

## Synthesis of a novel heterocyclic scaffold utilizing 2-cyano-N-(3-cyano-4,6-dimethyl-2-oxopyridin-1-yl) acetamide

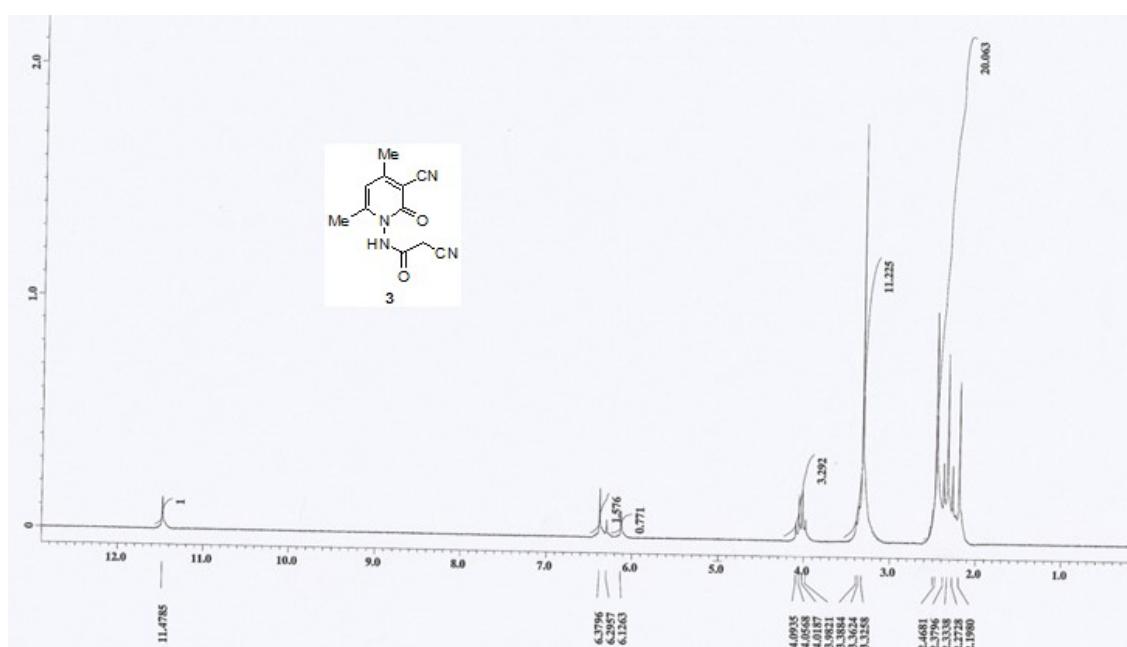
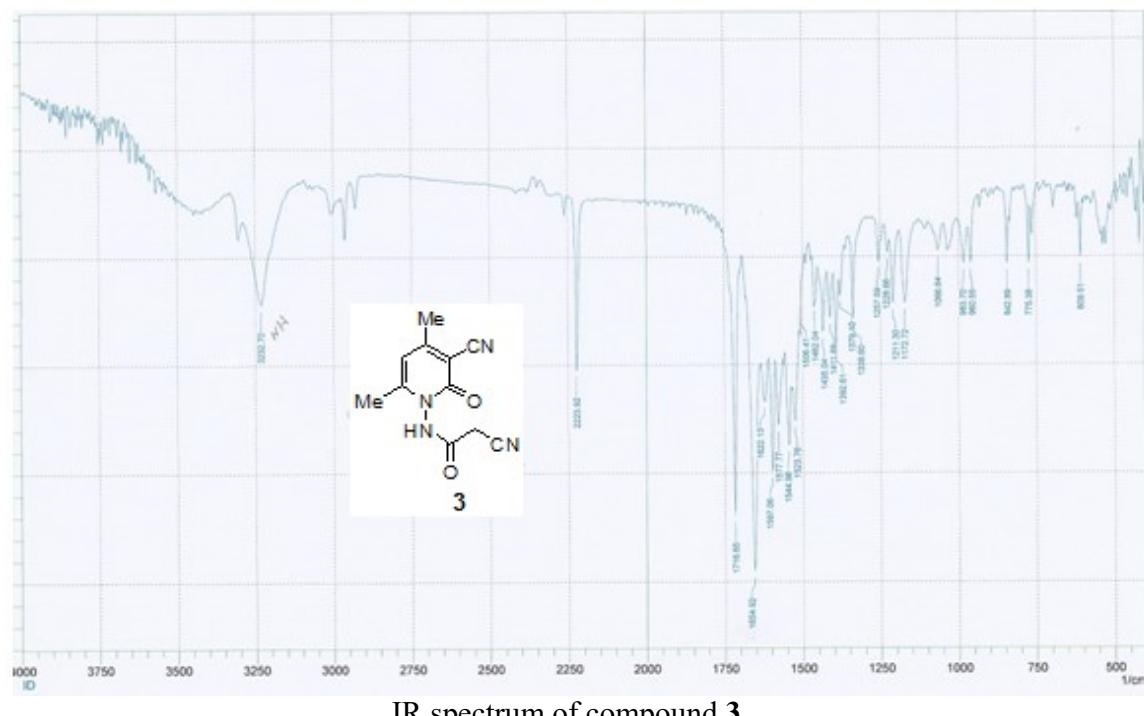
Rizk E. Khidre,<sup>a,b\*</sup> Diaa A. Ibrahim,<sup>a,c</sup> Ibrahim Ali M. Radini <sup>a</sup>

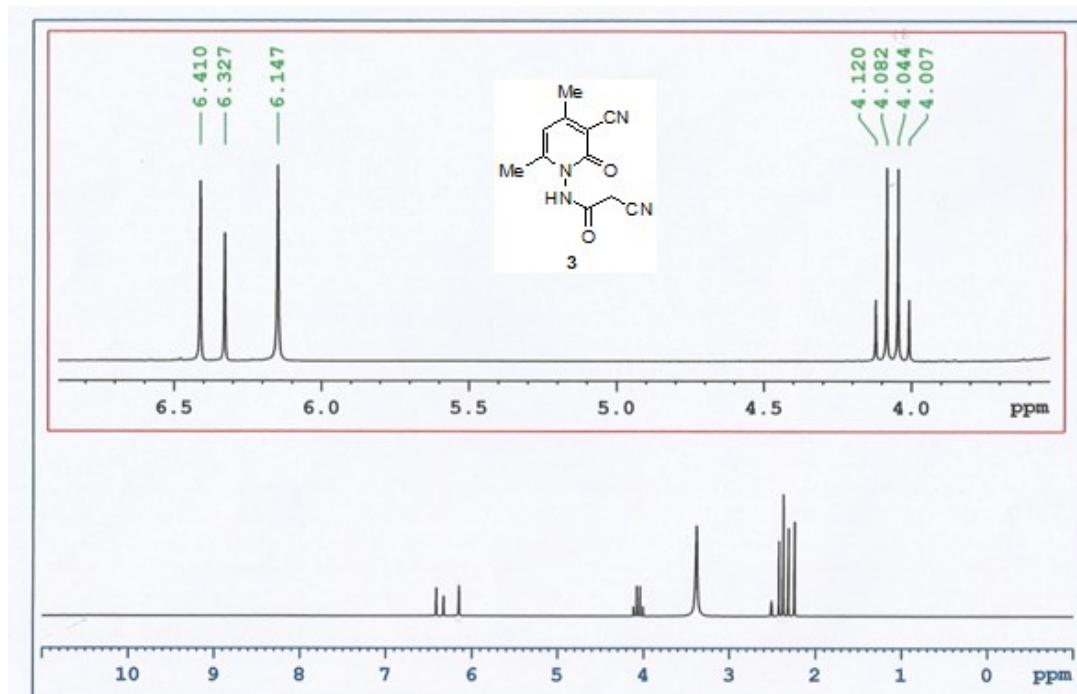
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<sup>b</sup>*Chemical Industries Division, National Research Centre, Dokki, 12622, Giza, Egypt*

