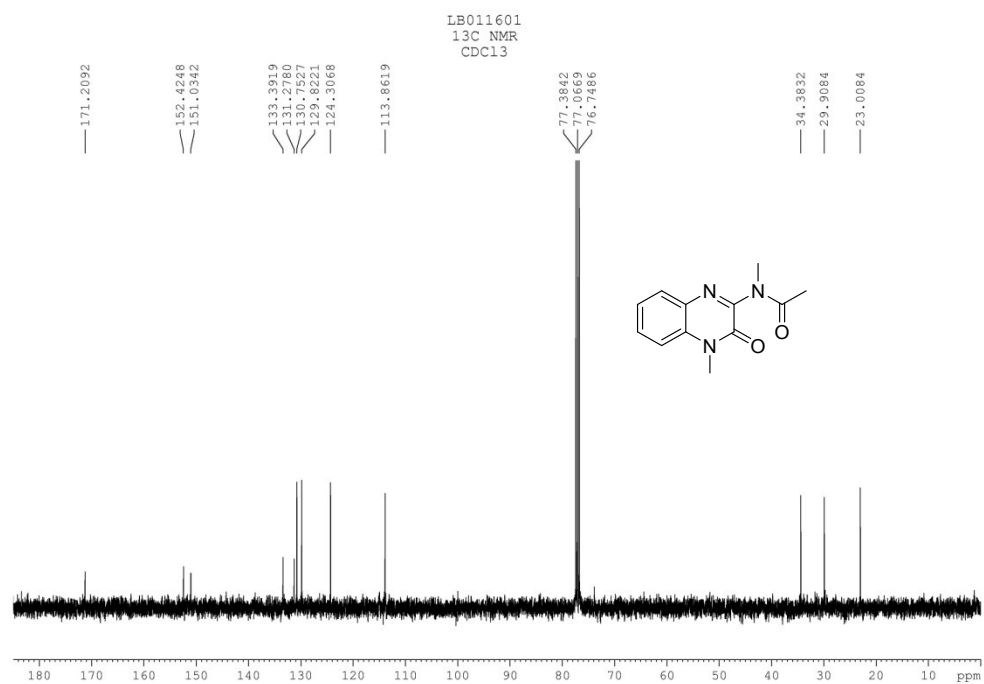
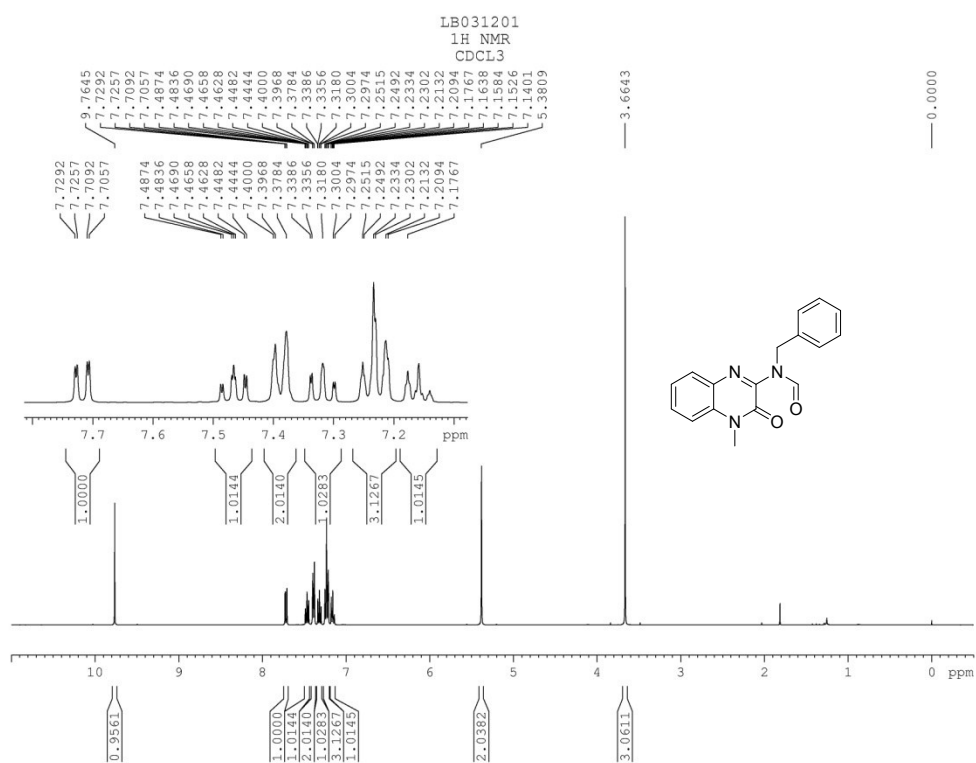
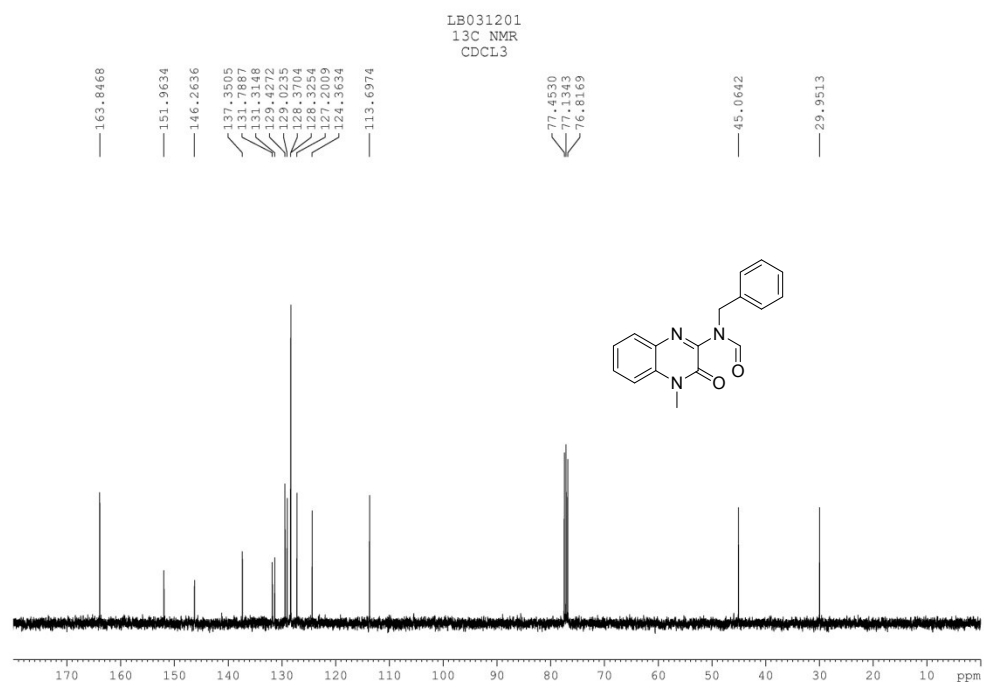


