

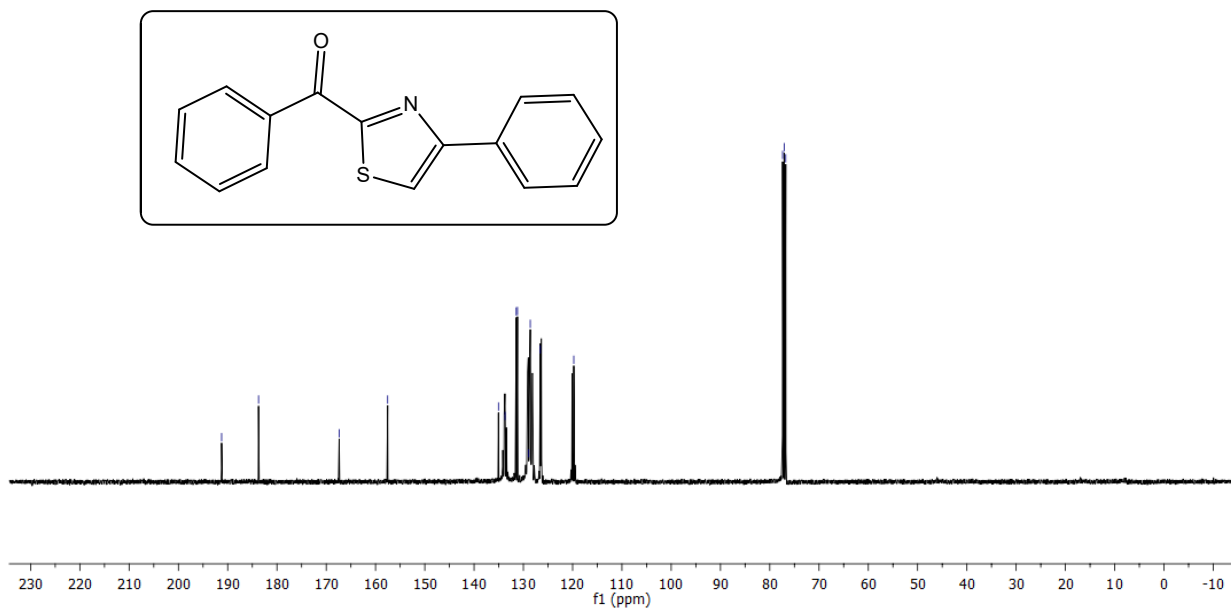
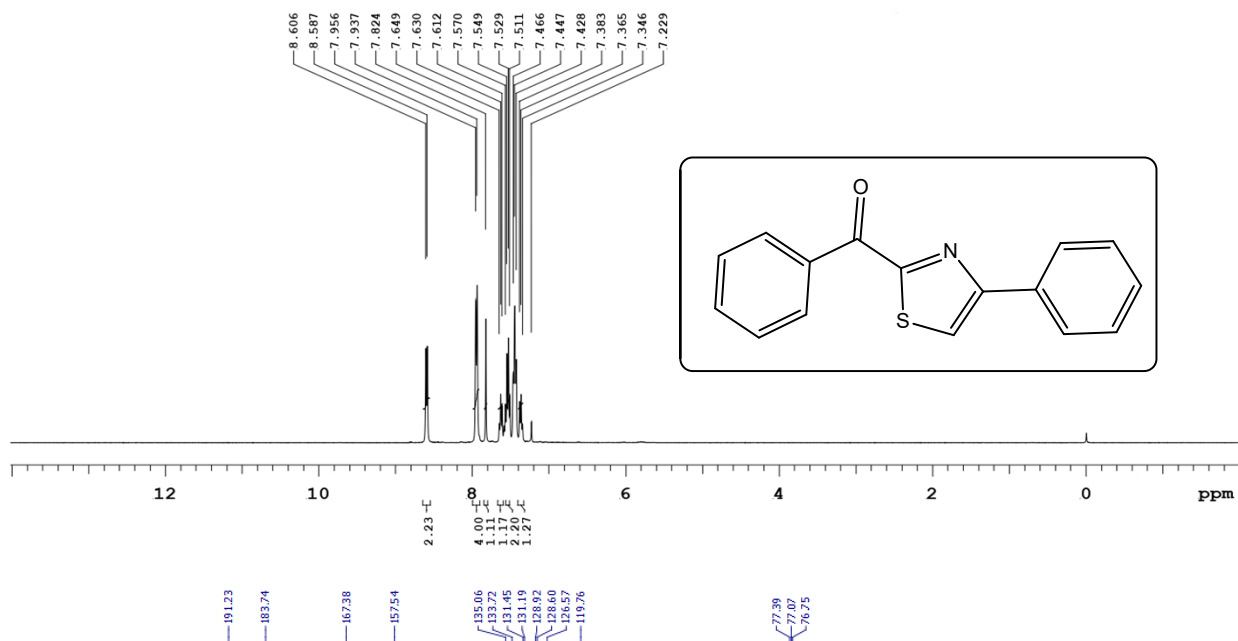
**A panoramic view on synthetic applications of  $\alpha$ -oxothioamides: A highly regioselective synthesis of 2-acyl-4-(het)arylthiazoles and thioethers**