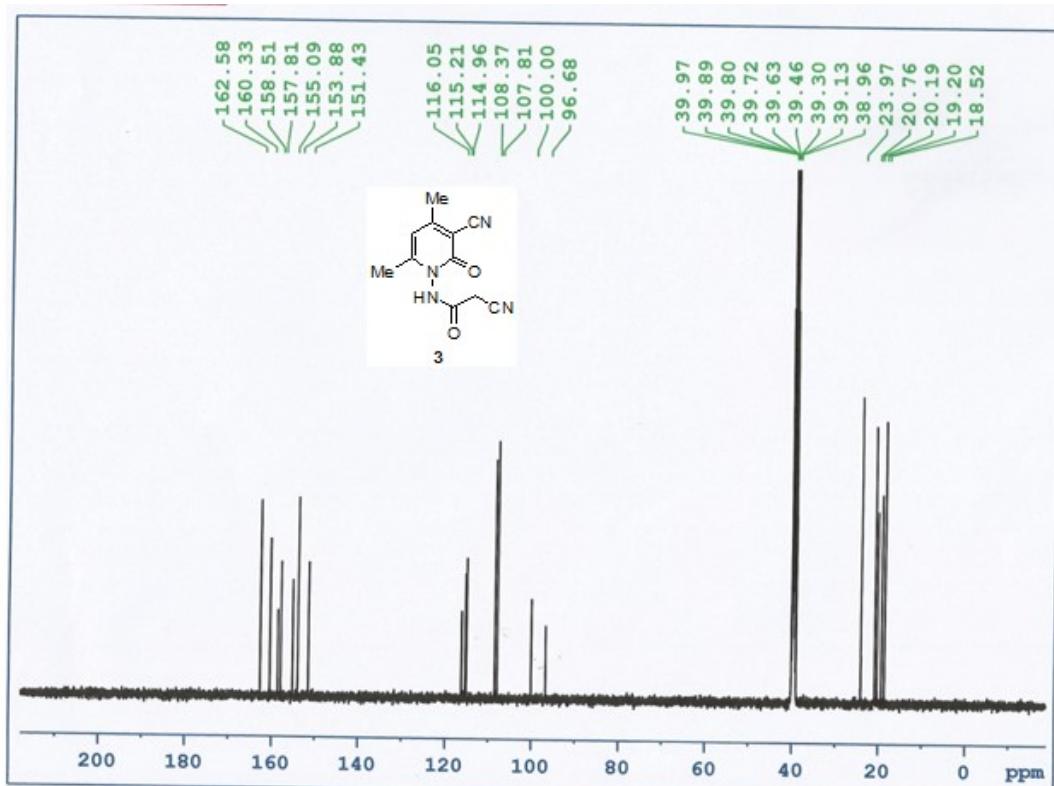
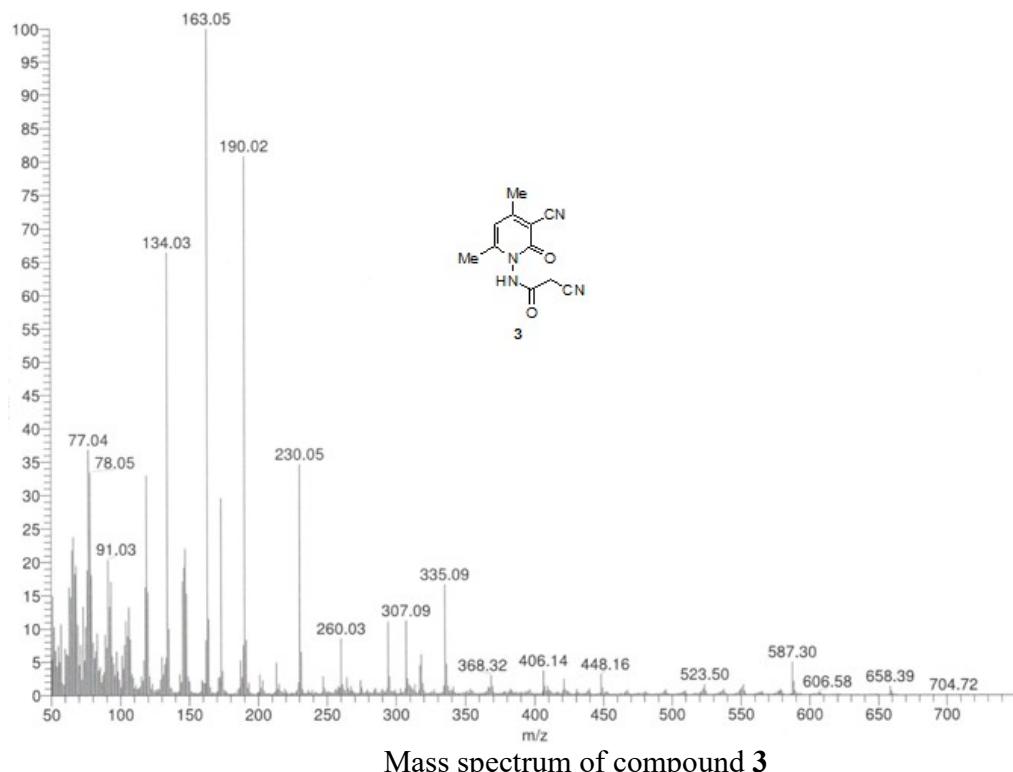
<sup>c</sup>*National Organization for Drug Control & Research, P.O. Box: 29, Giza 112313, Egypt*

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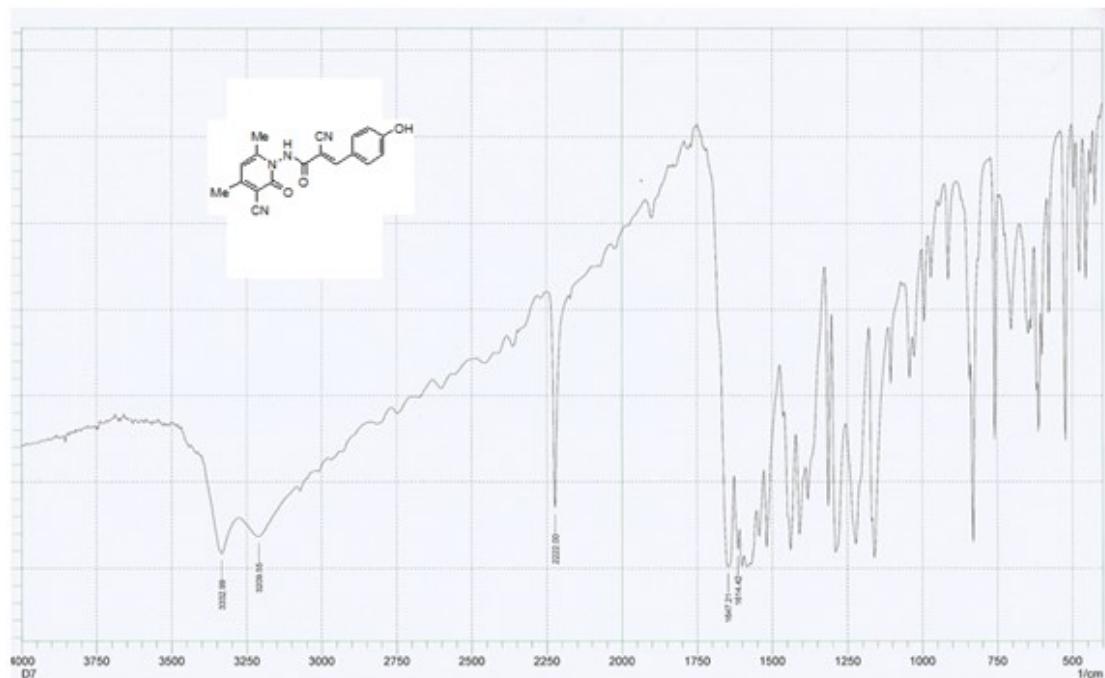




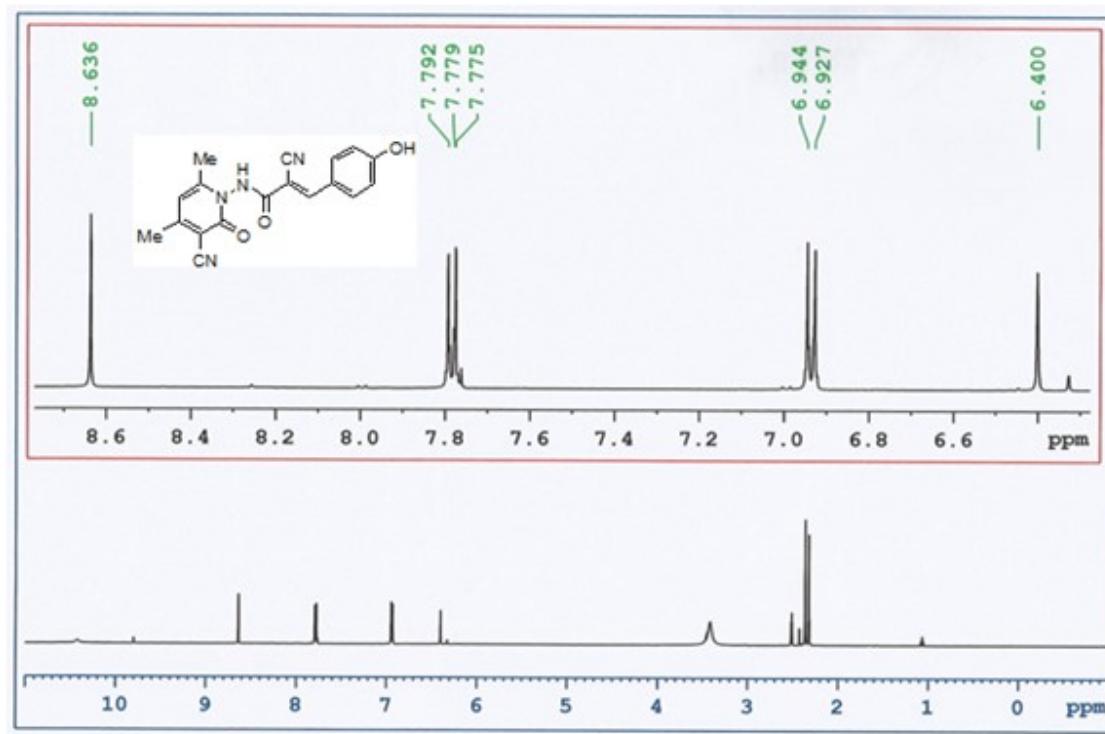
<sup>1</sup>H NMR spectrum of compound 3