Fig. 36  $^{13}\text{C}$  NMR spectrum of compound 3aq



**Fig. 37** <sup>1</sup>H NMR spectrum of compound **3ar**



**Fig. 38** <sup>13</sup>C NMR spectrum of compound **3ar**

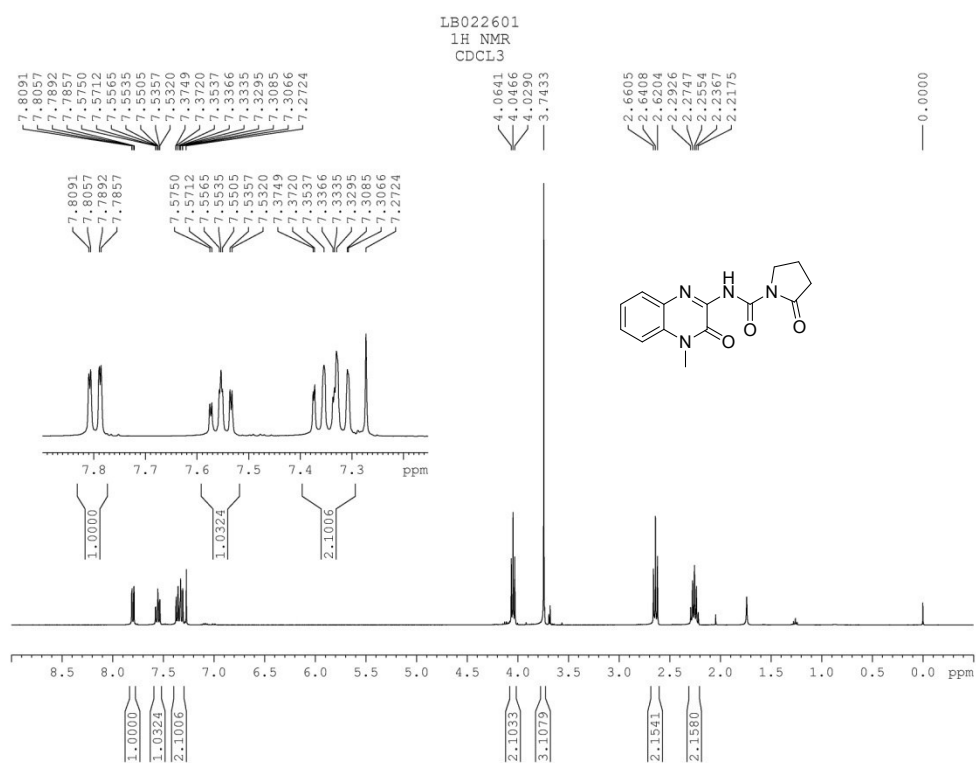


Fig. 39  $^1\text{H}$  NMR spectrum of compound 3as

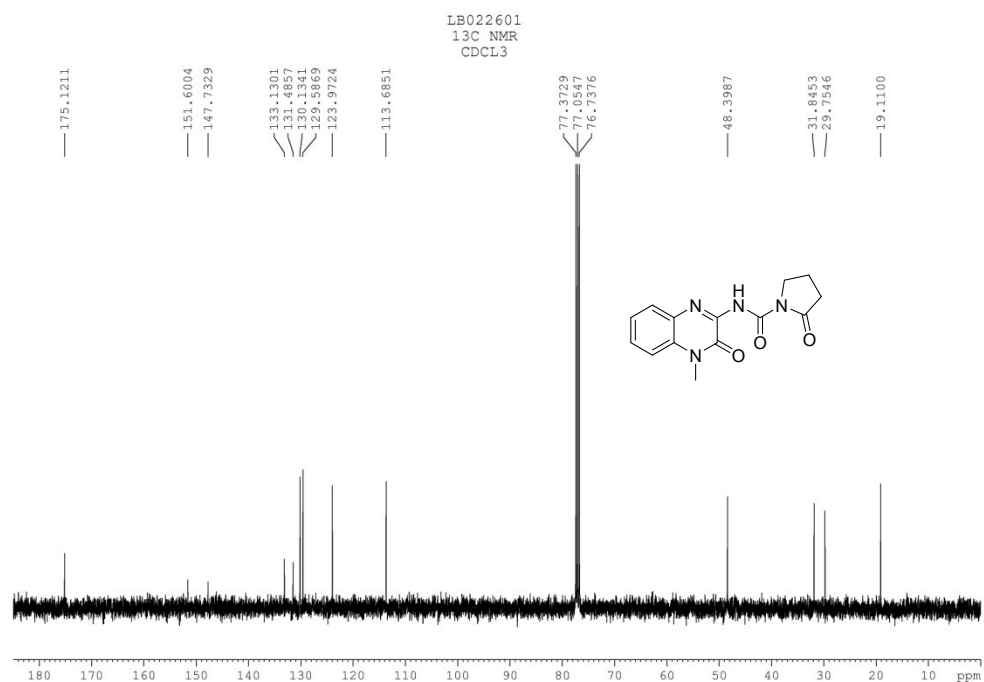


Fig. 40  $^{13}\text{C}$  NMR spectrum of compound 3as

