

## **Copper-catalyzed aerobic oxidative intramolecular amidation of 2-aminophenylacetylenes: A domino process for the synthesis of isatin**

N. Salvanna<sup>a\*</sup> Perla Ramesh<sup>b</sup>, K. Santosh Kumar<sup>c</sup>, Biswanath Das<sup>b\*</sup>

<sup>a</sup>*Osmania University Post Graduate College, Narsapur, Medak, Telangana, India- 502313.*

<sup>b</sup>*Natural Products Chemistry Division, CSIR-Indian Institute of Chemical Technology, Hyderabad, India -500007.*

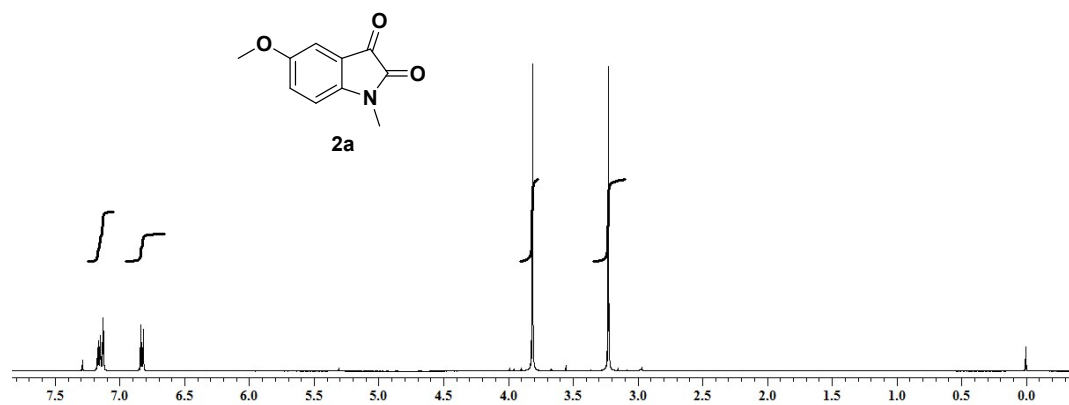
<sup>c</sup>*Department of Chemistry, Osmania University, Hyderabad, Telangana, India- 500007.*

\*Corresponding author: E-mail: [biswanathdas@yahoo.com](mailto:biswanathdas@yahoo.com)

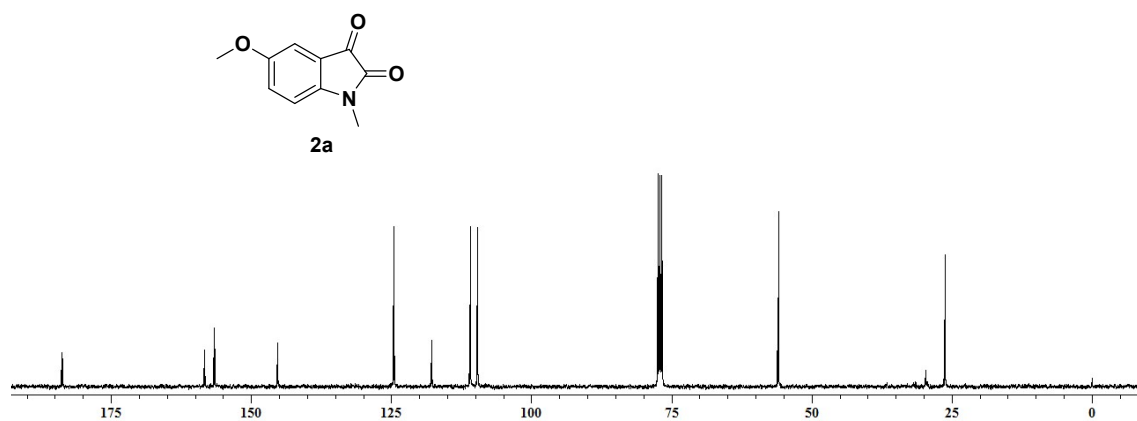
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**Copies of <sup>1</sup>H NMR and <sup>13</sup>C NMR Spectra .....**