Rajaghatta N Suresh,<sup>a</sup> Toreshettahally R Swaroop,<sup>b</sup> Darshini Gowda,<sup>a</sup> Kempegowda Mantelingu<sup>a,\*</sup> Kanchugarakoppal S Rangappa<sup>c,\*</sup>

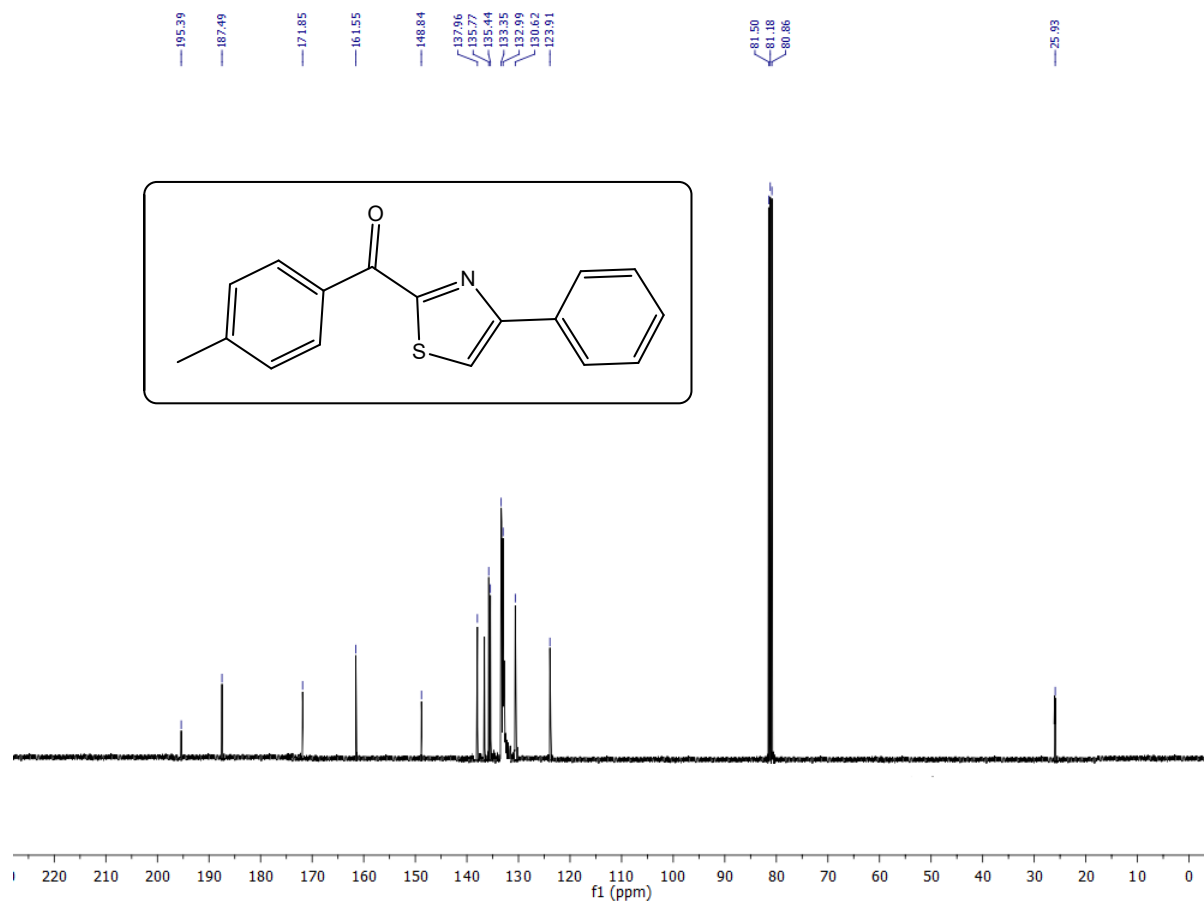