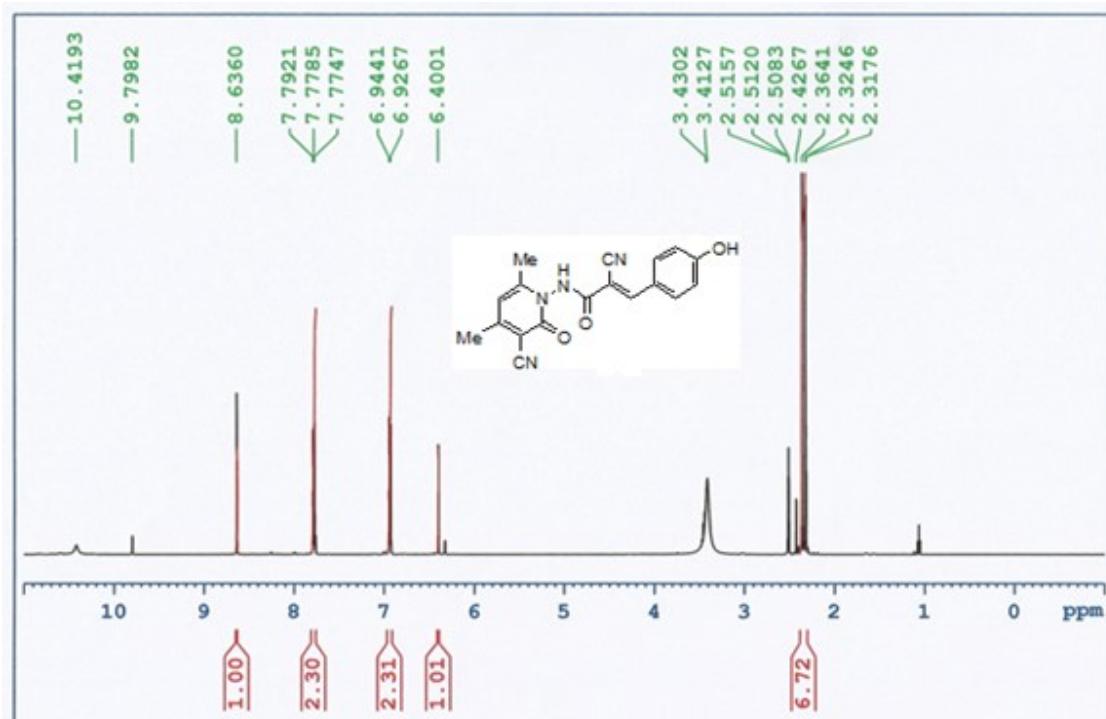
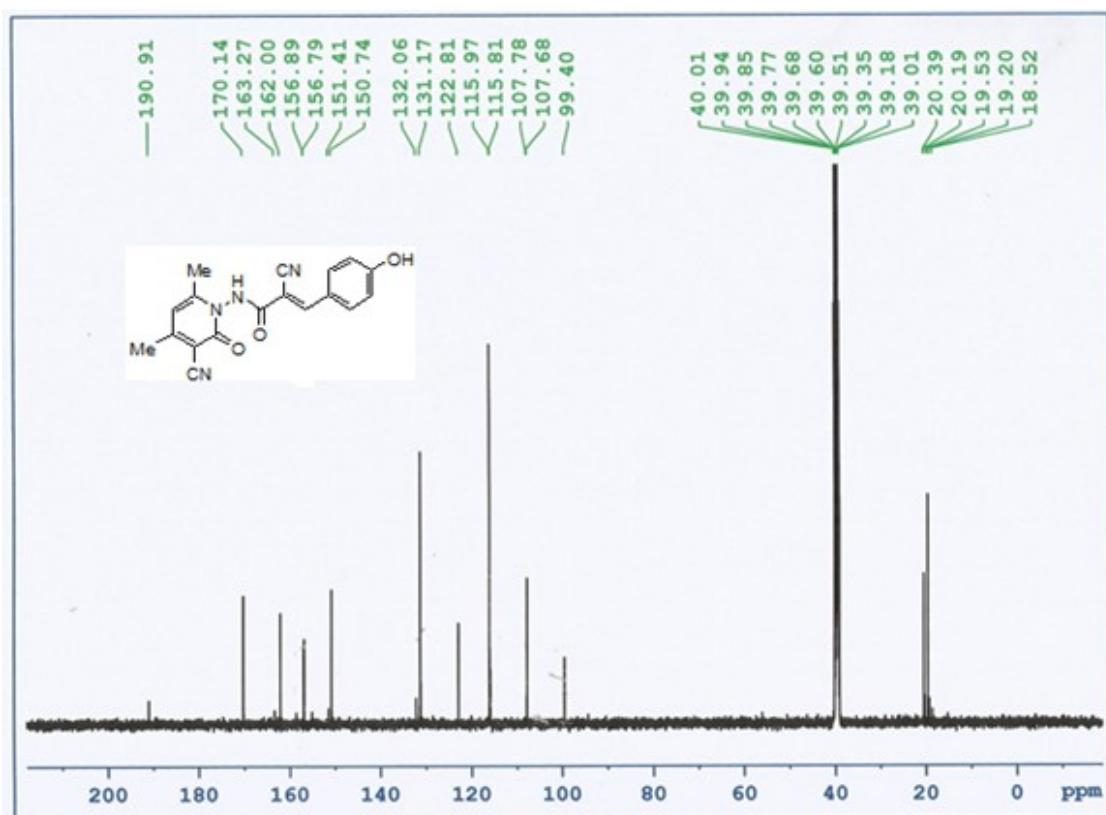
 $^{13}\text{C}$  NMR spectrum of compound 3