**5-Methoxy-1-methylindoline-2,3-dione (2a):**

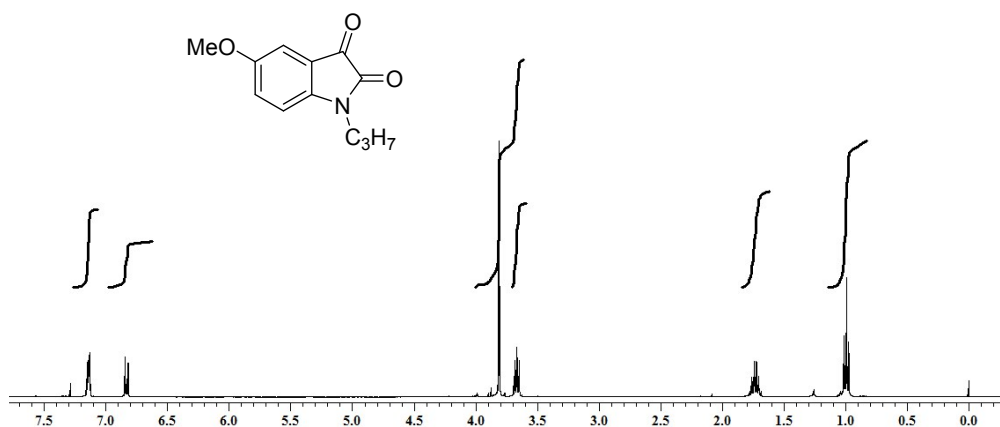


**<sup>1</sup>H NMR Spectrum of compound 2a**

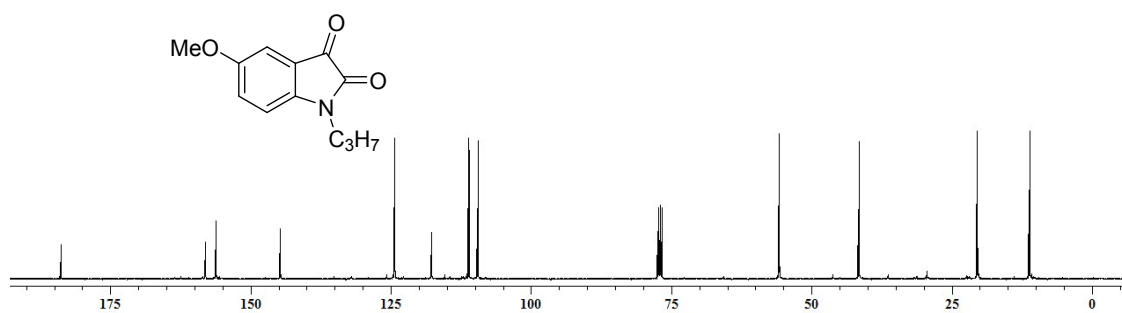


**<sup>13</sup>C NMR Spectrum of compound 2a**

**5-Methoxy-1-propylindoline-2,3-dione (2b):**

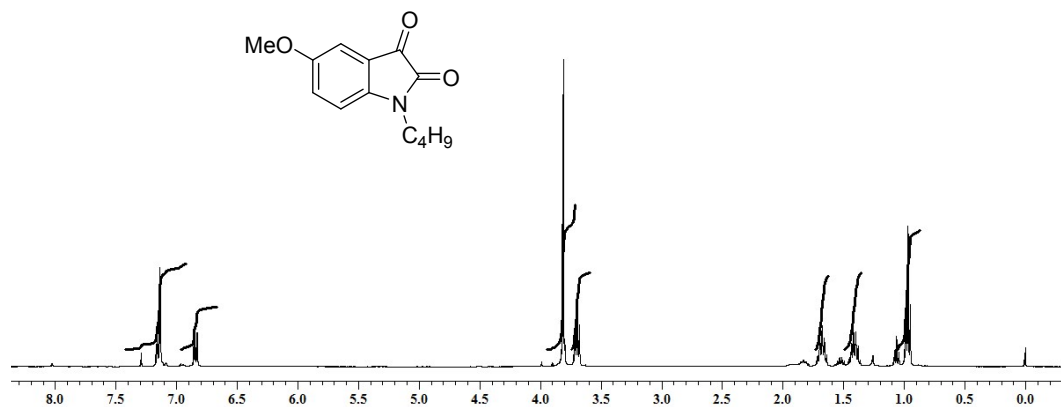


**<sup>1</sup>H NMR Spectrum of compound 2b**

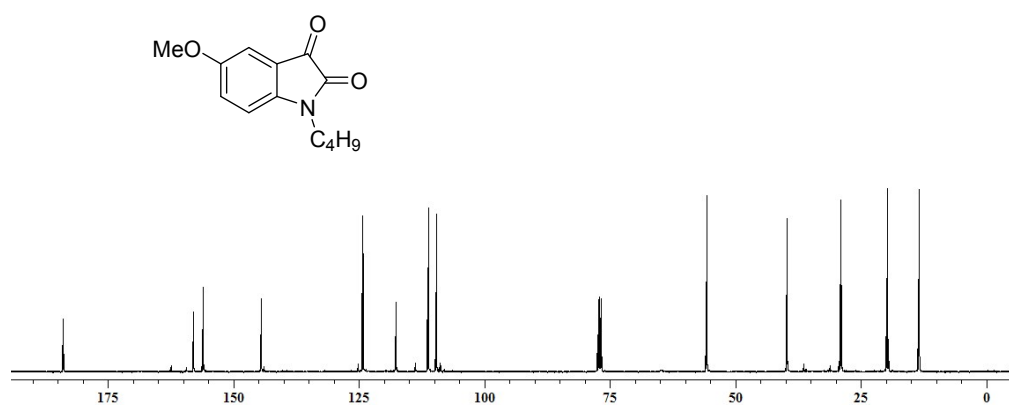


**<sup>13</sup>C NMR Spectrum of compound 2b**

**1-Butyl-5-methoxyindoline-2,3-dione (2c):**

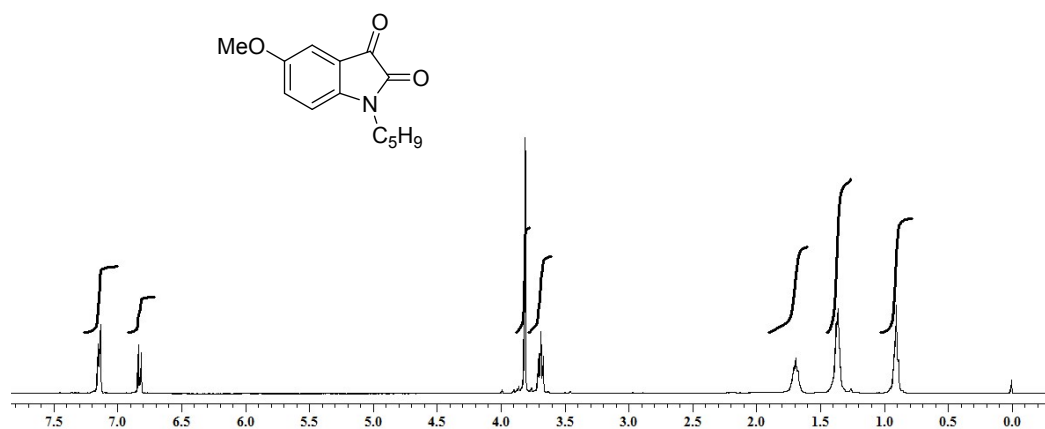


**<sup>1</sup>H NMR Spectrum of compound 2c**

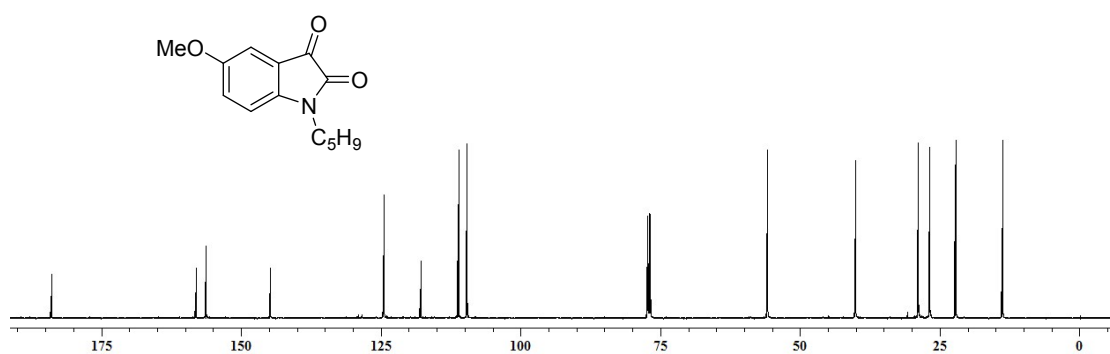