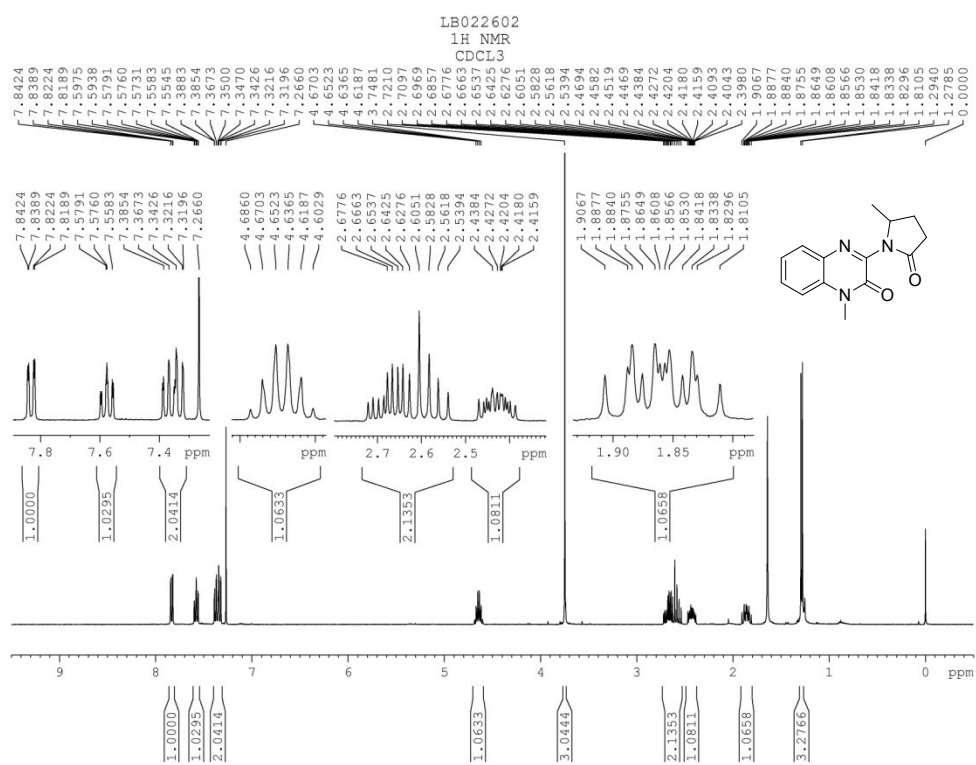


Fig. 41 <sup>1</sup>H NMR spectrum of compound 3at

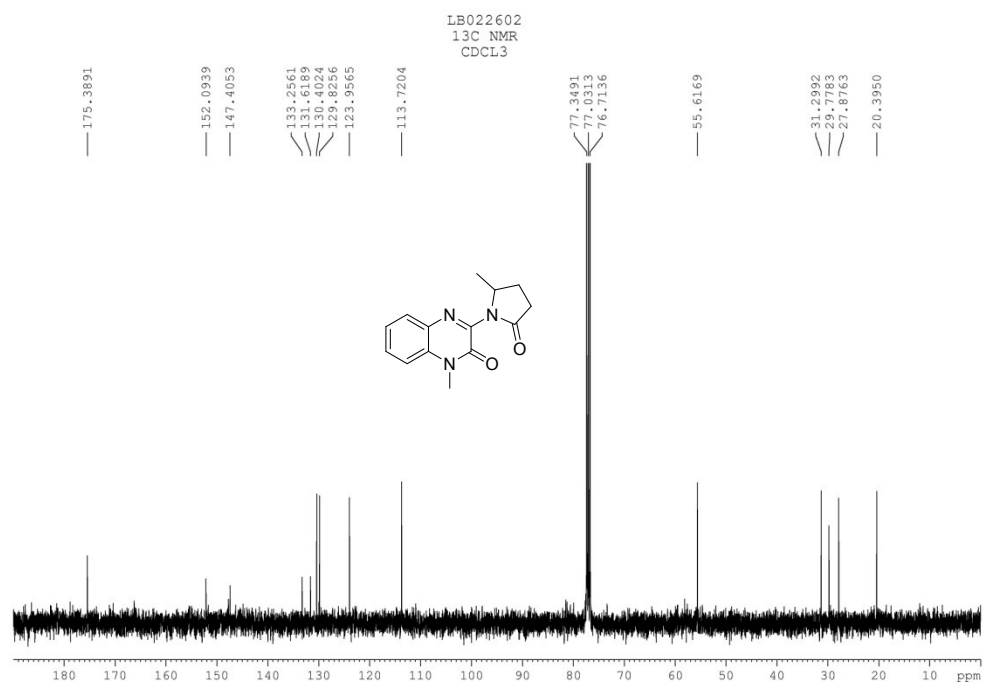


Fig. 42 <sup>13</sup>C NMR spectrum of compound 3at

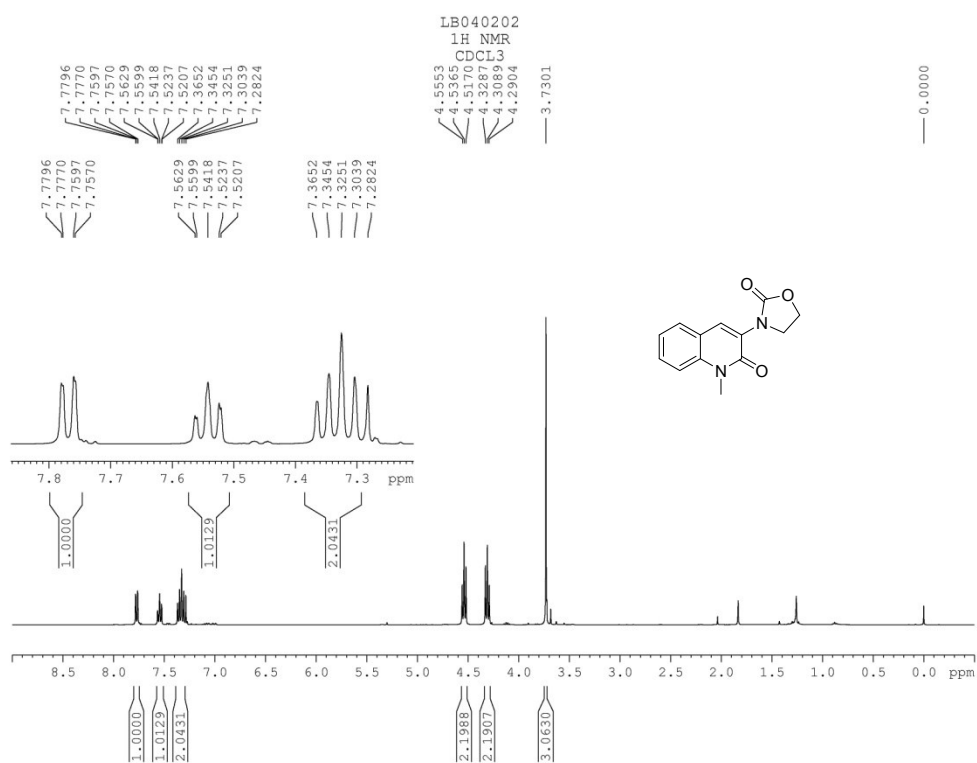


Fig. 43 <sup>1</sup>H NMR spectrum of compound 3au

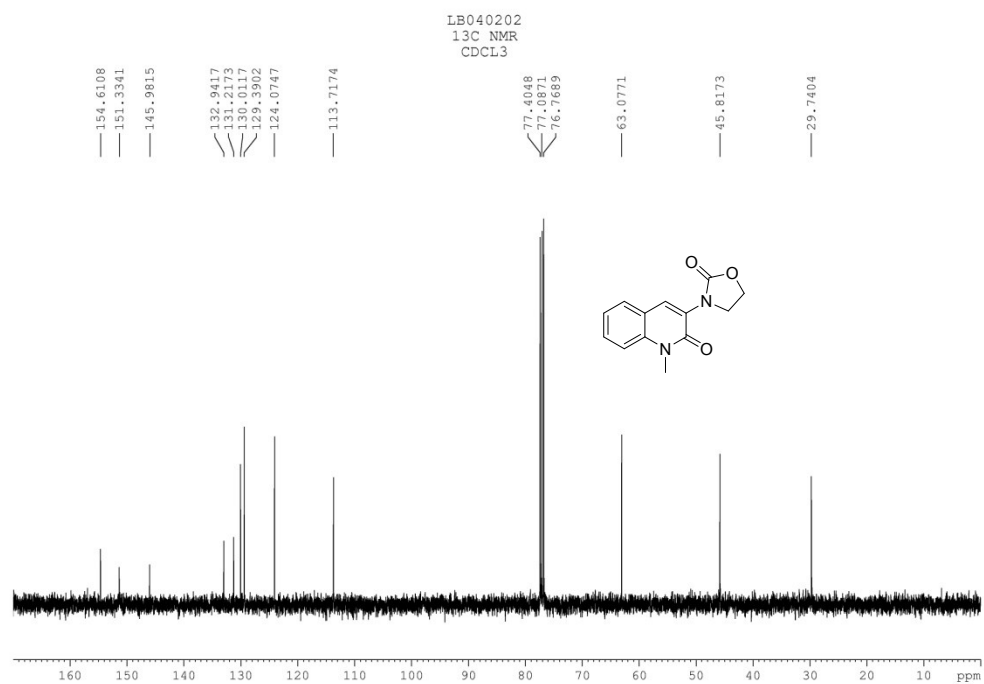