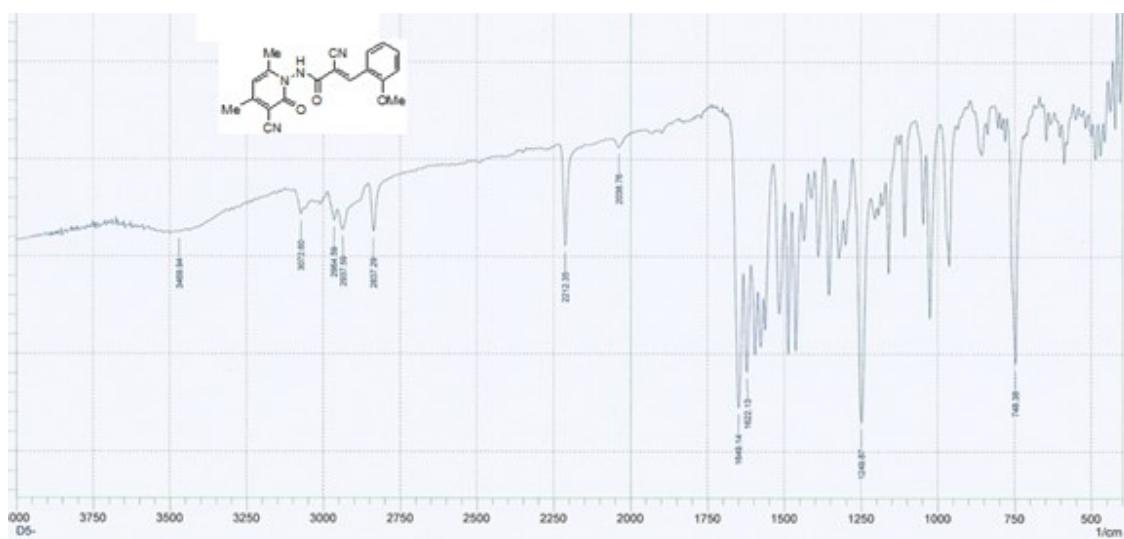
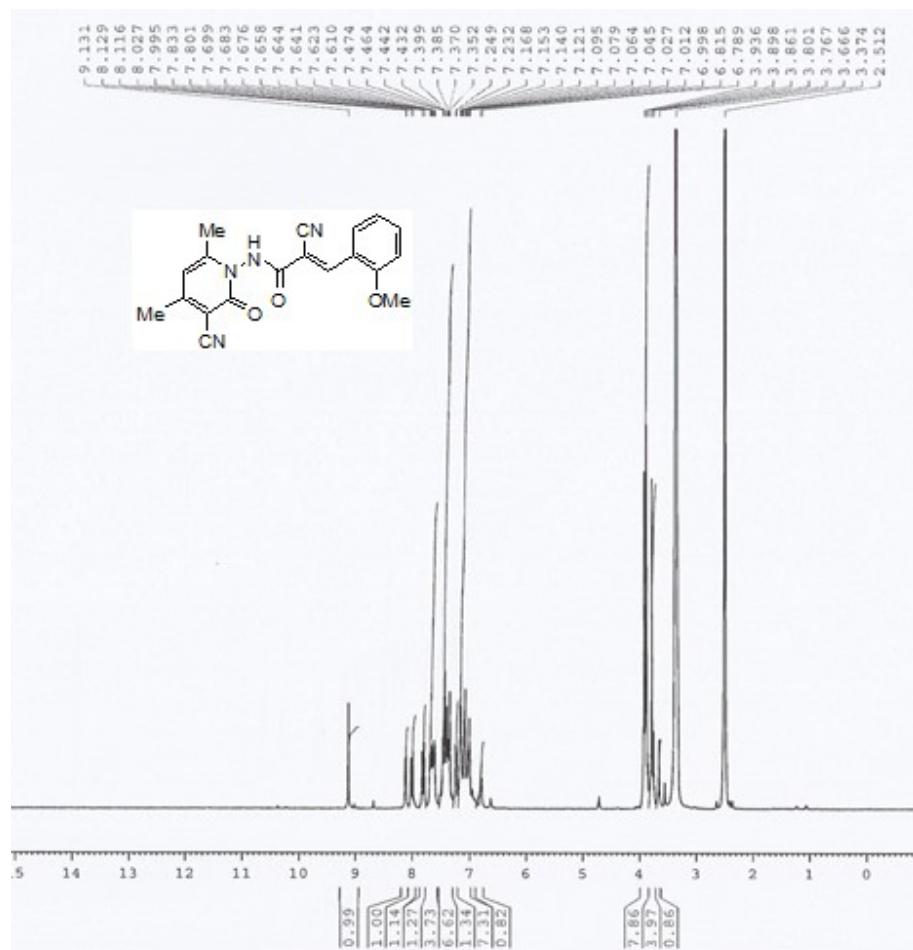
Mass spectrum of compound 3

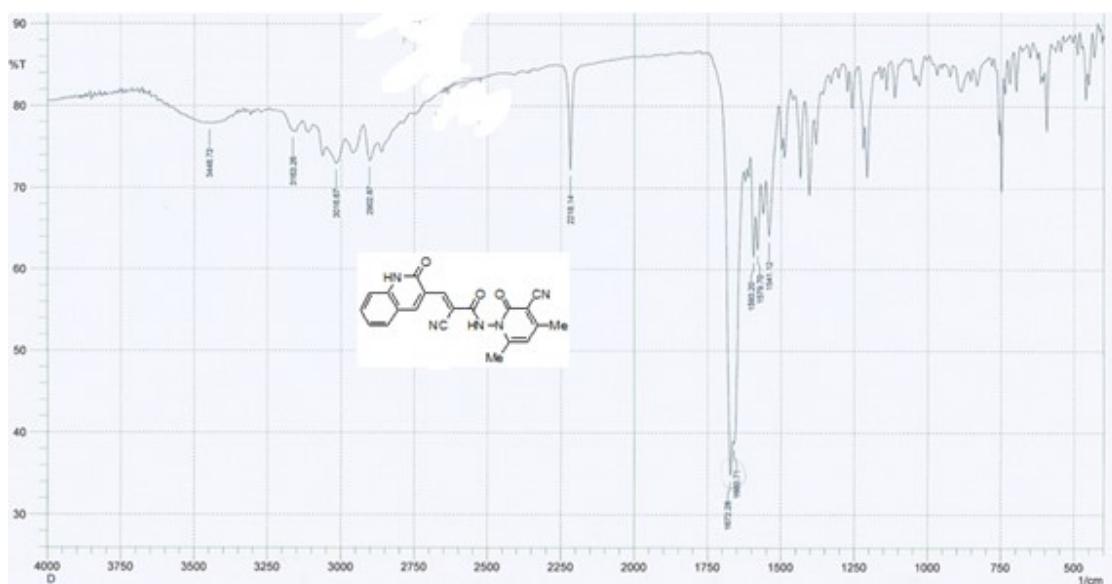
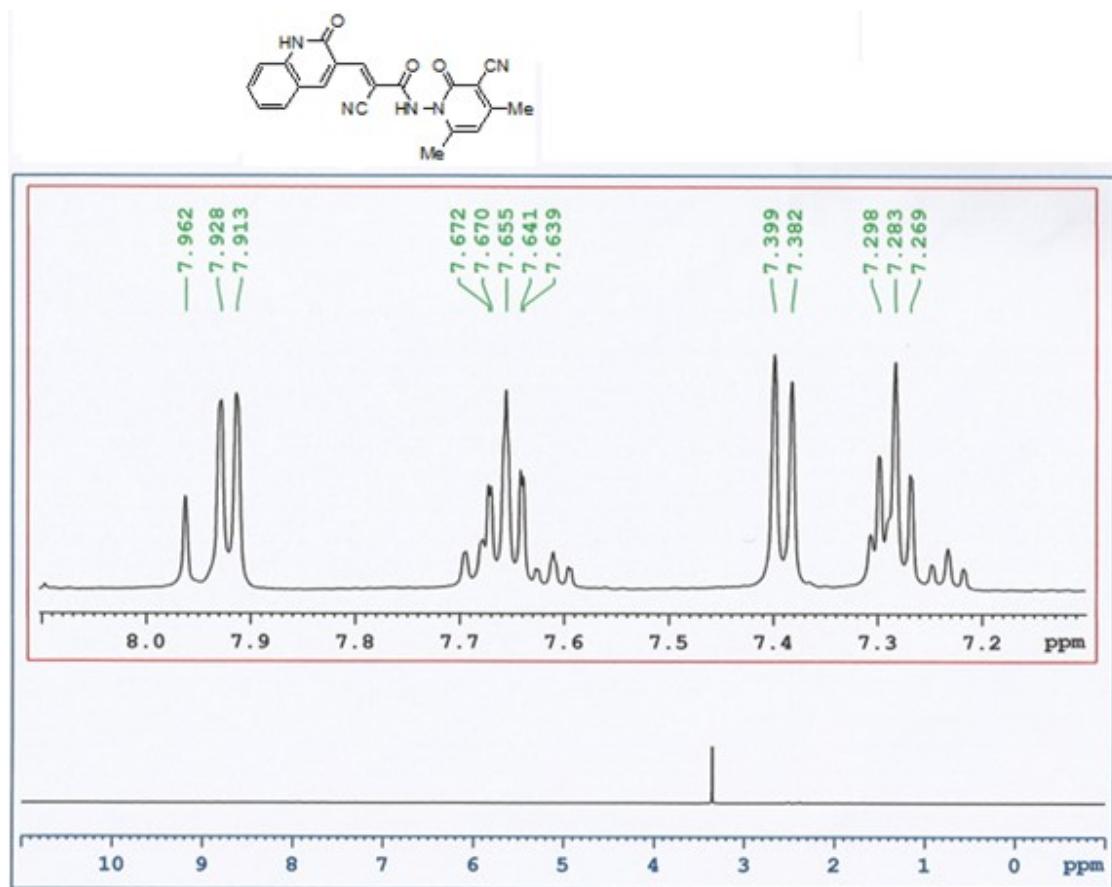