**<sup>13</sup>C NMR Spectrum of compound 2c**

**5-Methoxy-1-(penta-1,3-diyn-1-yl)indoline-2,3-dione (2d):**

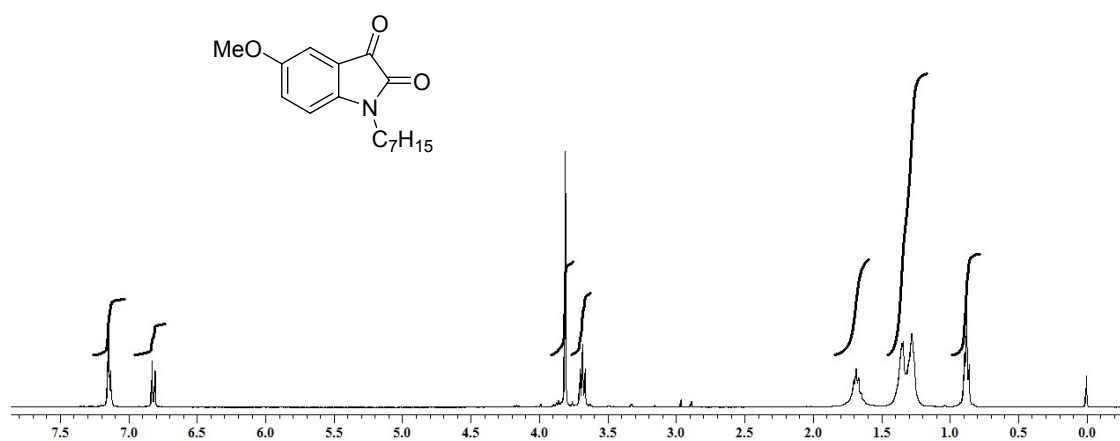


**<sup>1</sup>H NMR Spectrum of compound 2d**

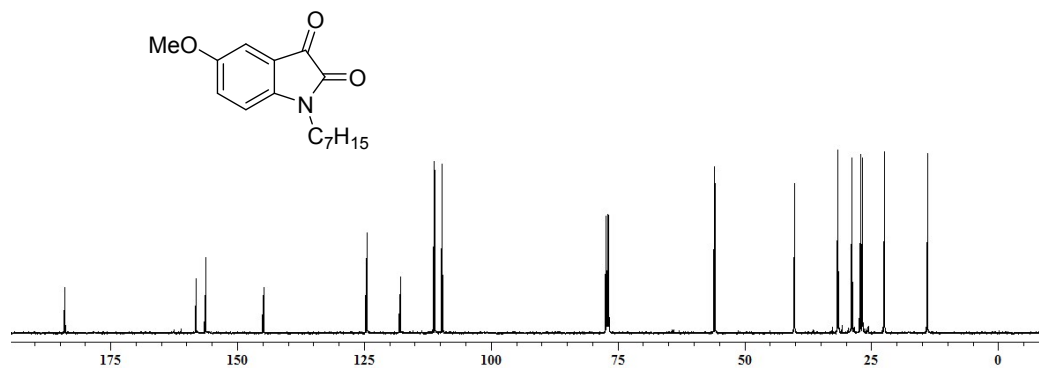


**<sup>13</sup>C NMR Spectrum of compound 2d**

**1-Heptyl-5-methoxyindoline-2,3-dione (2e):**

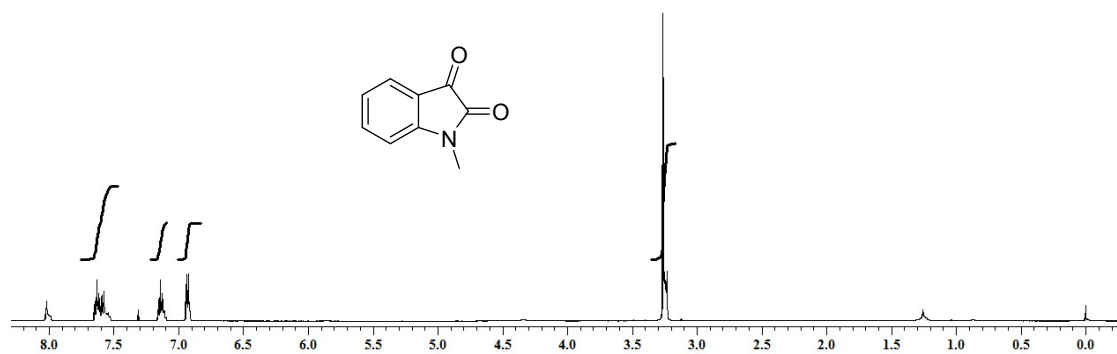


**<sup>1</sup>H NMR Spectrum of compound 2e**

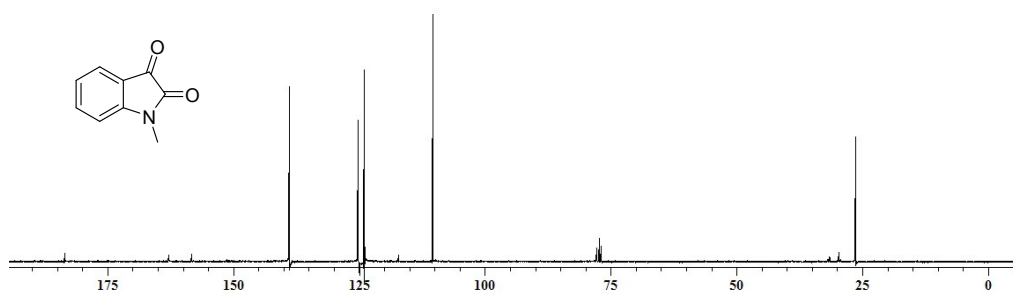


**<sup>13</sup>C NMR Spectrum of compound 2e**

**1-Methylindoline-2,3-dione (2f):**

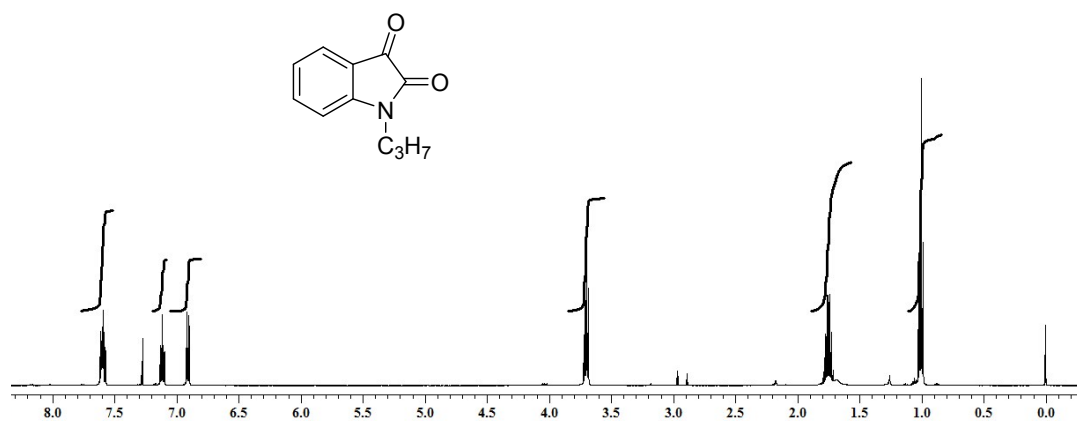