Fig. 44 <sup>13</sup>C NMR spectrum of compound 3au



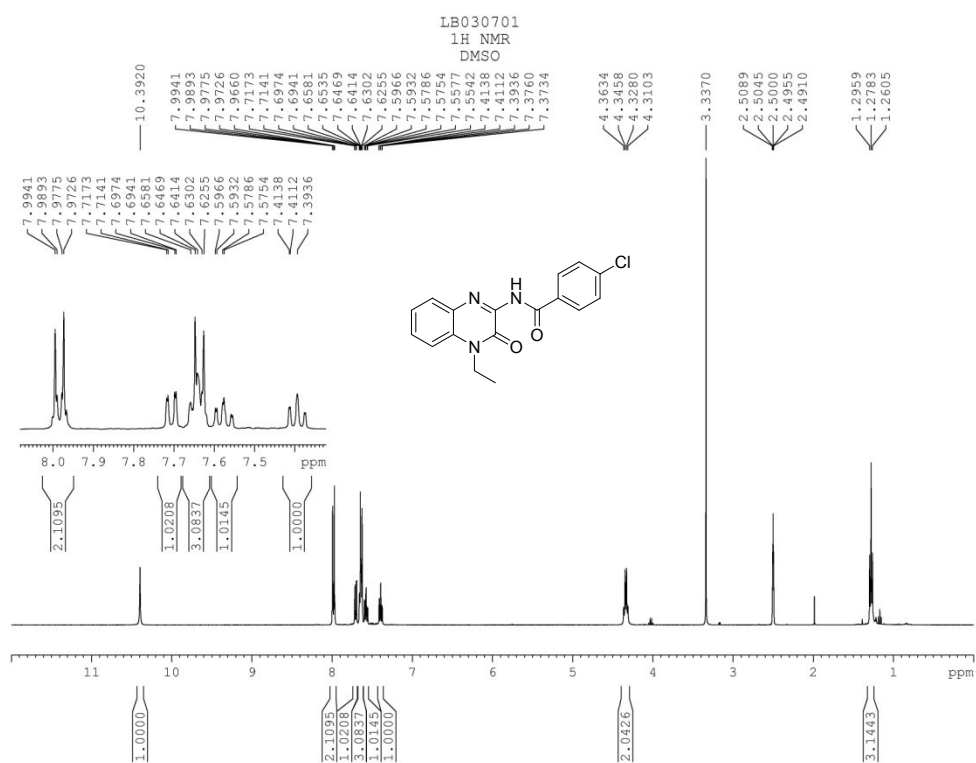


Fig. 45 <sup>1</sup>H NMR spectrum of compound 3be

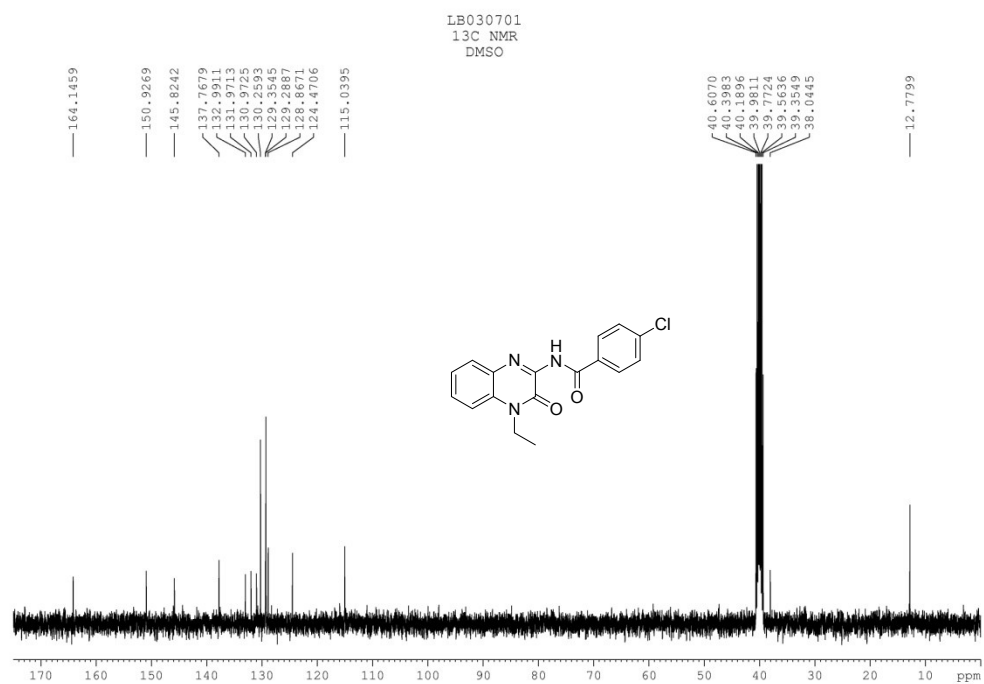


Fig. 46 <sup>13</sup>C NMR spectrum of compound 3be

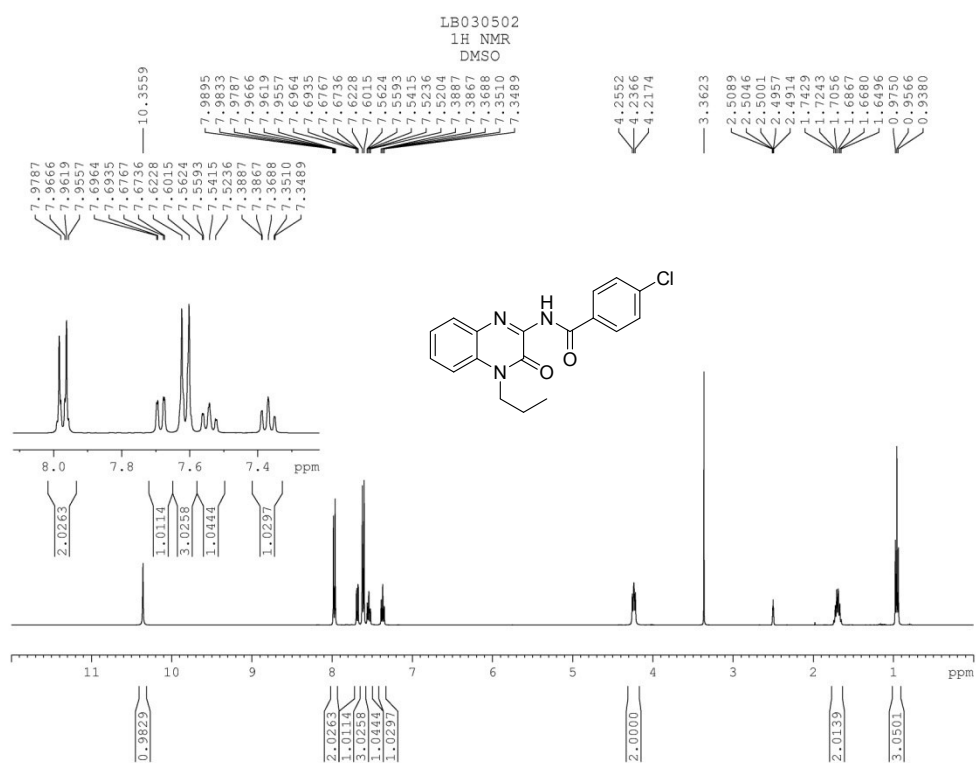


Fig. 47 <sup>1</sup>H NMR spectrum of compound 3ce