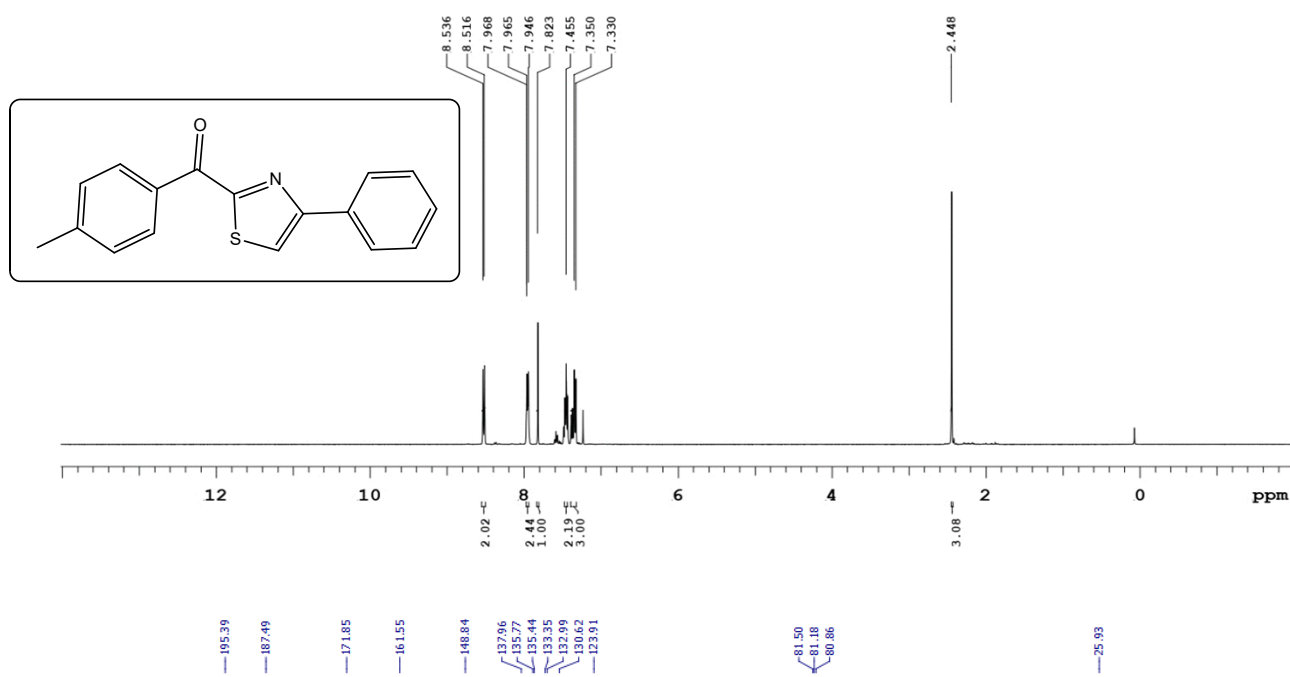
<sup>a</sup> Department of Studies in Chemistry, University of Mysore, Manasagangotri, Mysuru - 570 006, Karnataka, India

<sup>b</sup> Department of Studies in Organic Chemistry, University of