**<sup>1</sup>H NMR Spectrum of compound 2f**

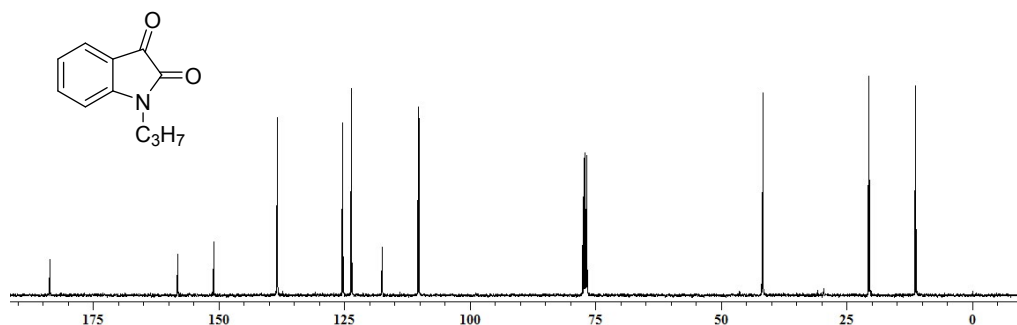


**<sup>13</sup>C NMR Spectrum of compound 2f**

**1-Propylindoline-2,3-dione (2g):**



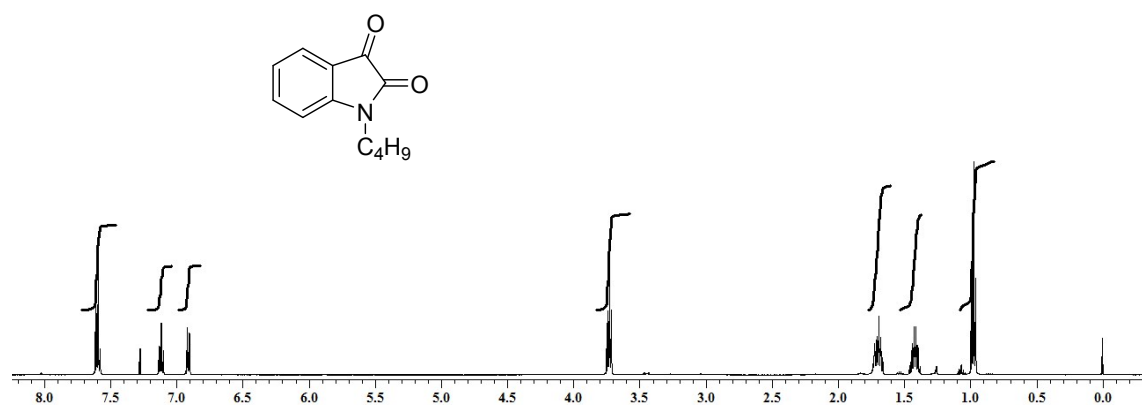
**<sup>1</sup>H NMR Spectrum of compound 2g**



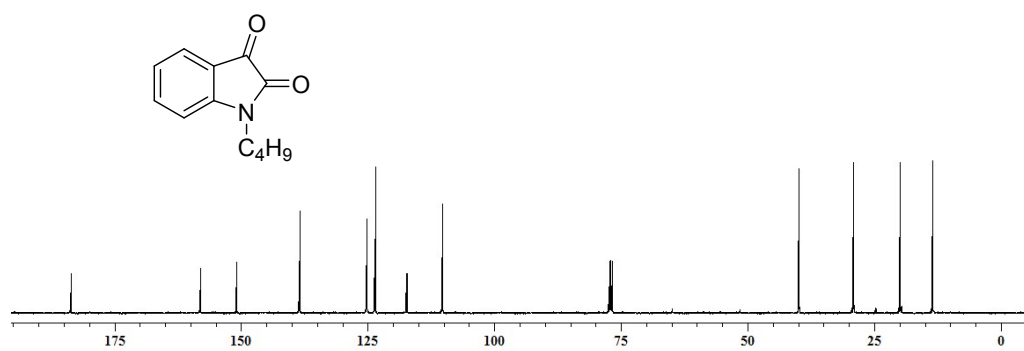
**<sup>13</sup>C NMR Spectrum of compound 2g**



**1-Butylindoline-2,3-dione (2h):**

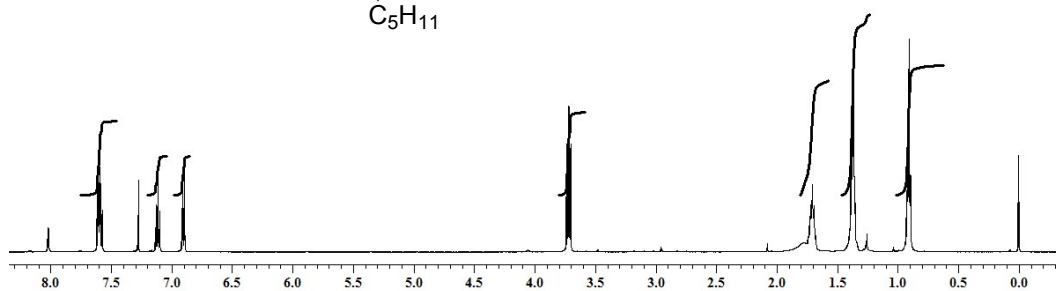
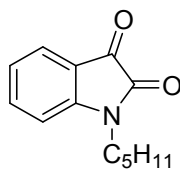


**$^1\text{H}$  NMR Spectrum of compound 2h**

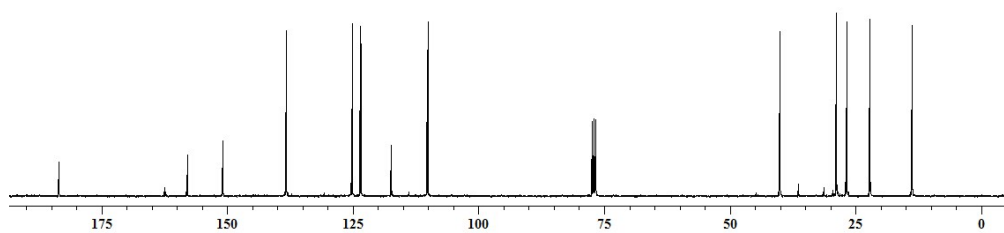
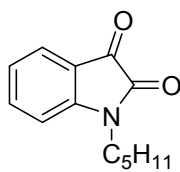