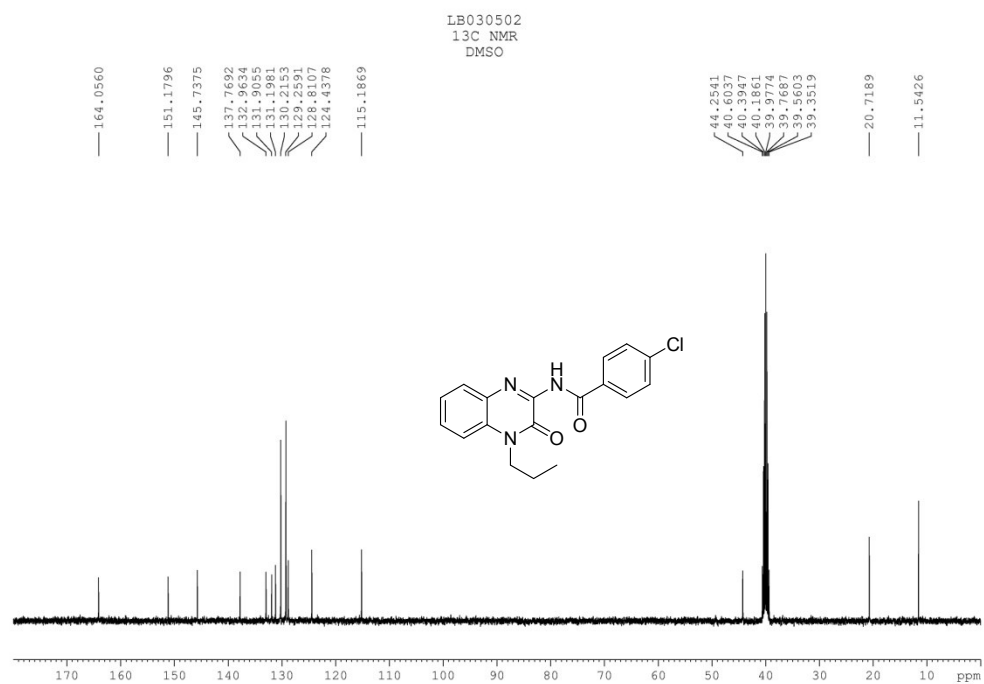


Fig. 48 <sup>13</sup>C NMR spectrum of compound 3ce

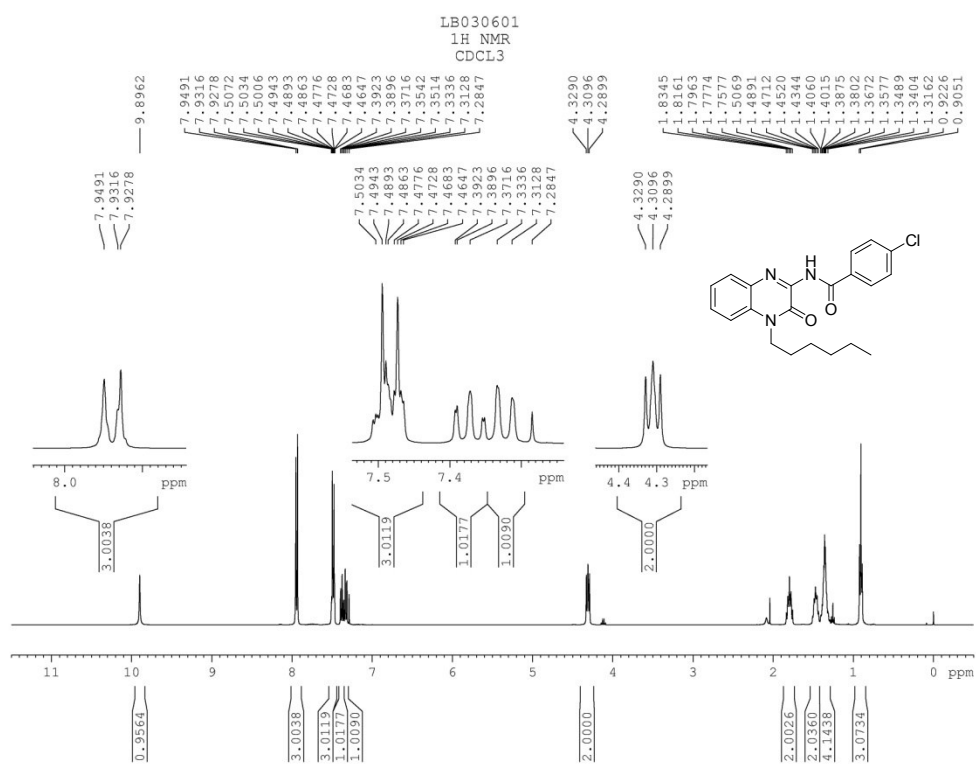


Fig. 49 <sup>1</sup>H NMR spectrum of compound 3de

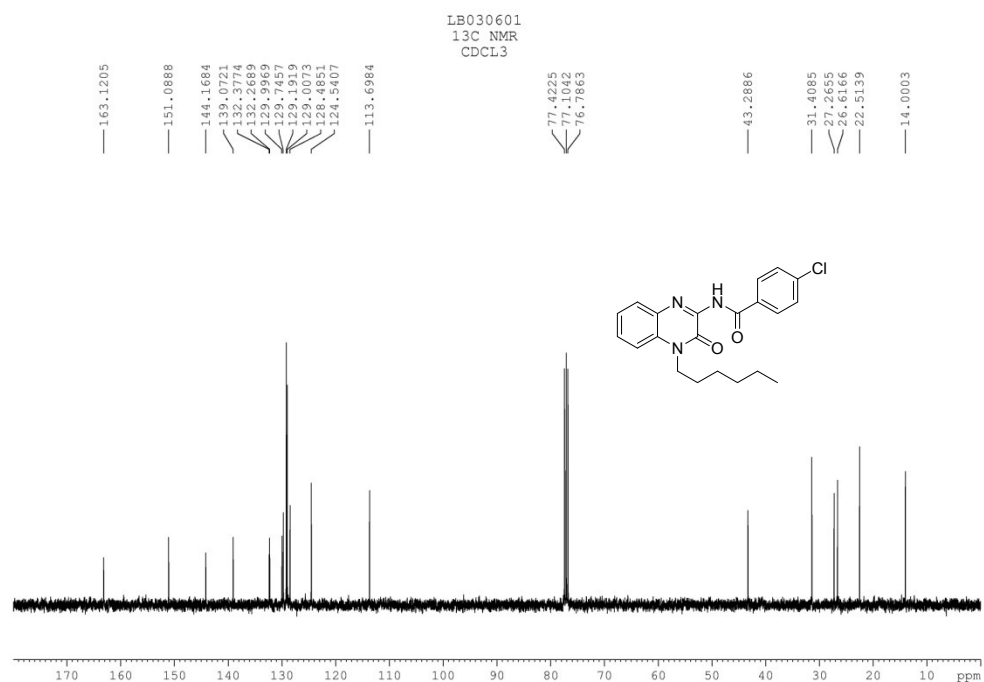


Fig. 50 <sup>13</sup>C NMR spectrum of compound 3de

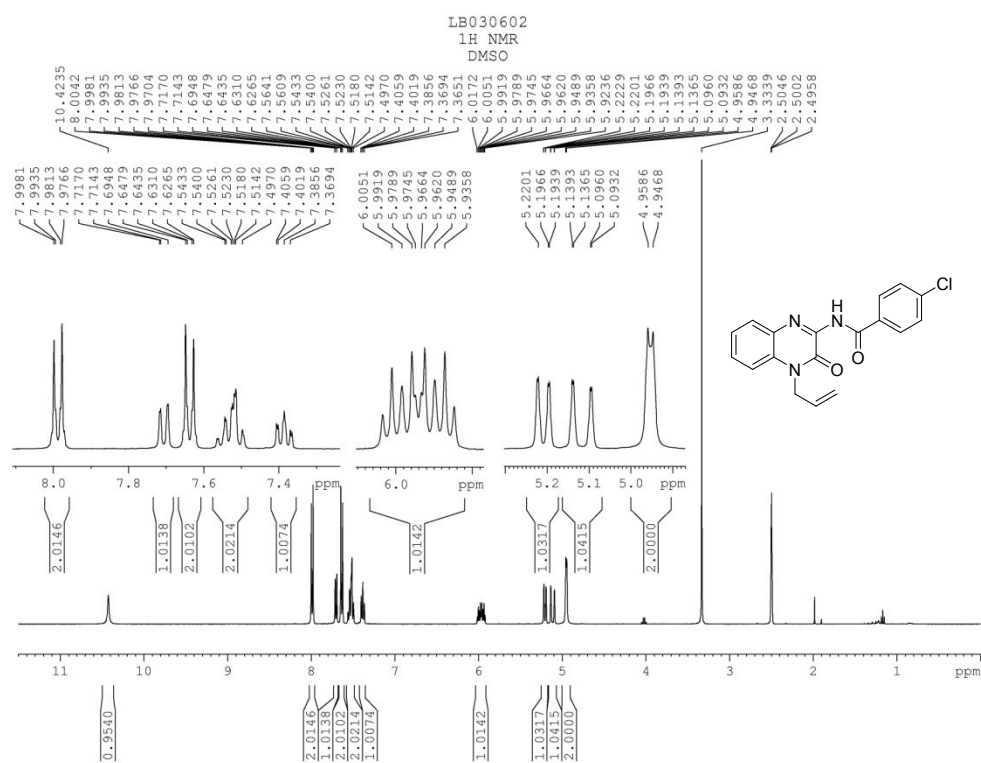