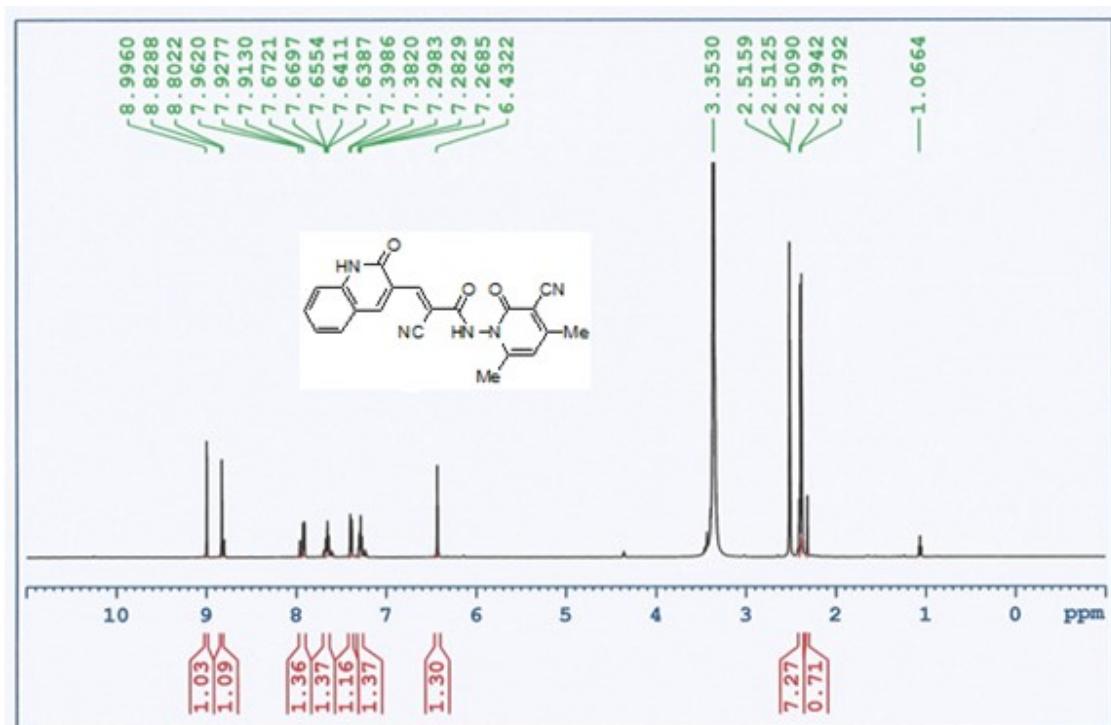
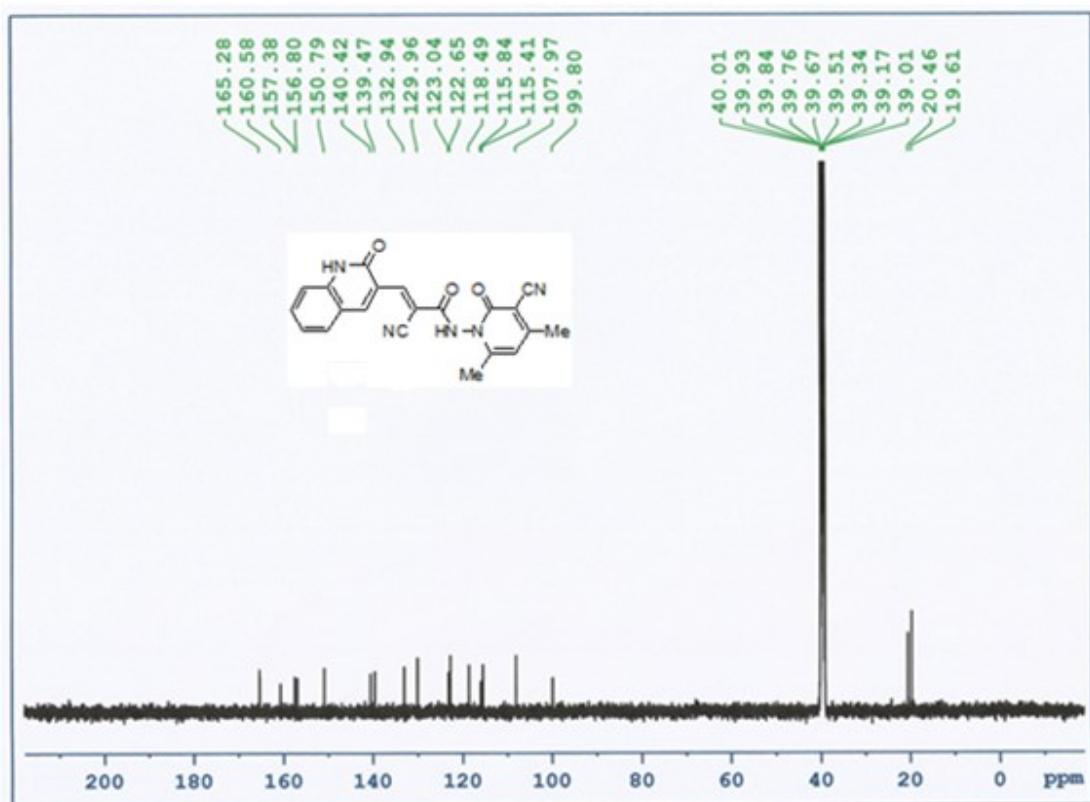
IR spectrum of compound 5c

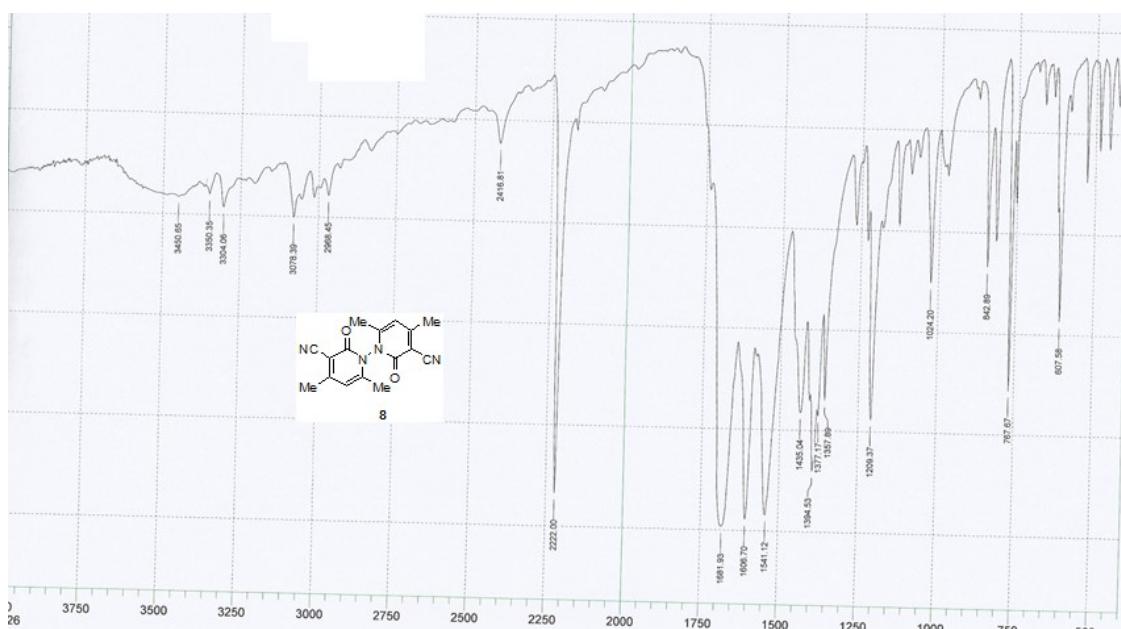
<sup>1</sup>H NMR spectrum of compound 5c

<sup>1</sup>H NMR spectrum of compound 5c<sup>13</sup>C NMR spectrum of compound 5c

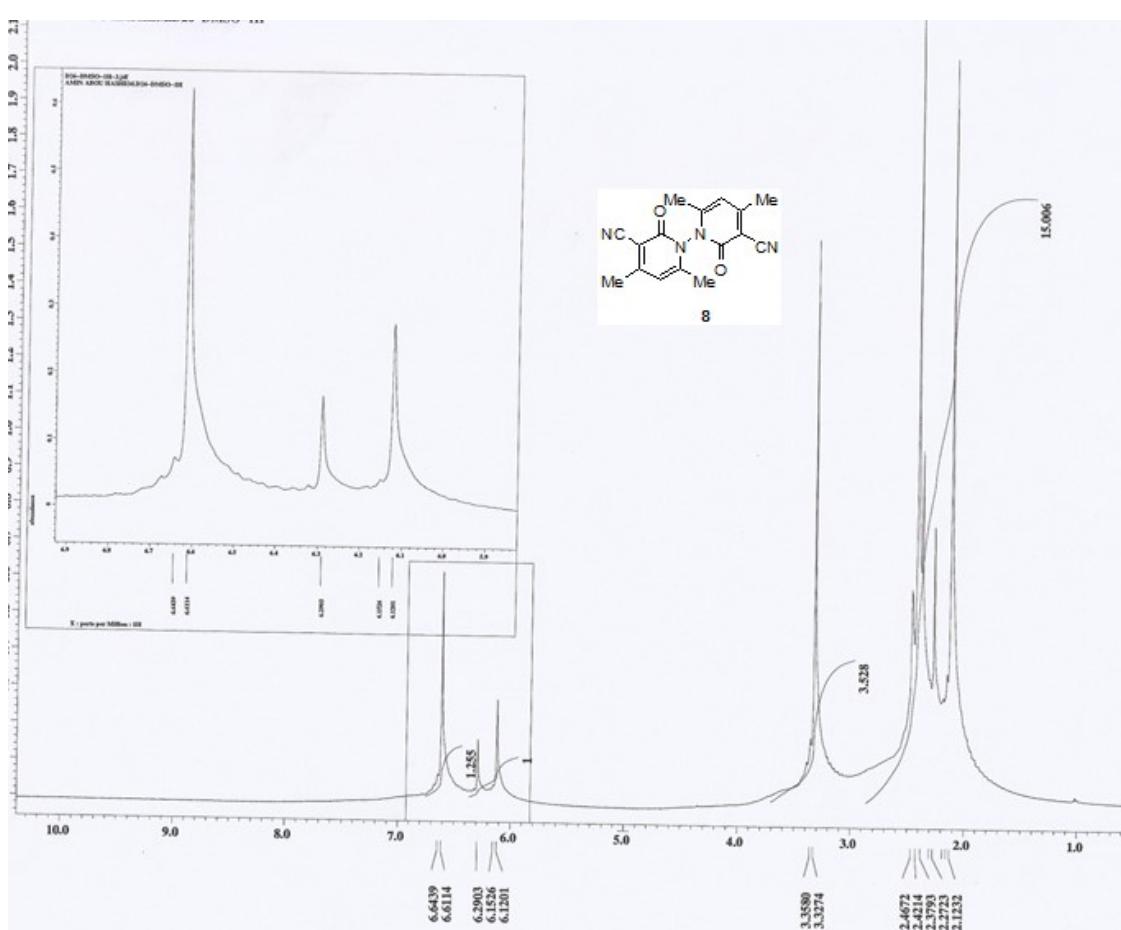
IR Spectrum of compound **5e**<sup>1</sup>H NMR spectrum of compound **5e**