**$^{13}\text{C}$  NMR Spectrum of compound 2h**

**1-Pentylindoline-2,3-dione (2i):**

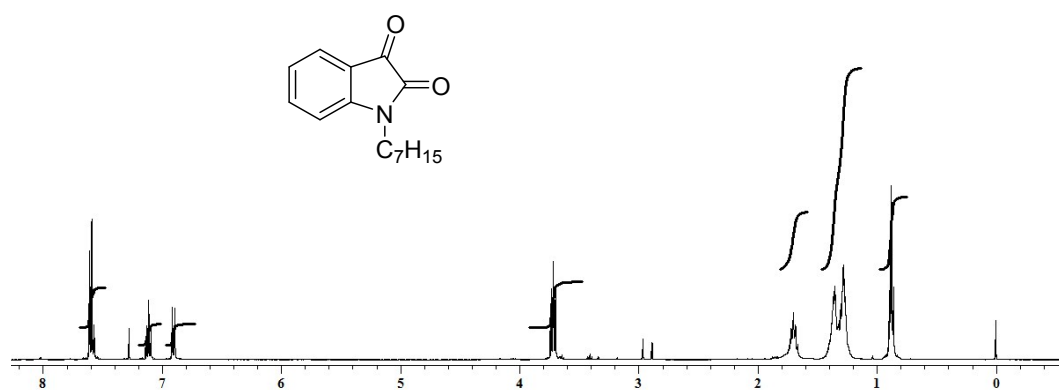


**<sup>1</sup>H NMR Spectrum of compound 2i**

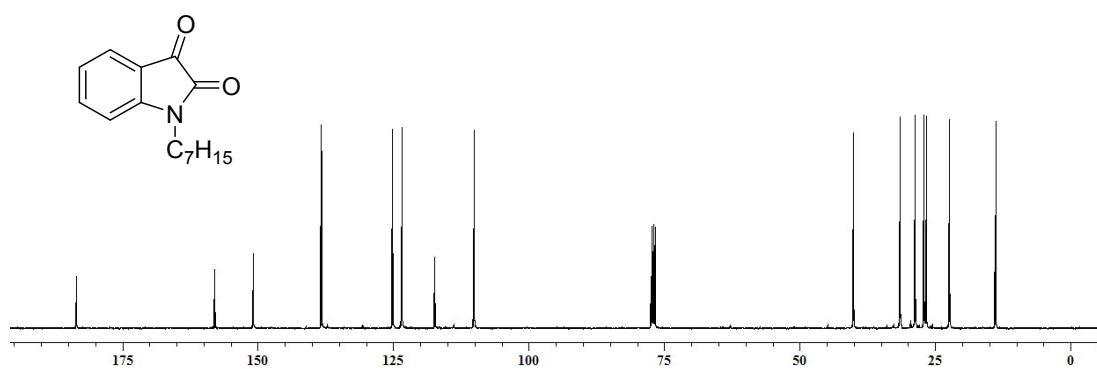


**<sup>13</sup>C NMR Spectrum of compound 2i**

**1-Heptylindoline-2,3-dione (2j):**

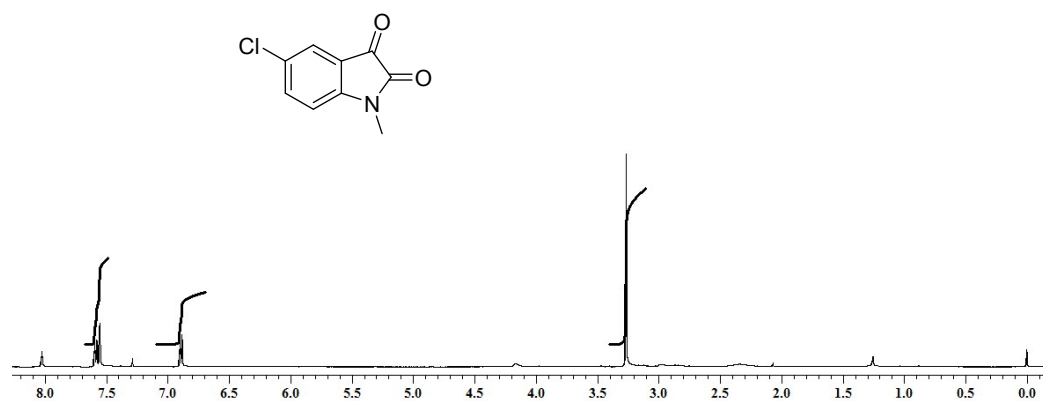


**$^1\text{H}$  NMR Spectrum of compound 2j**

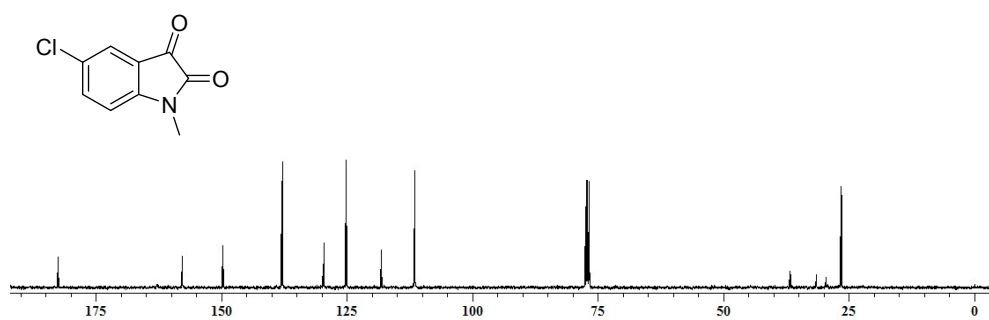


**$^{13}\text{C}$  NMR Spectrum of compound 2j**

**5-Chloro-1-methylindoline-2,3-dione (2k):**

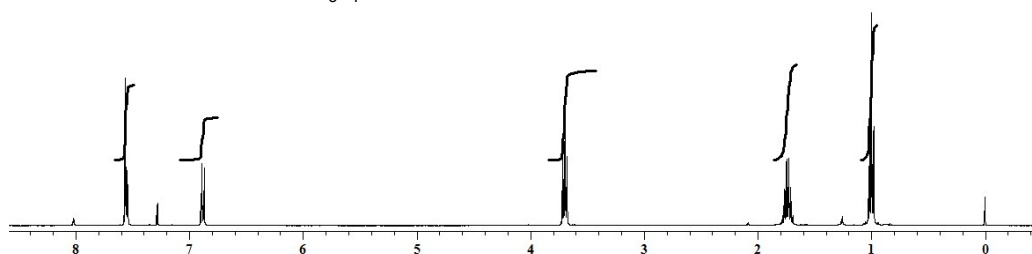
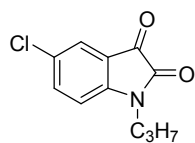


**<sup>1</sup>H NMR Spectrum of compound 2k**

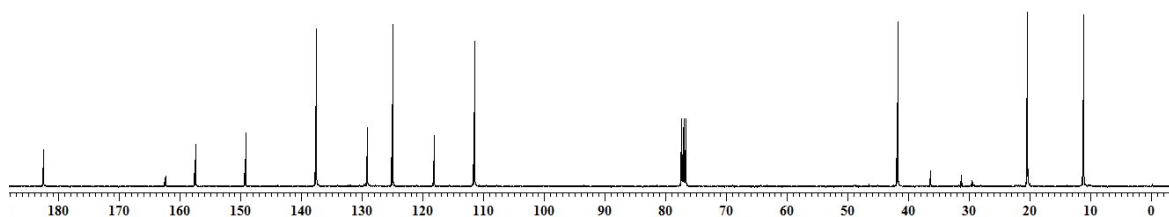
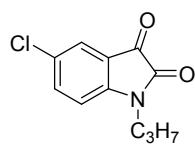