Mysore, Manasagangotri, Mysuru - 570 006, Karnataka, India.

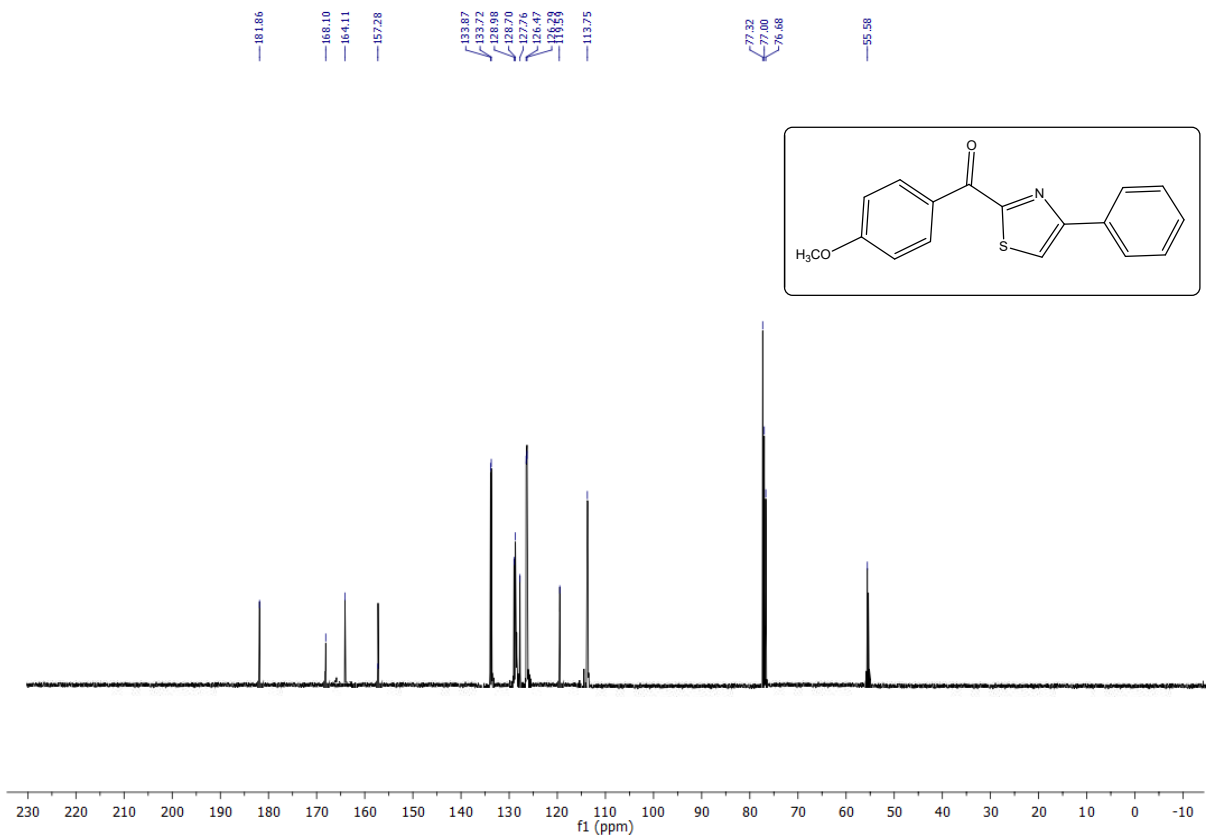
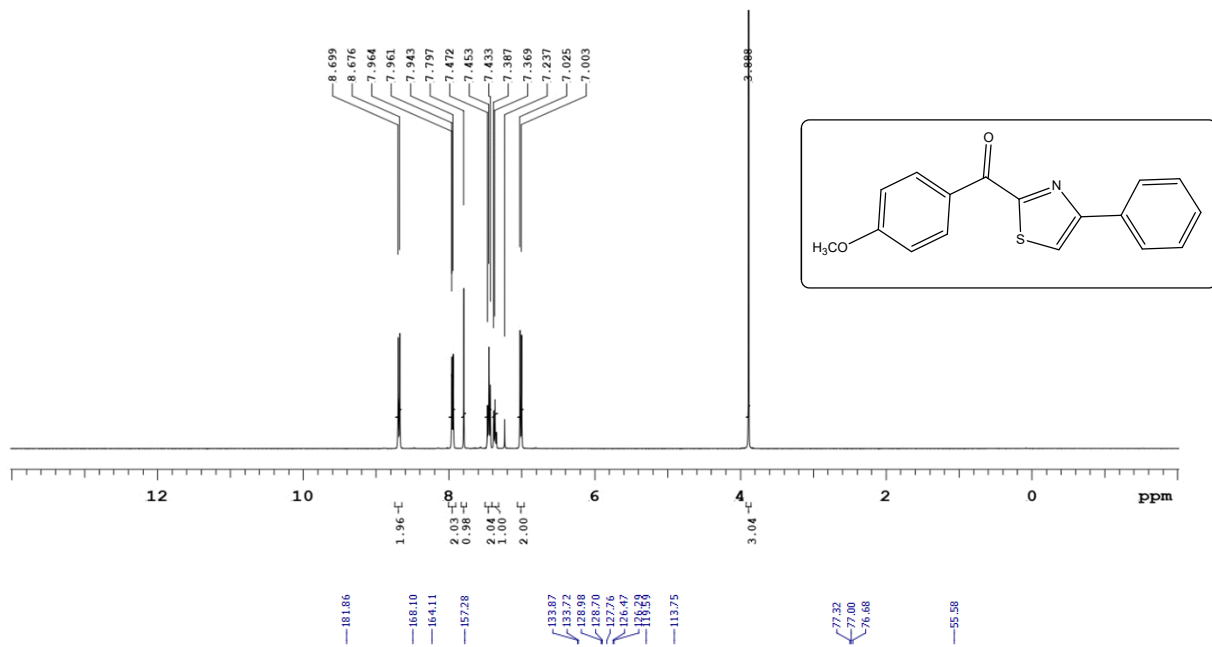
<sup>c</sup> Vijnana Bhavana, University of Mysore, Manasagangotri, Mysuru - 570 006, Karnataka, India.