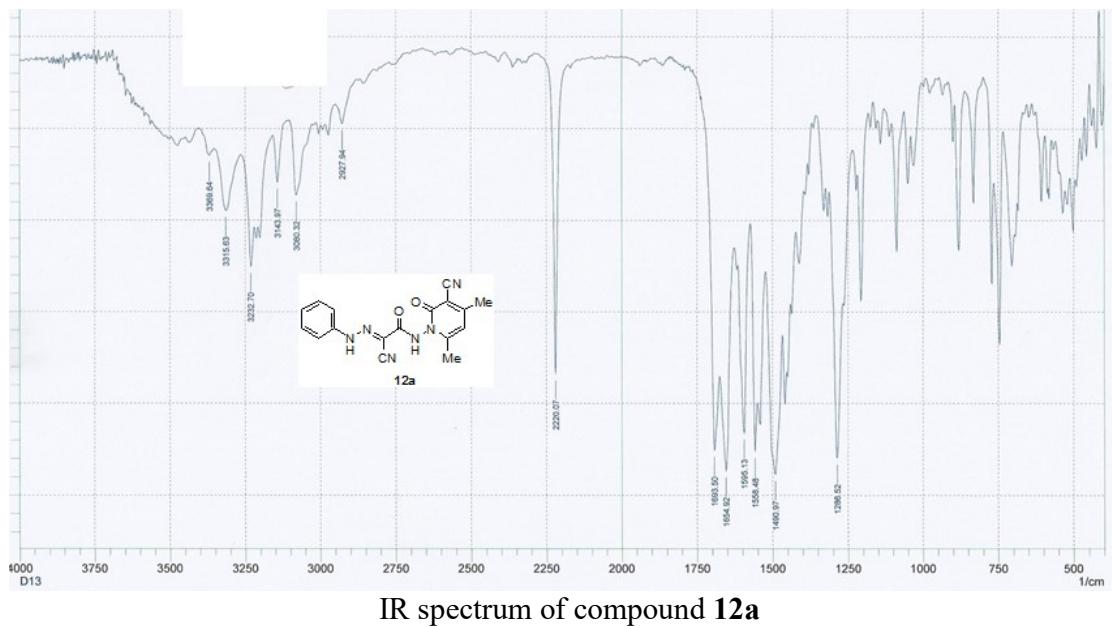
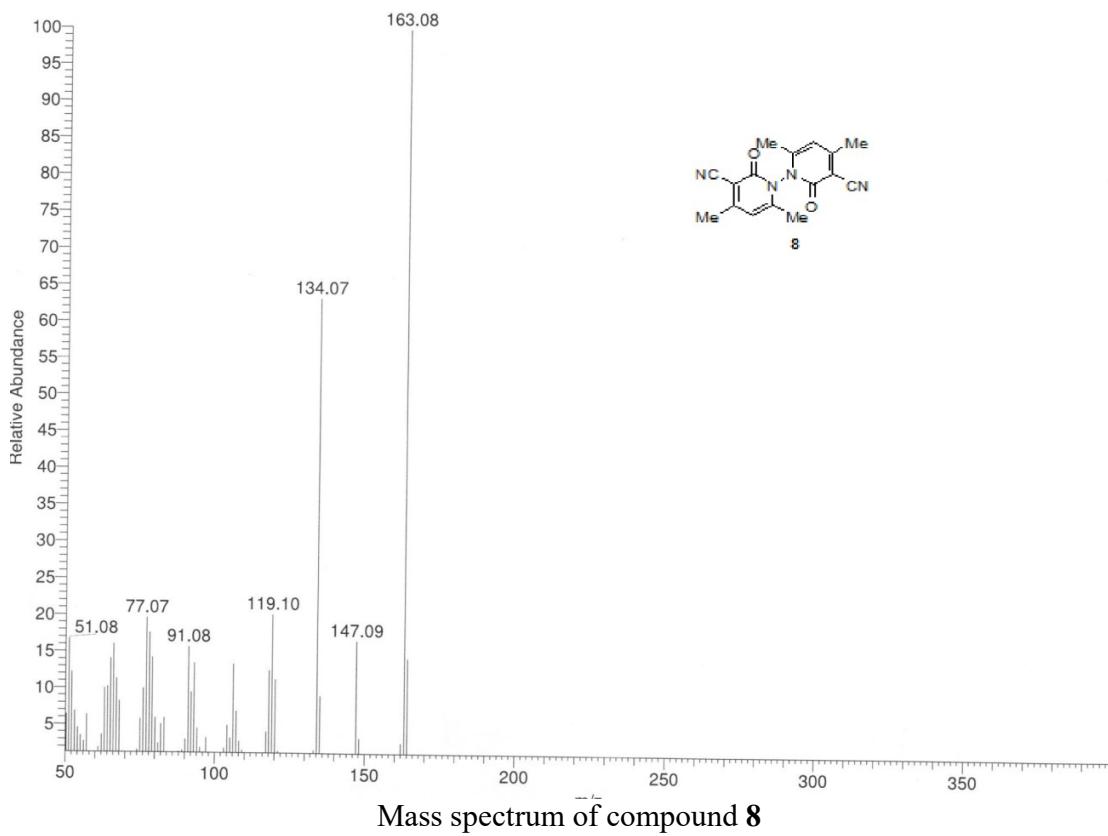
IR spectrum of compound **5f**<sup>1</sup>H NMR spectrum of compound **5f**

<sup>1</sup>H NMR spectrum of compound 5f<sup>13</sup>C NMR spectrum of compound 5f