**<sup>13</sup>C NMR Spectrum of compound 2k**

**5-Chloro-1-propylindoline-2,3-dione (2l):**

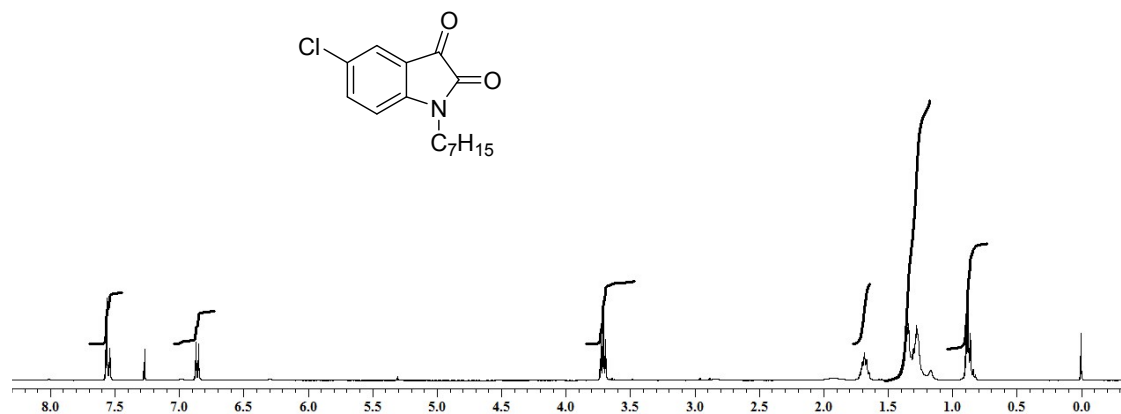


**<sup>1</sup>H NMR Spectrum of compound 2l**

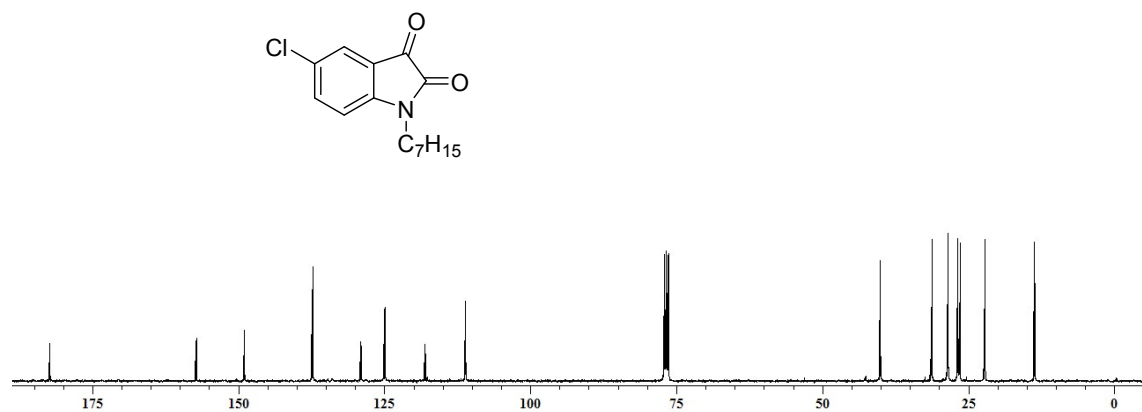


**<sup>13</sup>C NMR Spectrum of compound 2l**

**5-Chloro-1-heptylindoline-2,3-dione (2m):**

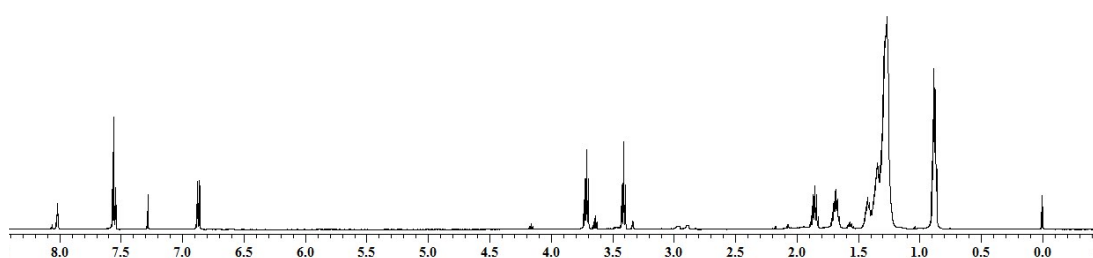
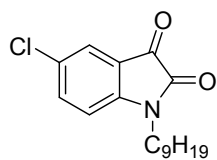


**<sup>1</sup>H NMR Spectrum of compound 2m**

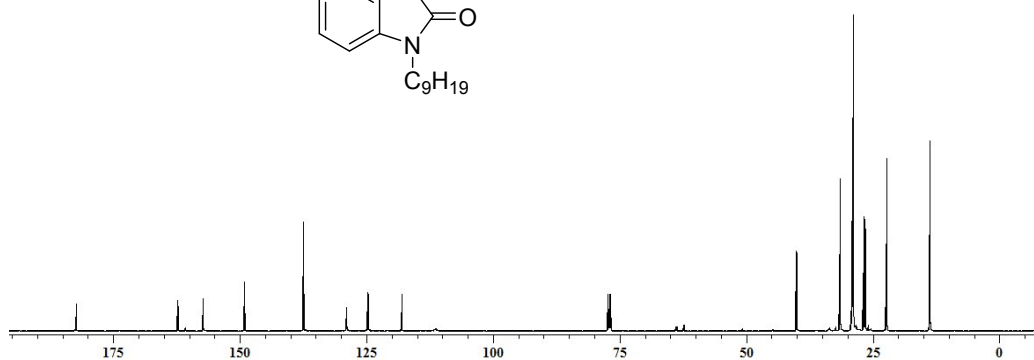
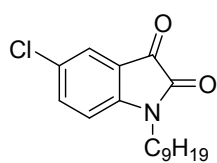