Fig. 51  $^1\text{H}$  NMR spectrum of compound 3ee

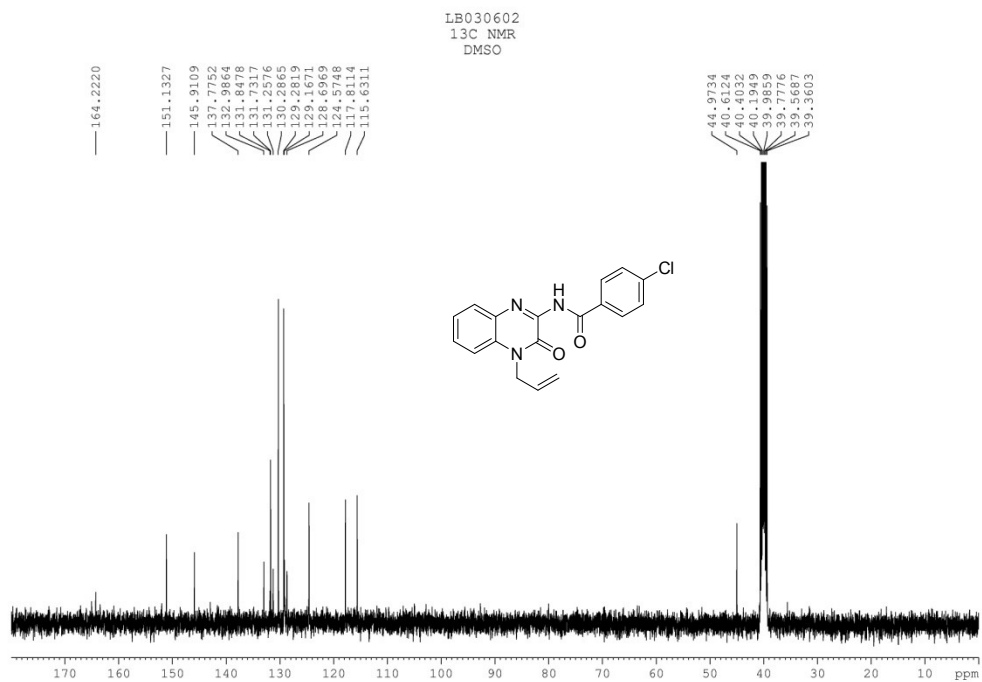


Fig. 52  $^{13}\text{C}$  NMR spectrum of compound 3ee

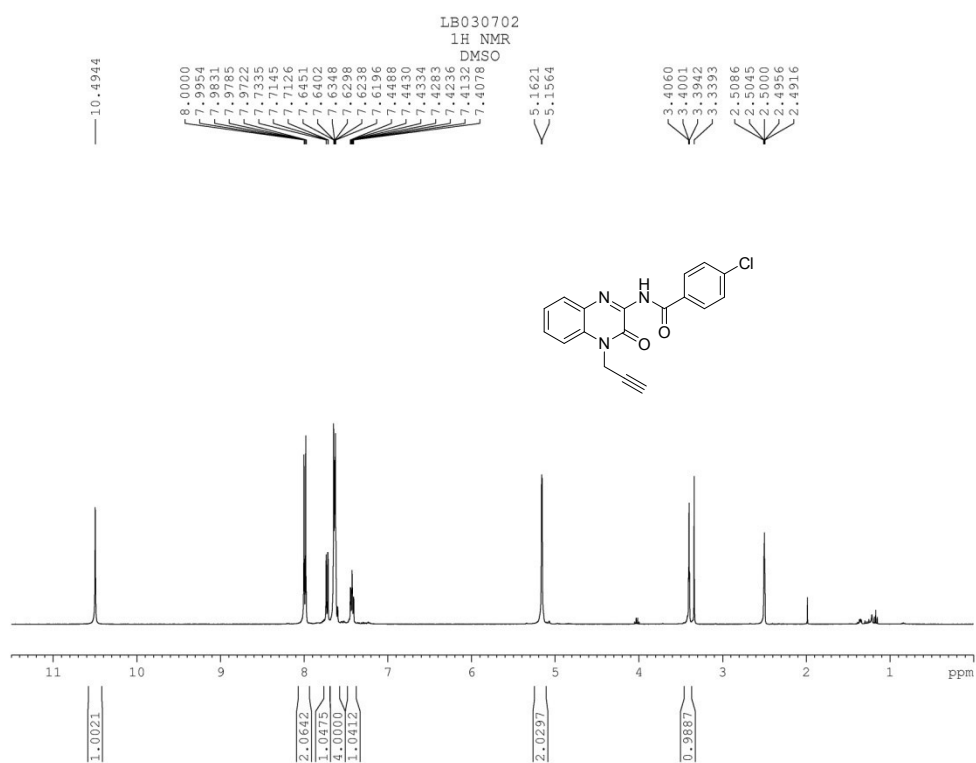


Fig. 53 <sup>1</sup>H NMR spectrum of compound 3fe

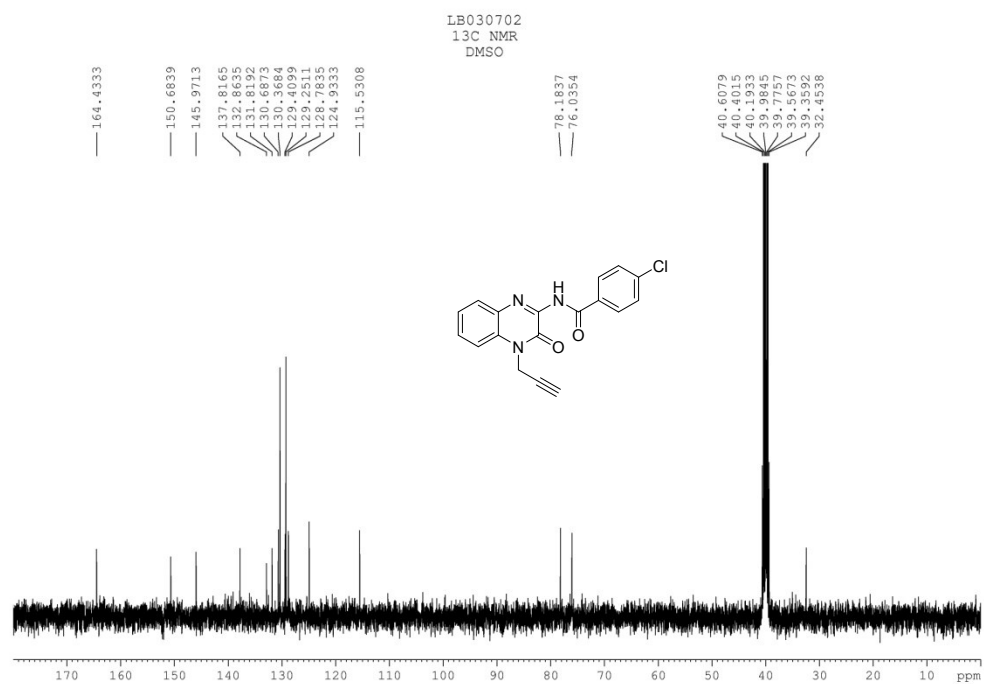


Fig. 54 <sup>13</sup>C NMR spectrum of compound 3fe

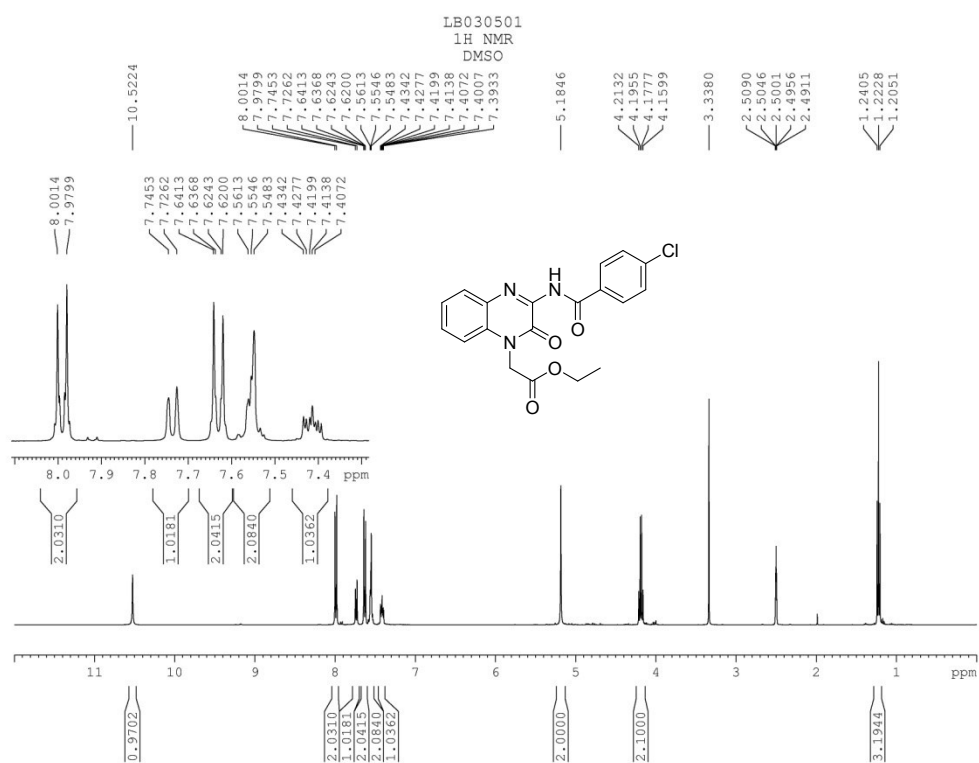