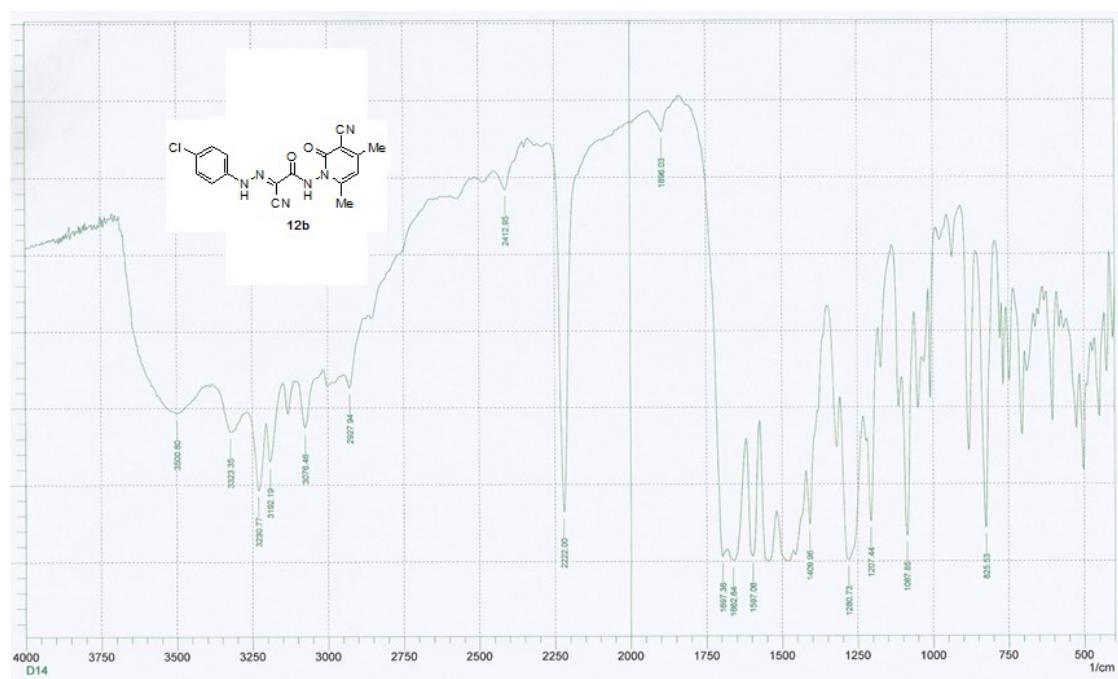
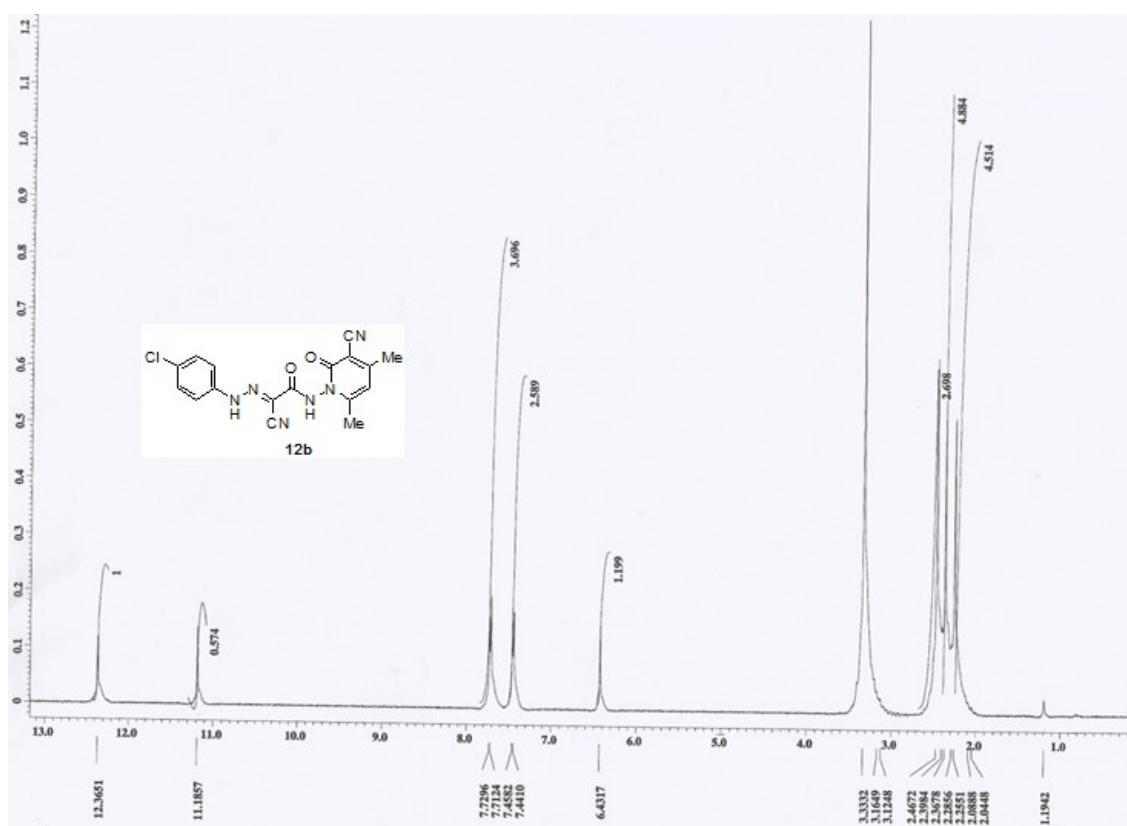


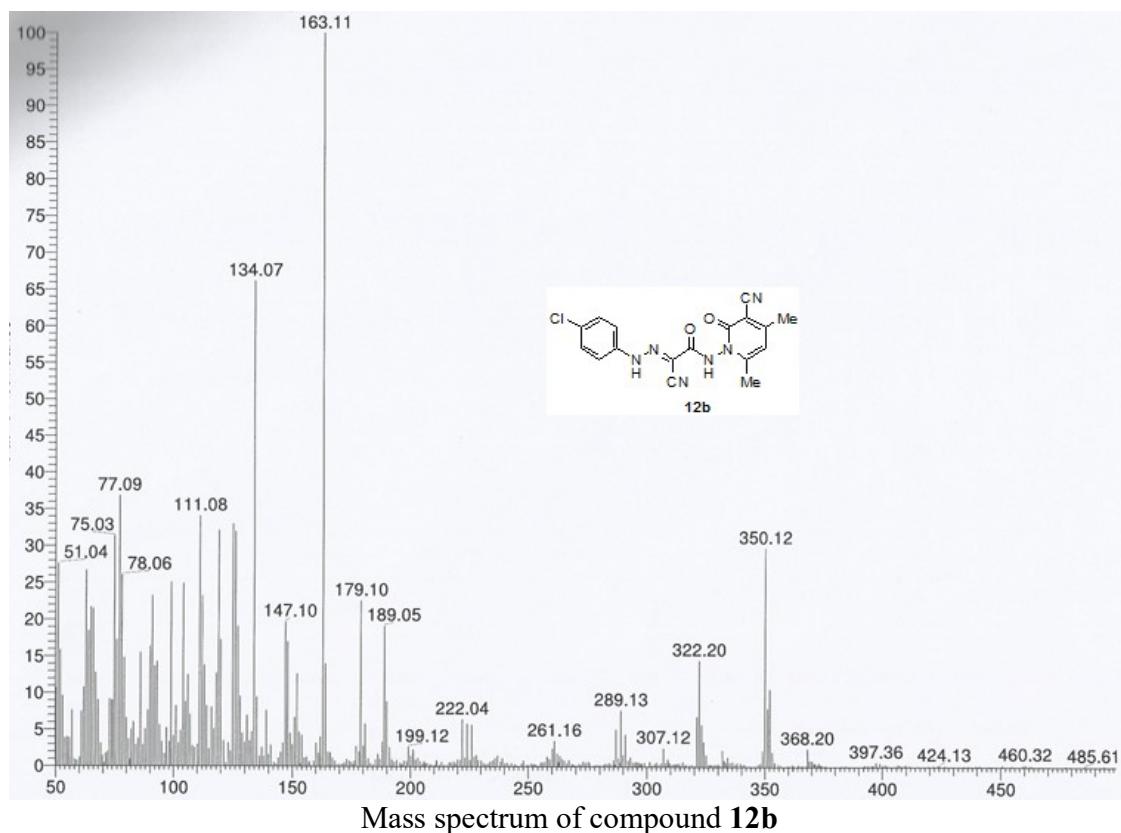
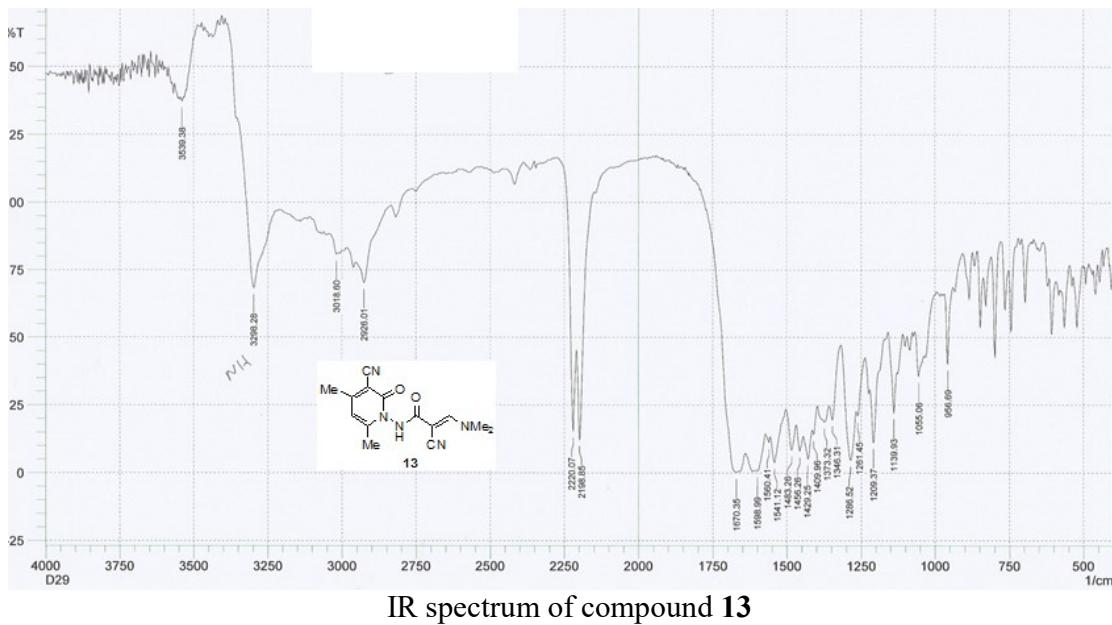
IR spectrum of compound 8