**<sup>13</sup>C NMR Spectrum of compound 2m**

**5-Chloro-1-nonylindoline-2,3-dione (2n):**

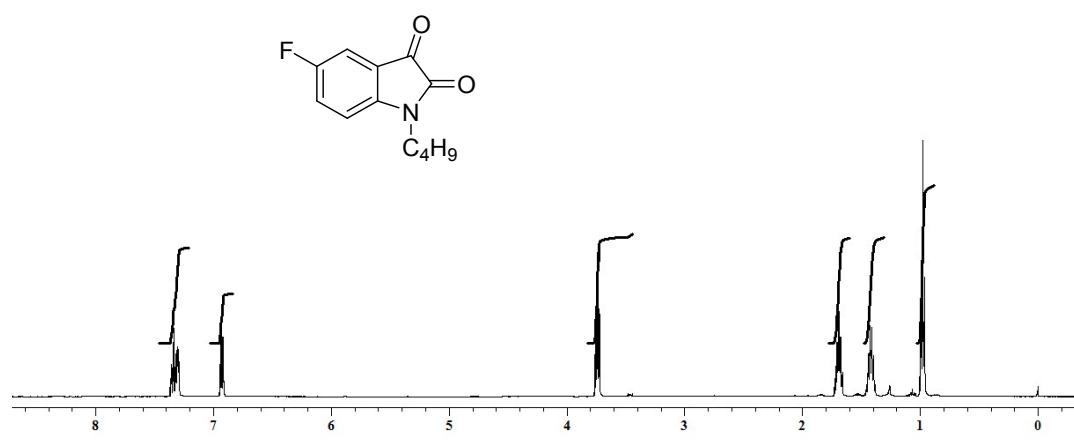


**<sup>1</sup>H NMR Spectrum of compound 2n**

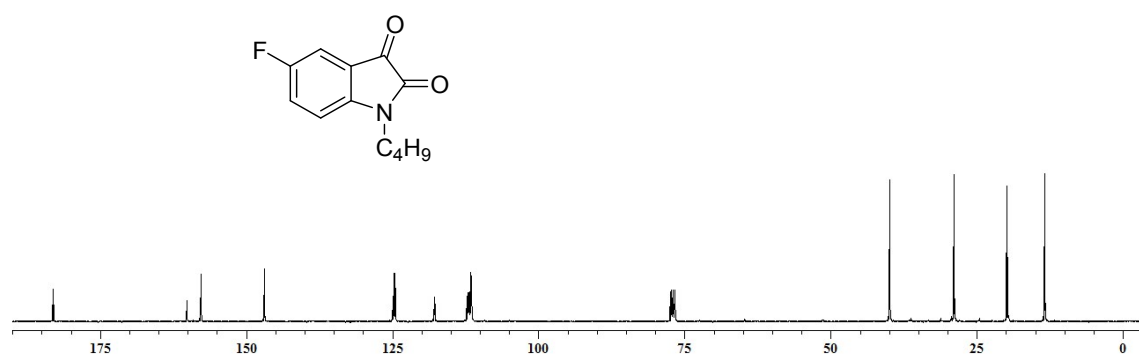


**<sup>13</sup>C NMR Spectrum of compound 2n**

**1-Butyl-5-fluoroindoline-2,3-dione (2o):**



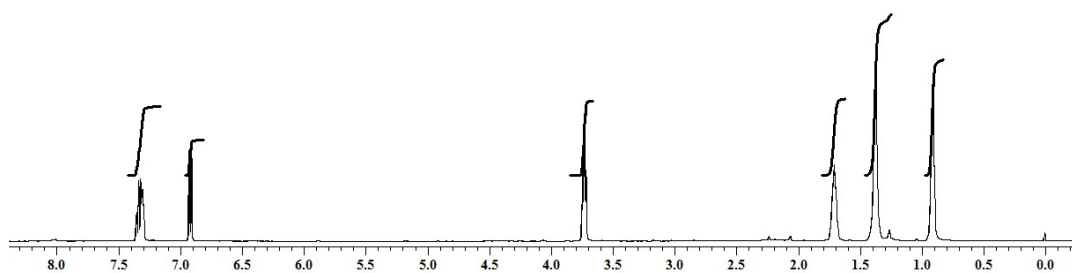
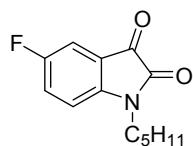
**<sup>1</sup>H NMR Spectrum of compound 2o**



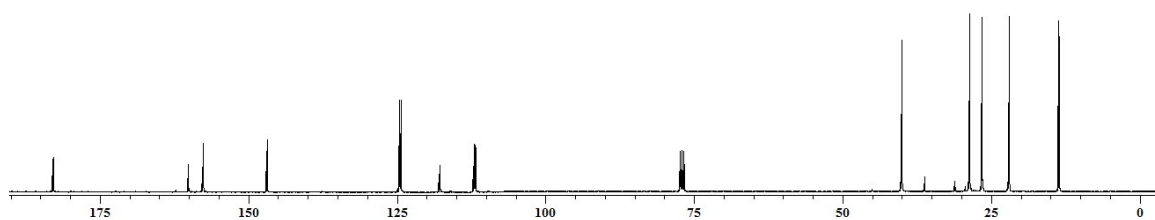
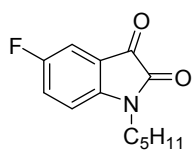
**<sup>13</sup>C NMR Spectrum of compound 2o**