Fig. 55  $^1\text{H}$  NMR spectrum of compound 3ge

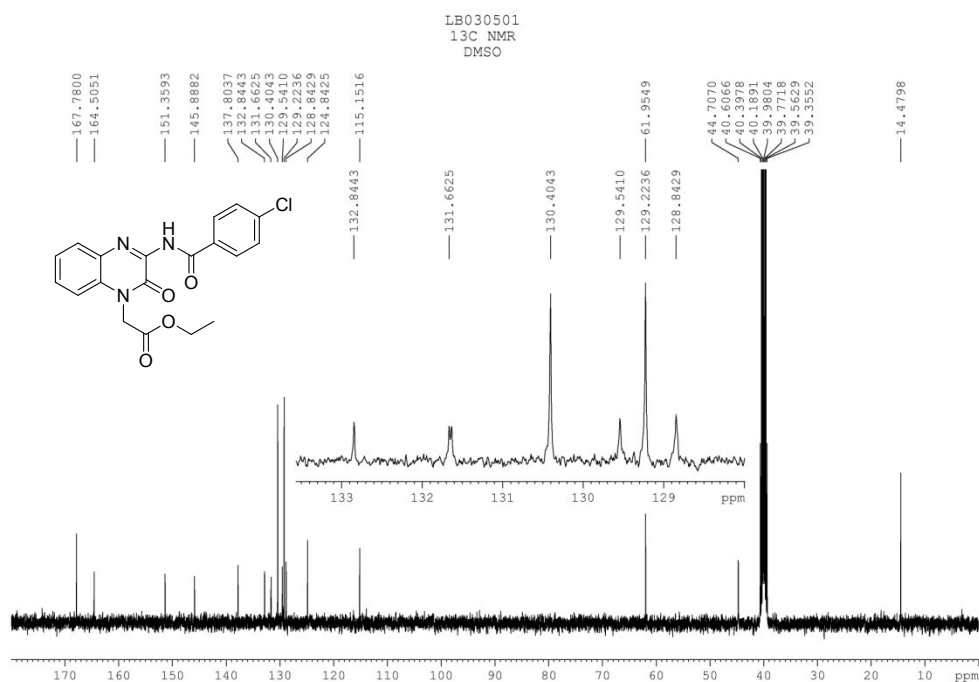


Fig. 56  $^{13}\text{C}$  NMR spectrum of compound 3ge

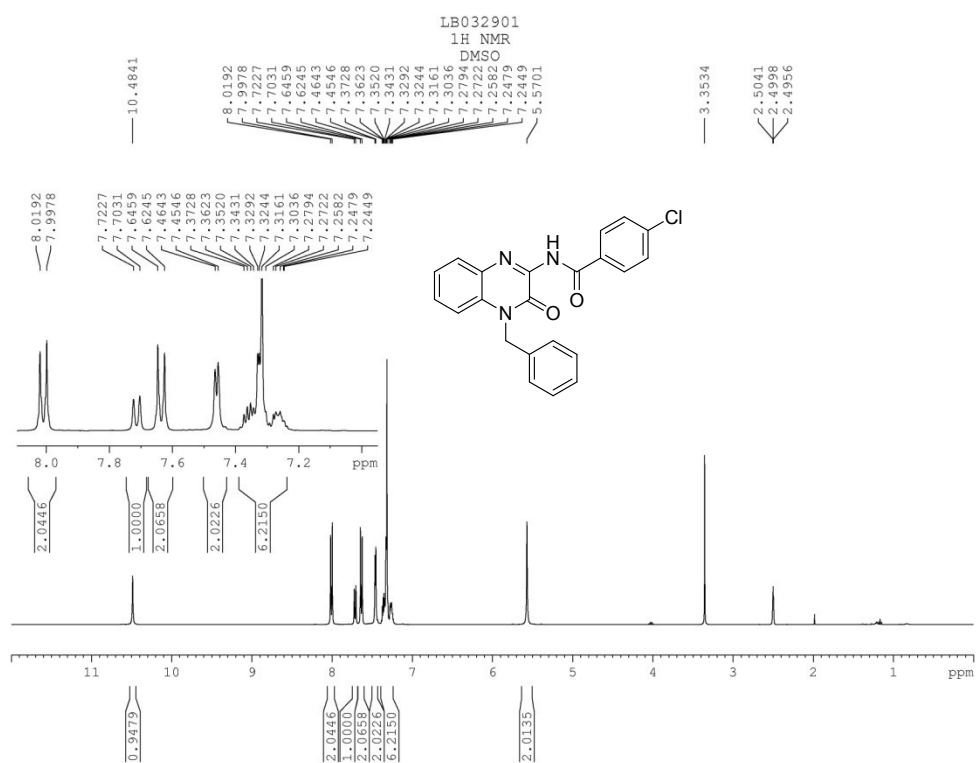


Fig. 56 <sup>1</sup>H NMR spectrum of compound 3he

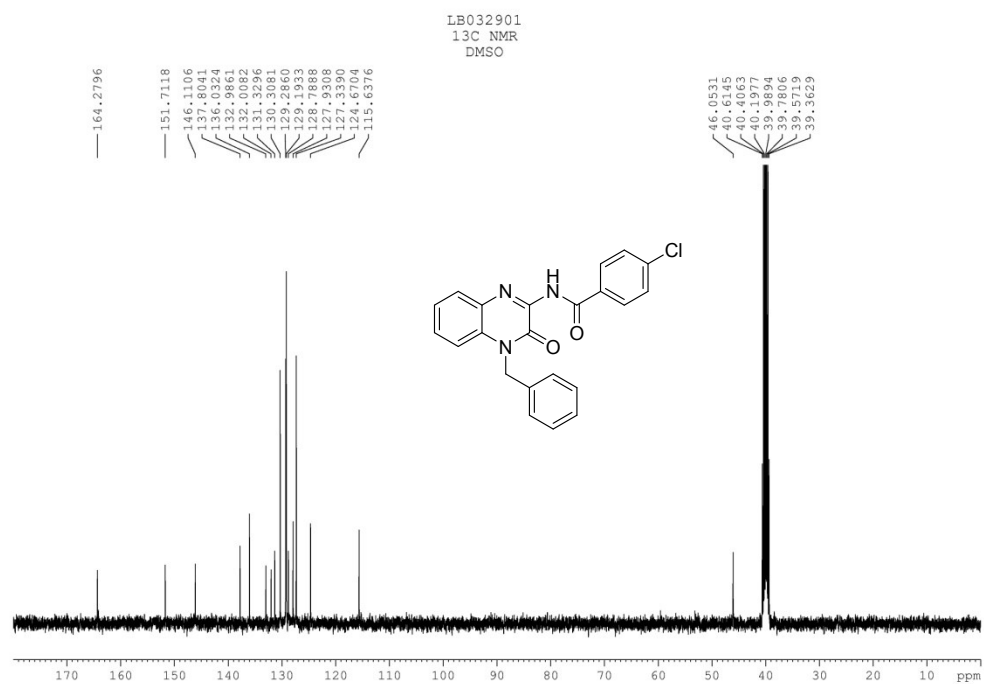
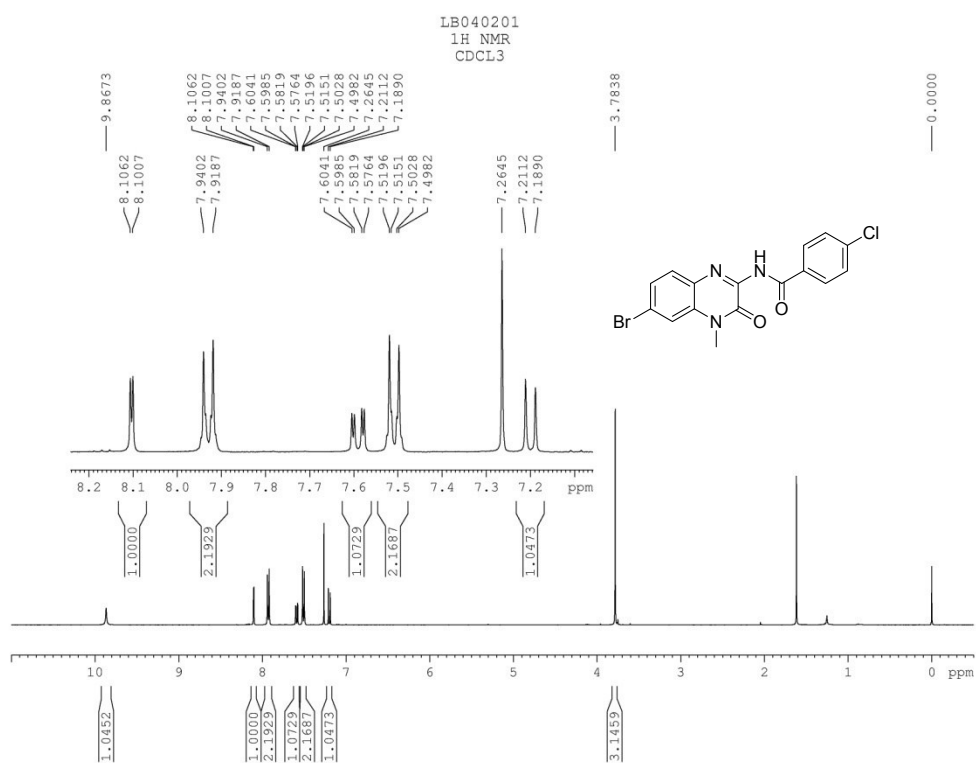