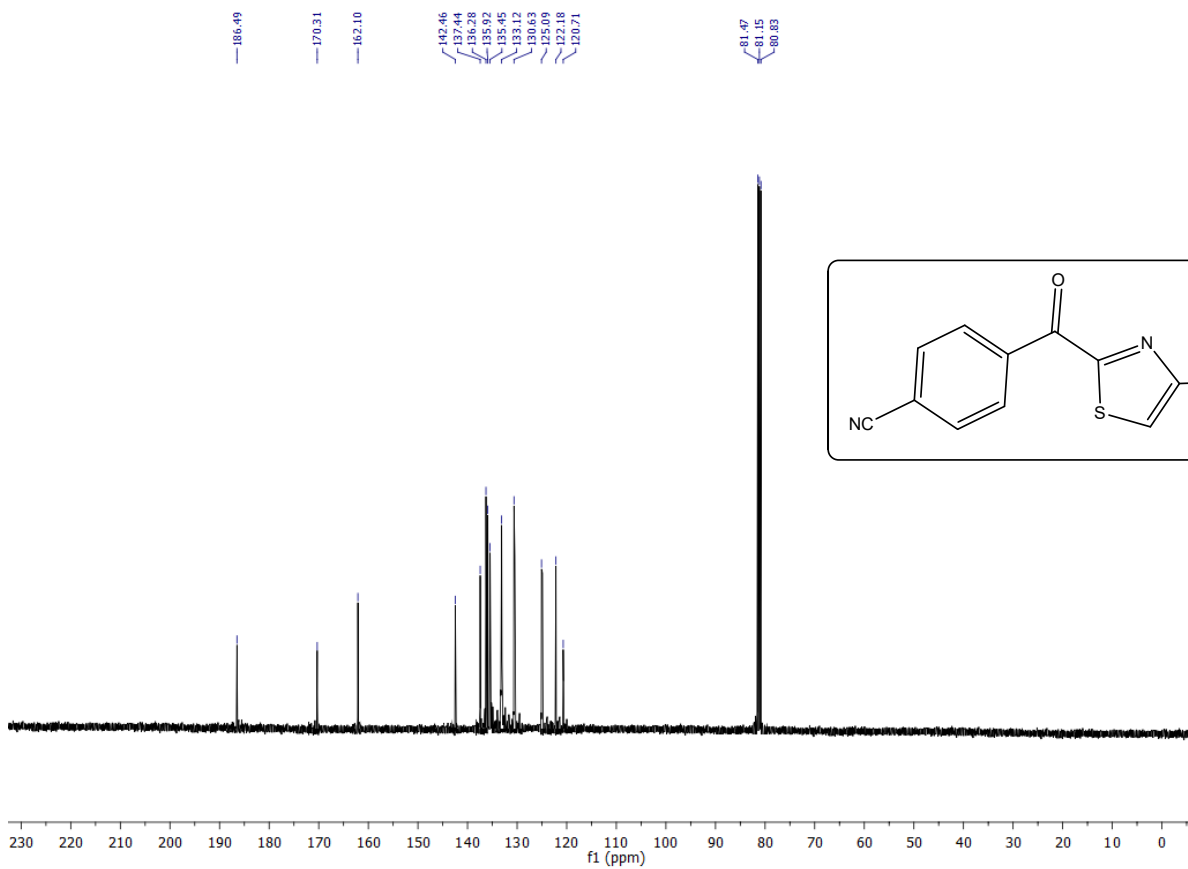
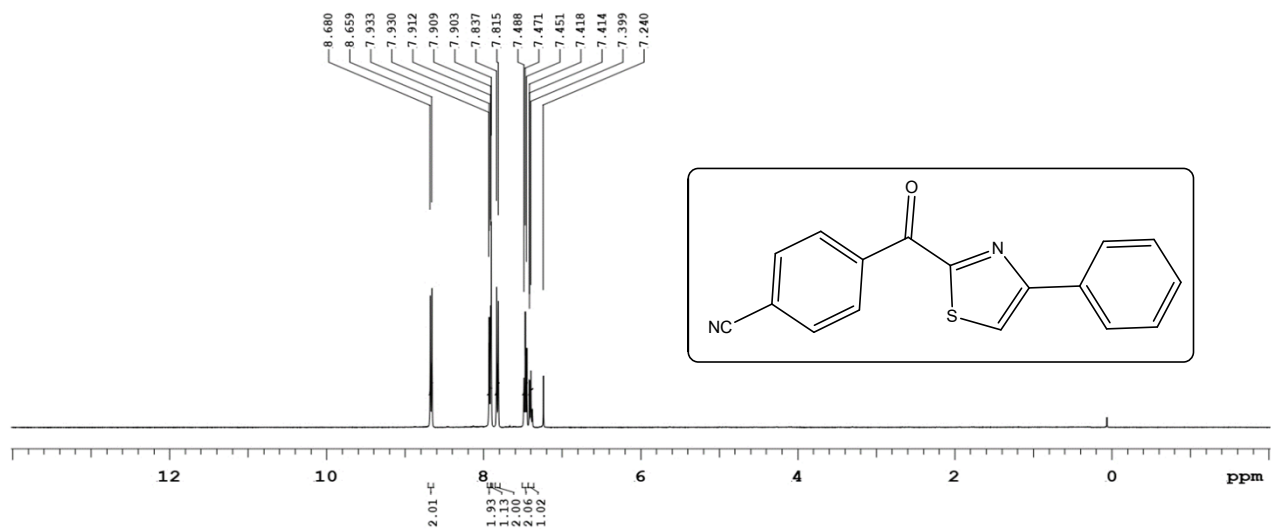
**<sup>1</sup>H & <sup>13</sup>C NMR of Phenyl(4-phenylthiazol-2-yl)methanone (4a)**



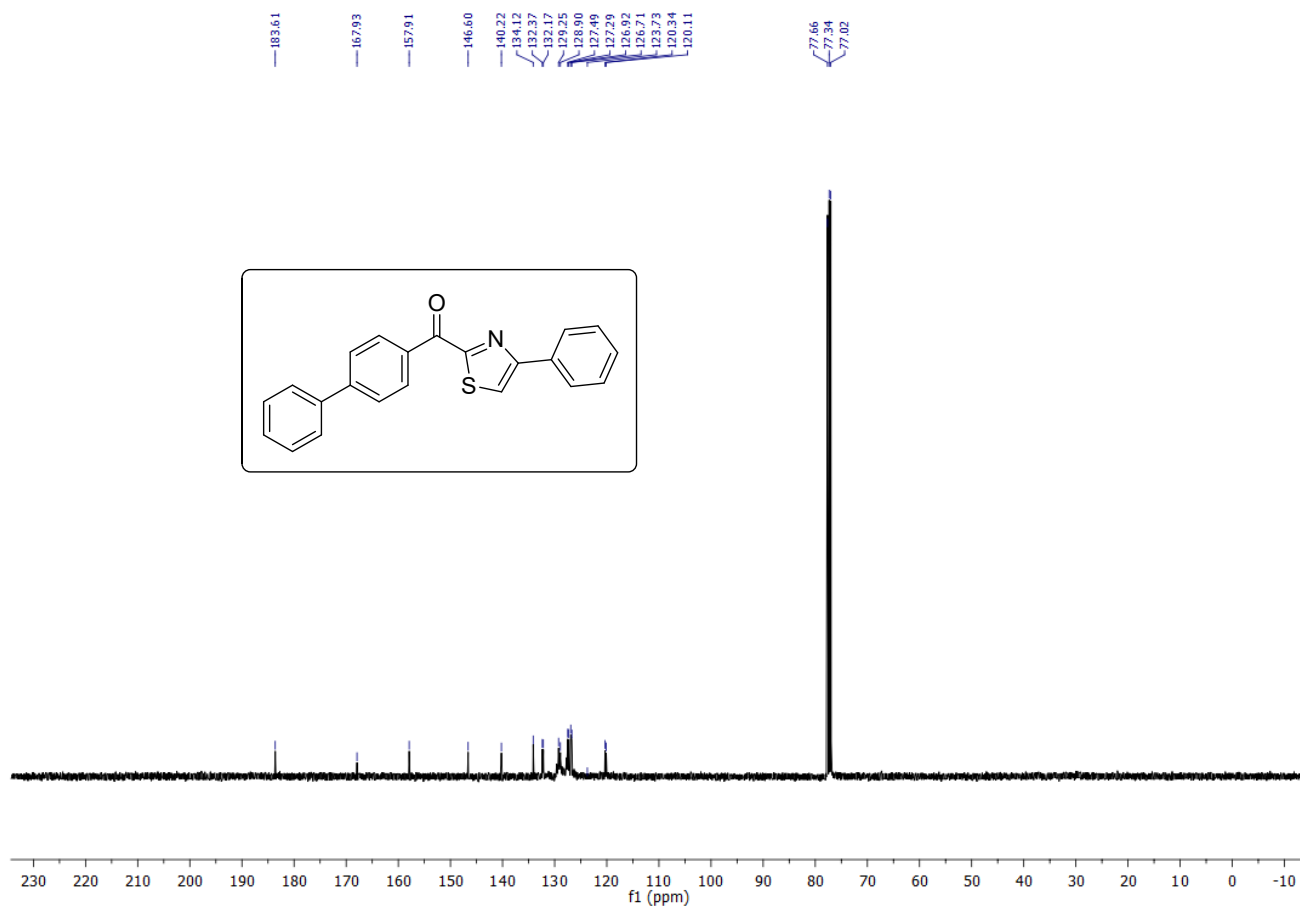