**5-Fluoro-1-pentylindoline-2,3-dione (2p):**

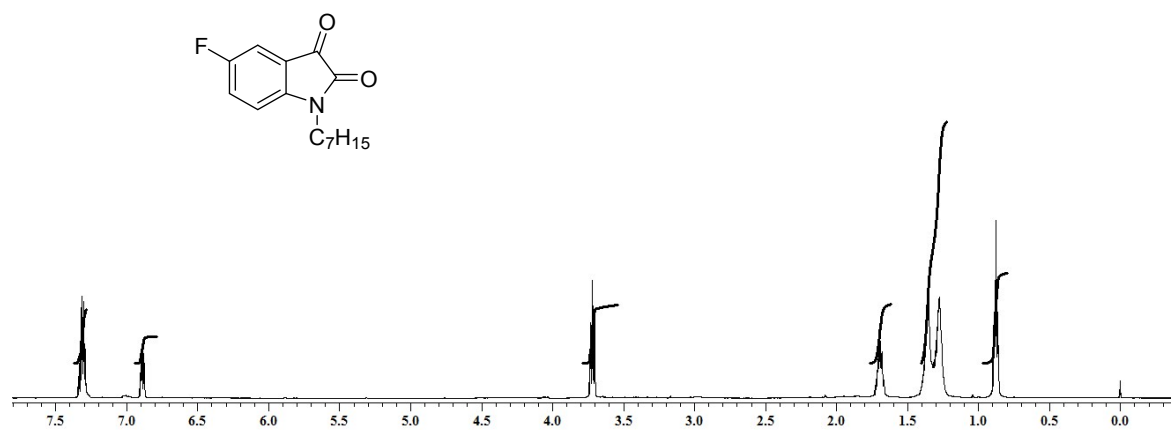


**<sup>1</sup>H NMR Spectrum of compound 2p**

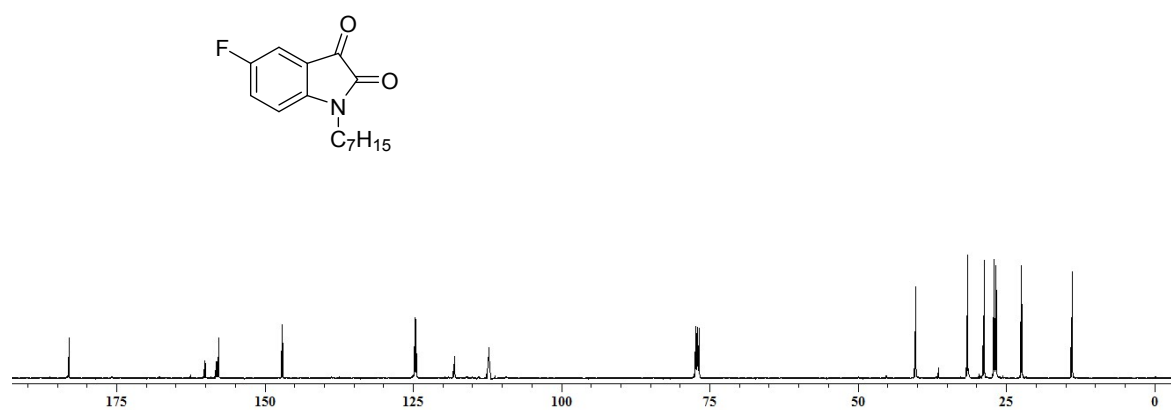


**<sup>13</sup>C NMR Spectrum of compound 2p**

**5-Fluoro-1-heptylindoline-2,3-dione (2q):**

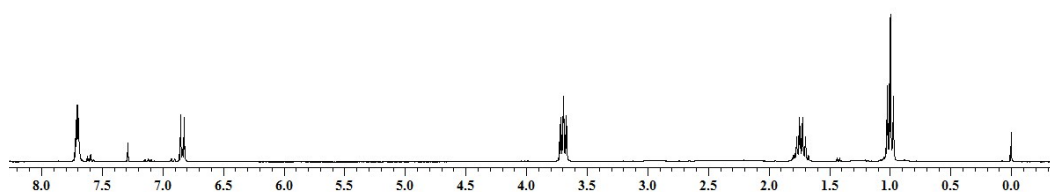
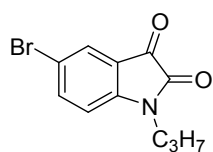


**<sup>1</sup>H NMR Spectrum of compound 2q**

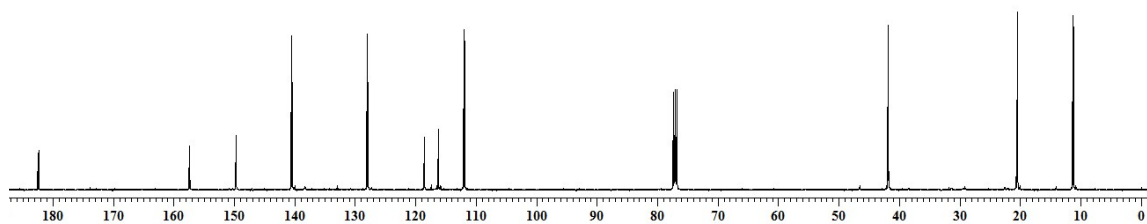
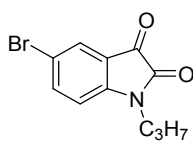


**<sup>13</sup>C NMR Spectrum of compound 2q**

**5-Bromo-1-propylindoline-2,3-dione (2r):**

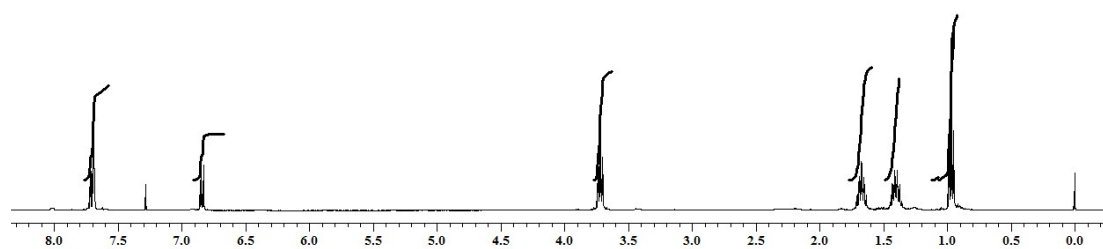
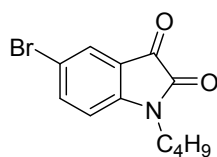


**<sup>1</sup>H NMR Spectrum of compound 2r**

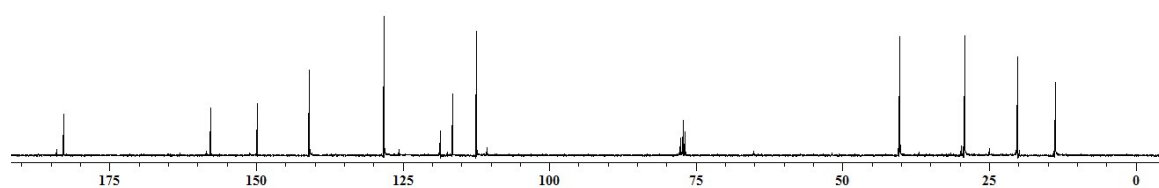
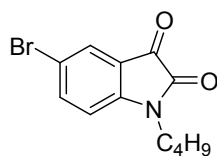


**<sup>13</sup>C NMR Spectrum of compound 2r**

**5-Bromo-1-butylindoline-2,3-dione (2s):**

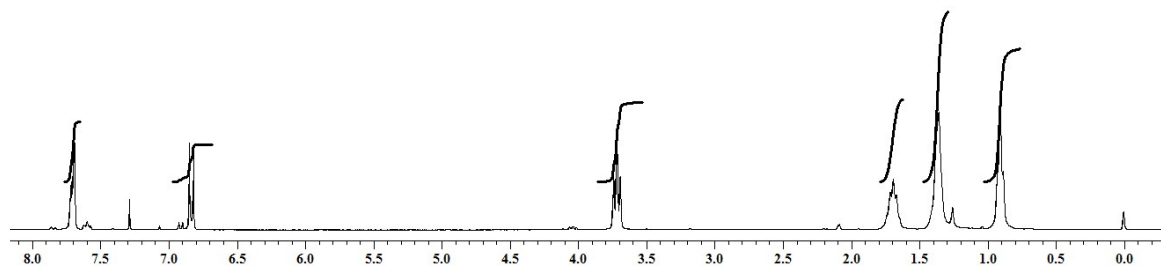
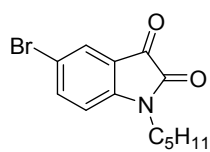


**$^1\text{H}$  NMR Spectrum of compound 2s**

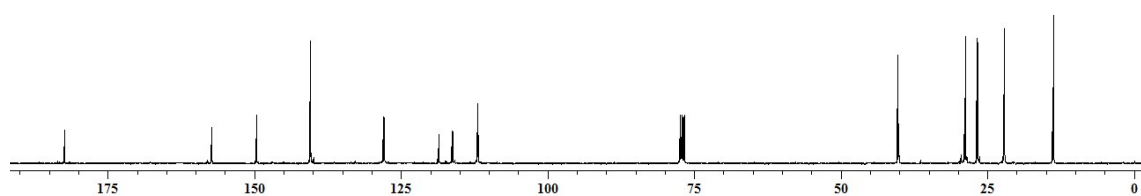
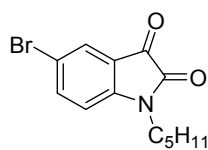


**$^{13}\text{C}$  NMR Spectrum of compound 2s**

**5-Bromo-1-pentylindoline-2,3-dione (2t):**



**<sup>1</sup>H NMR Spectrum of compound 2t**



**<sup>13</sup>C NMR Spectrum of compound 2t**