Fig. 58 <sup>13</sup>C NMR spectrum of compound 3he







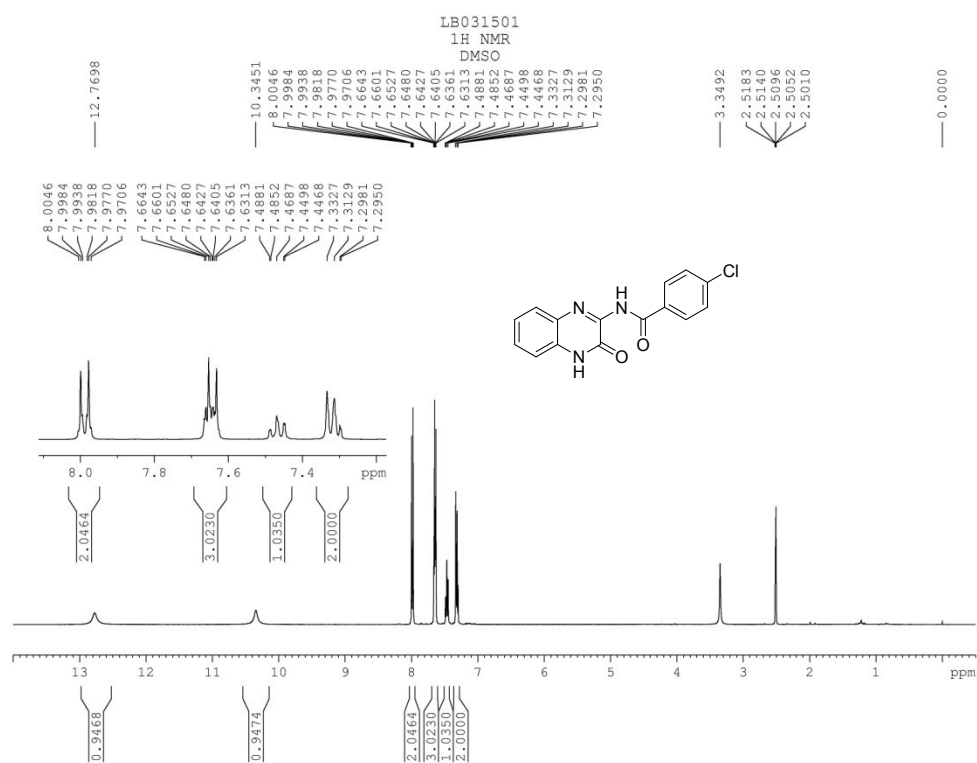


Fig. 63 <sup>1</sup>H NMR spectrum of compound 3ke

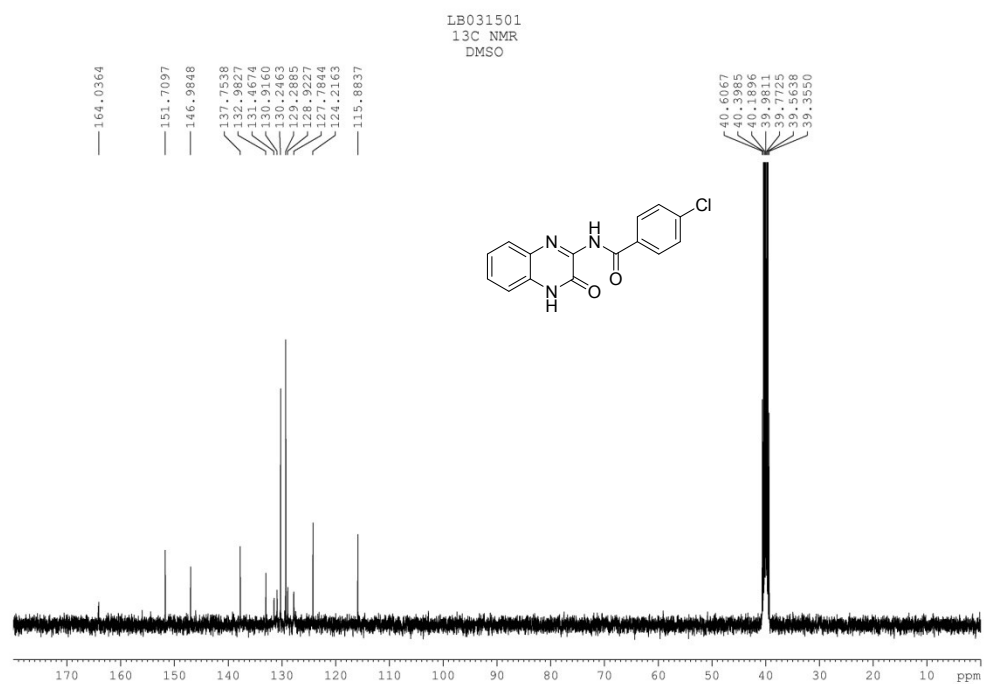


Fig. 64 <sup>13</sup>C NMR spectrum of compound 3ke

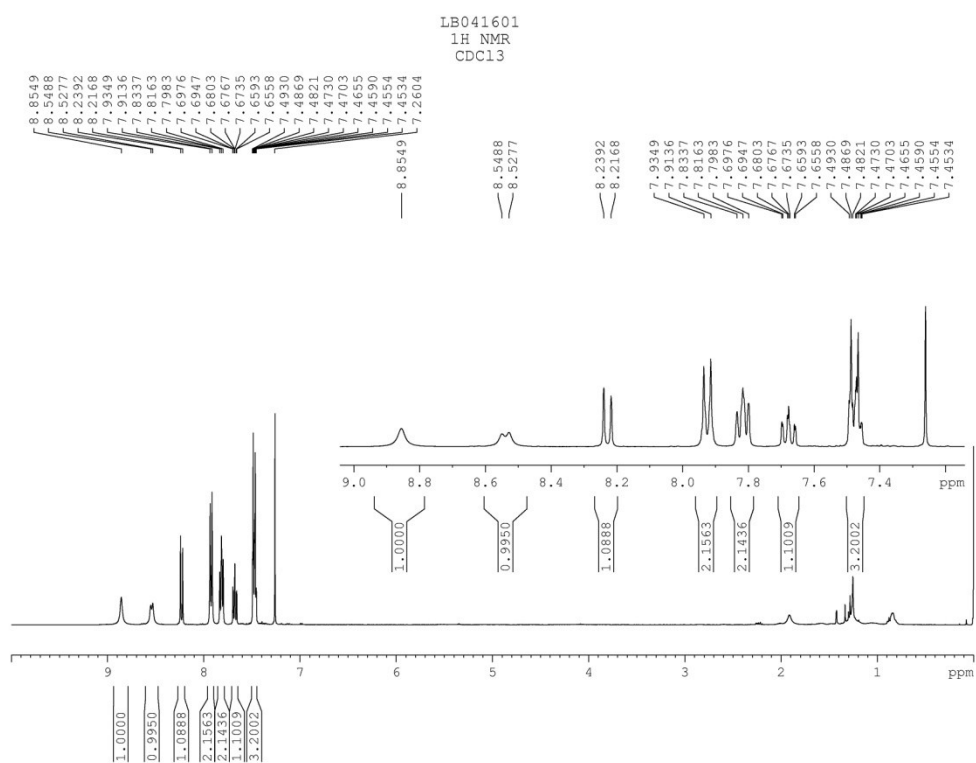


Fig. 65 <sup>1</sup>H NMR spectrum of compound 3le

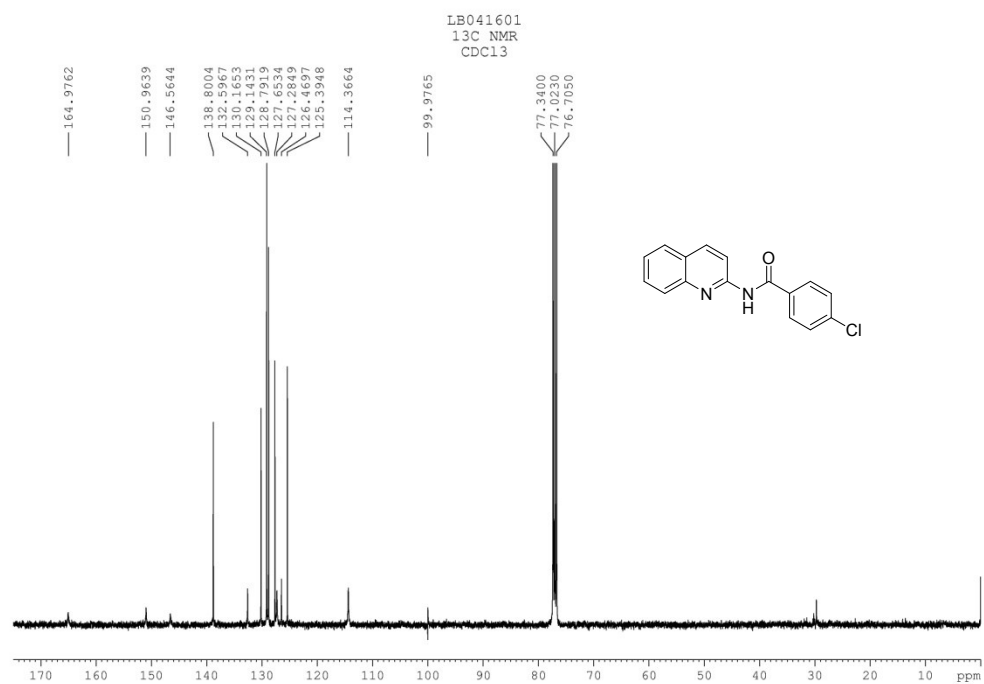


Fig. 66 <sup>13</sup>C NMR spectrum of compound 3le

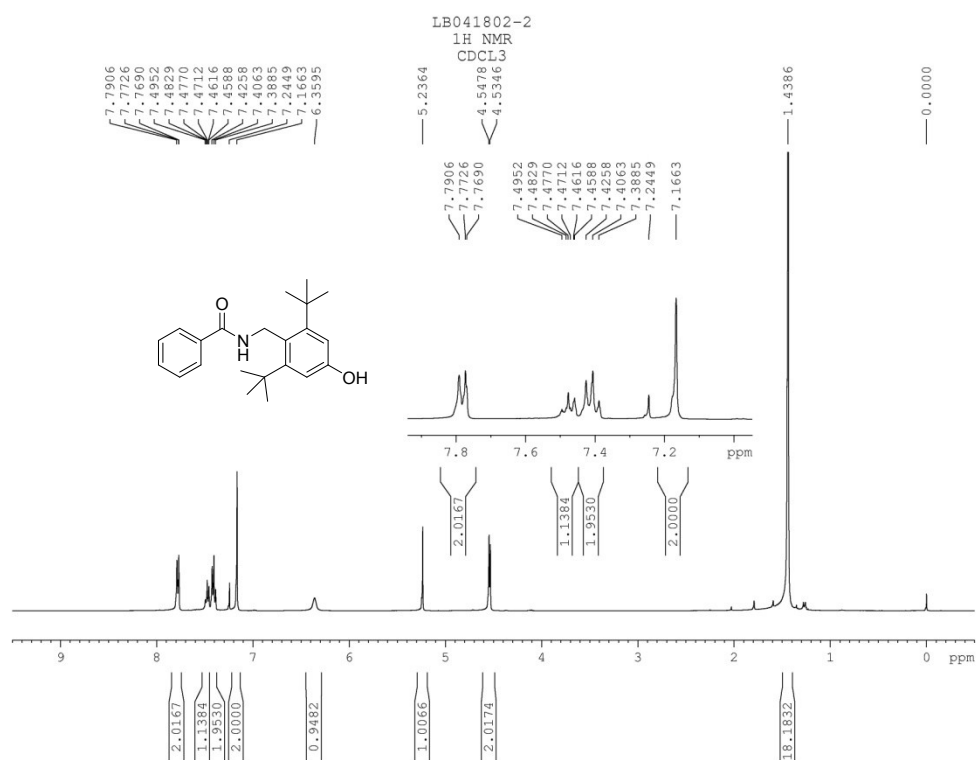


Fig. 67 <sup>1</sup>H NMR spectrum of compound 4

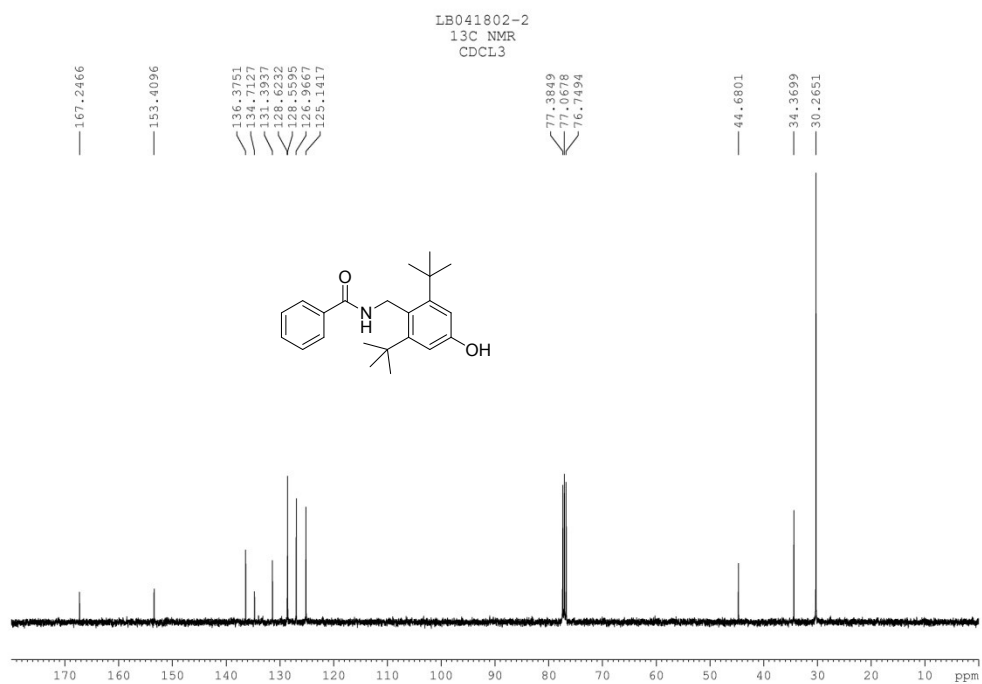


Fig. 68 <sup>13</sup>C NMR spectrum of compound 4