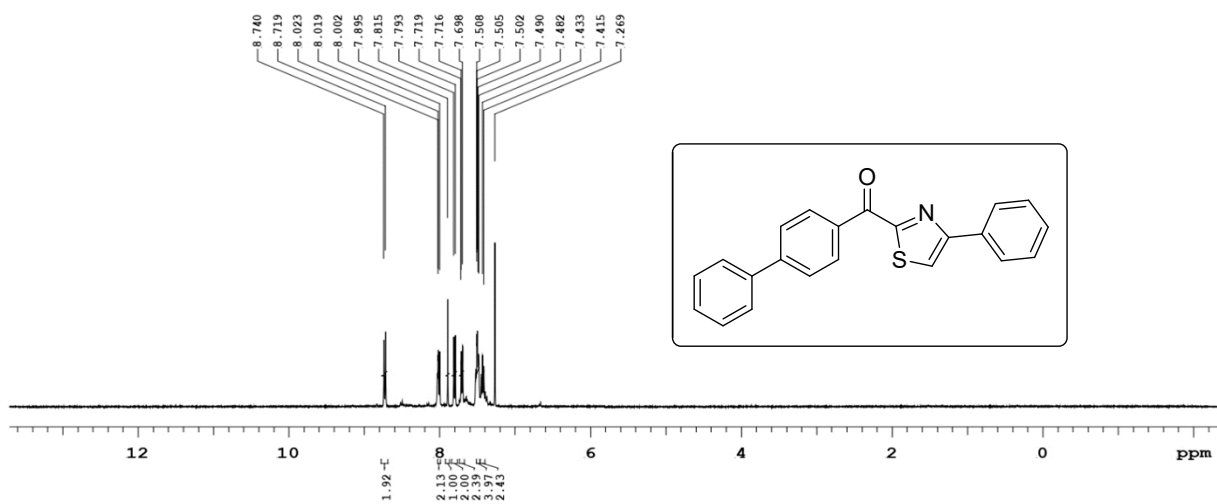
**<sup>1</sup>H & <sup>13</sup>C NMR of (4-Phenylthiazol-2-yl)(p-tolyl)methanone (4b)**



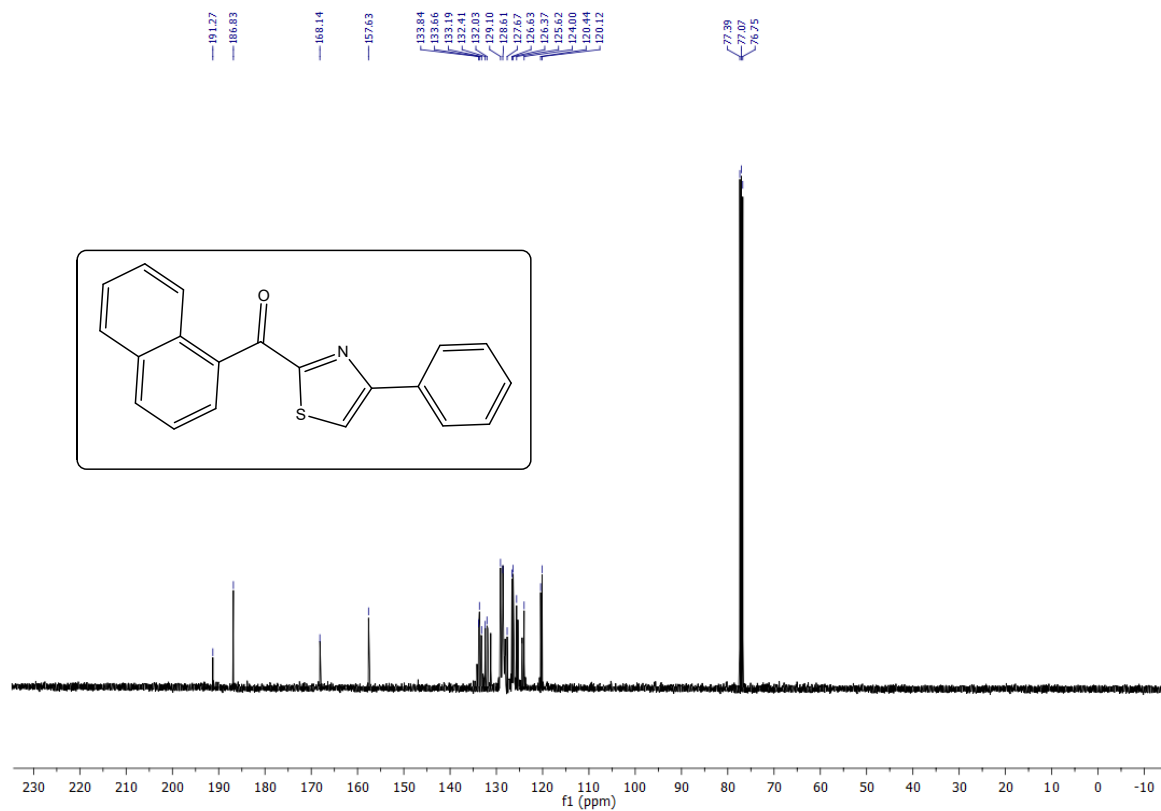