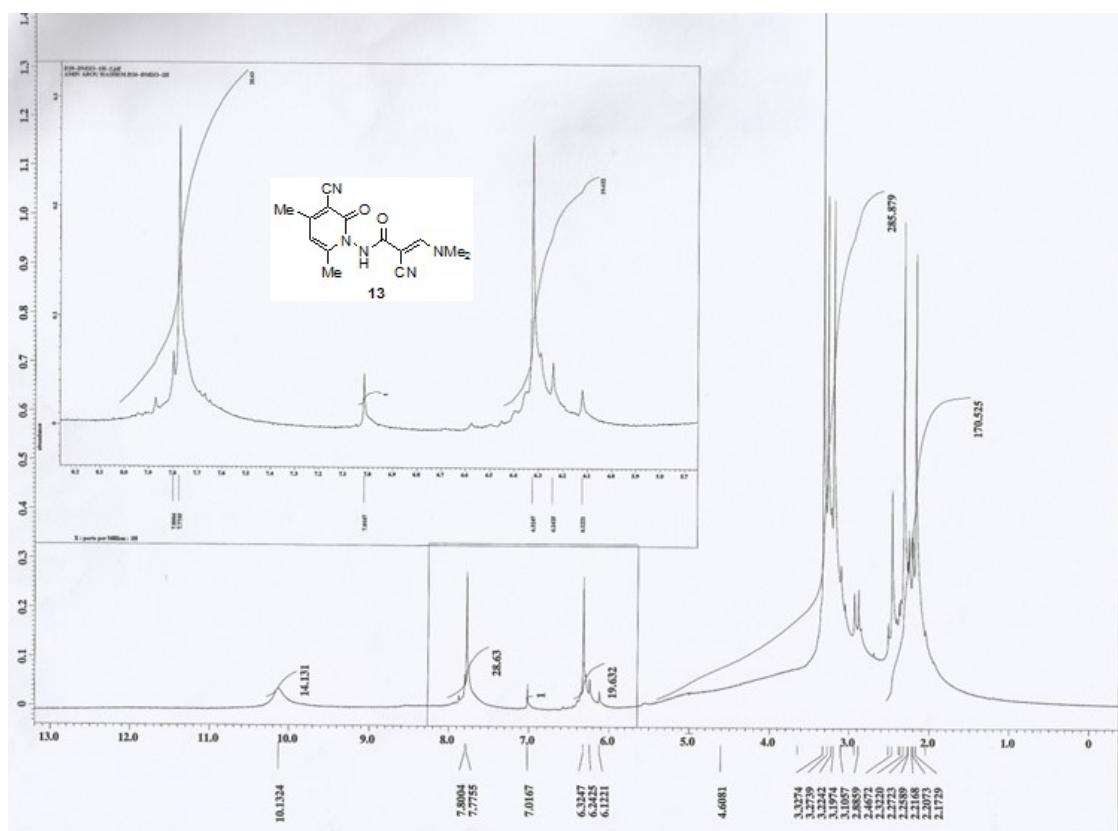
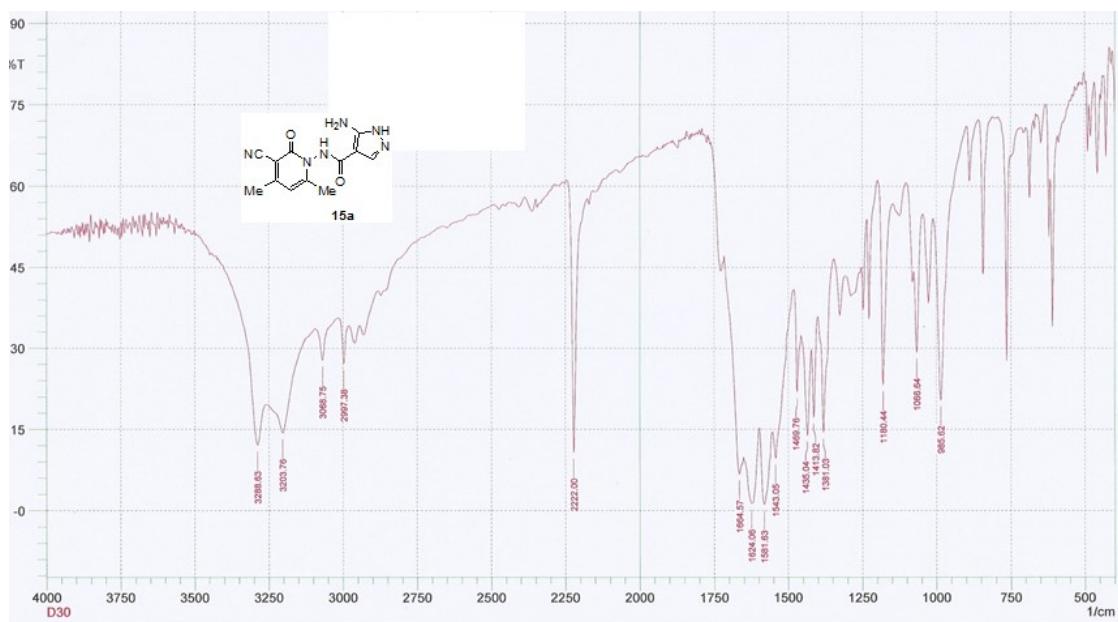
<sup>1</sup>H NMR spectrum of compound 8



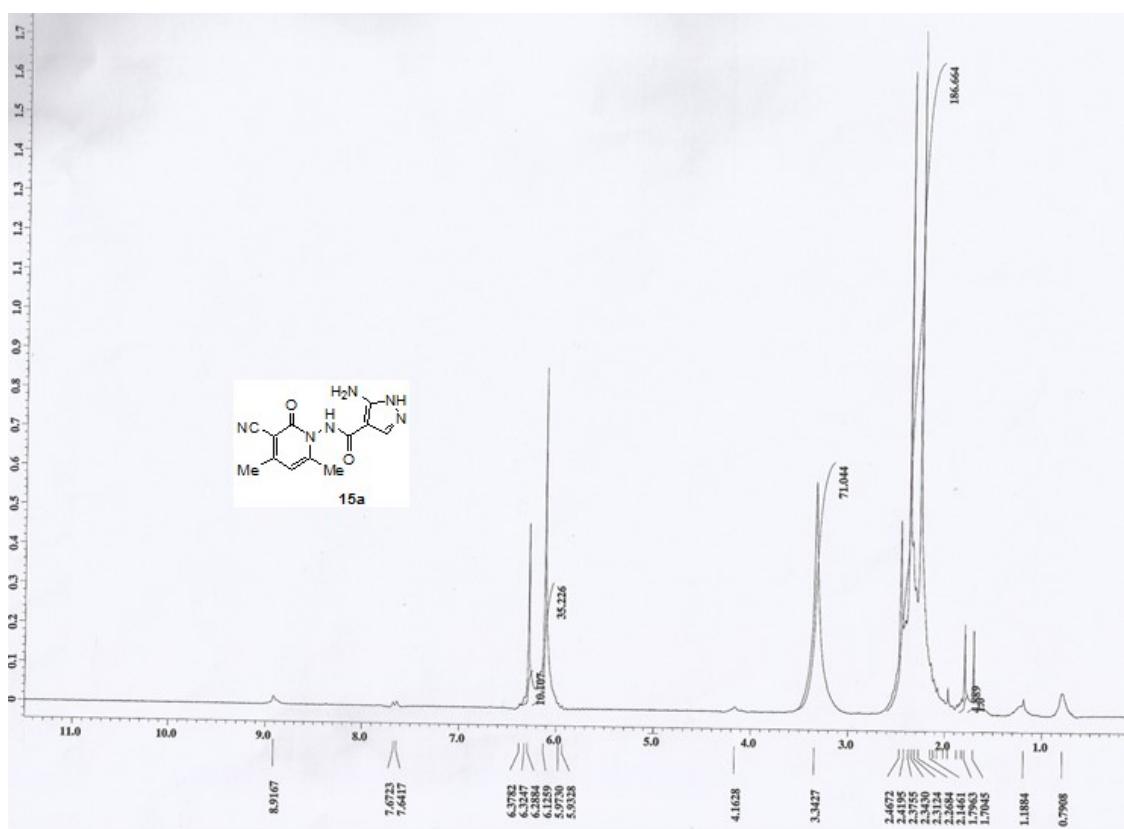


IR spectrum of compound **12b**<sup>1</sup>H NMR spectrum of compound **12b**

Mass spectrum of compound **12b**IR spectrum of compound **13**

<sup>1</sup>H NMR spectrum of compound 13

IR spectrum of compound 15a



$^1\text{H}$ NMR spectrum of compound 15a