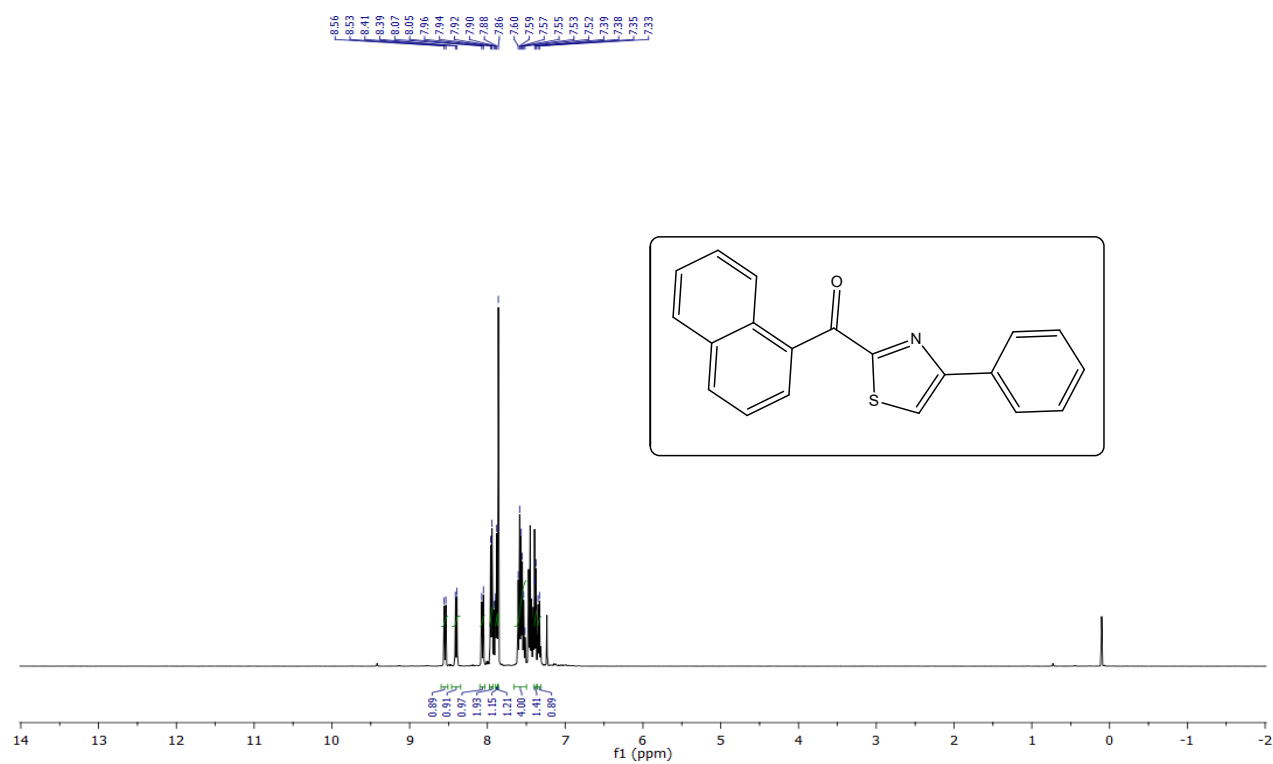
**<sup>1</sup>H & <sup>13</sup>C NMR of (4-Methoxyphenyl)(4-phenylthiazol-2-yl)methanone (4c)**



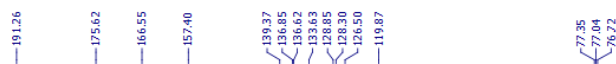
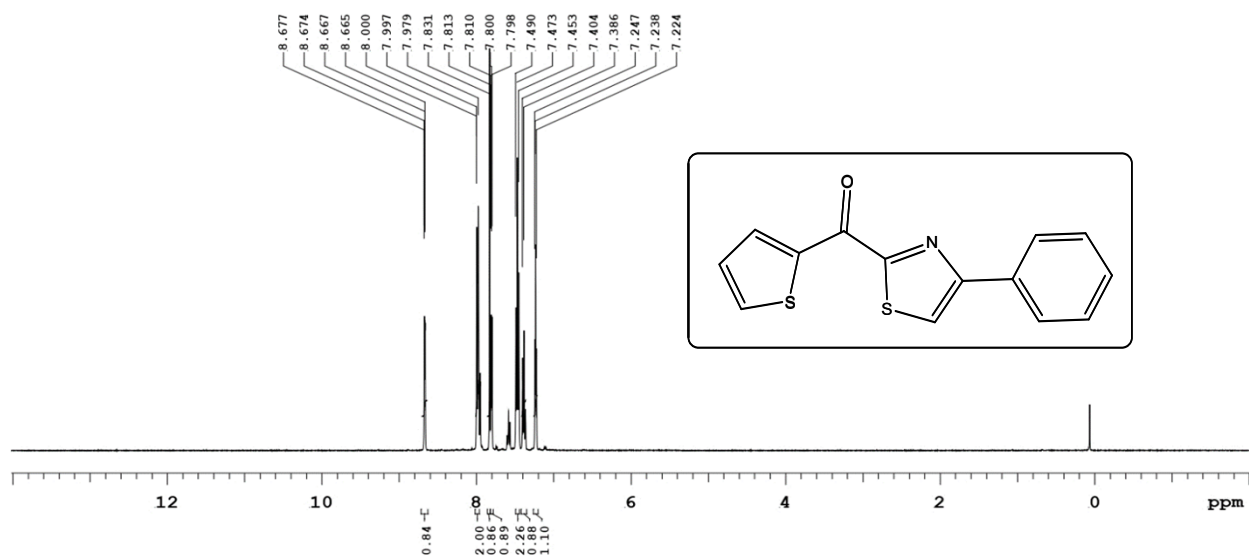
**<sup>1</sup>H & <sup>13</sup>C NMR of 4-(4-Phenylthiazole-2-carbonyl)benzonitrile (4d)**



**<sup>1</sup>H & <sup>13</sup>C NMR of [1,1'-biphenyl]-4-yl(4-phenylthiazol-2-yl)methanone (4e)**

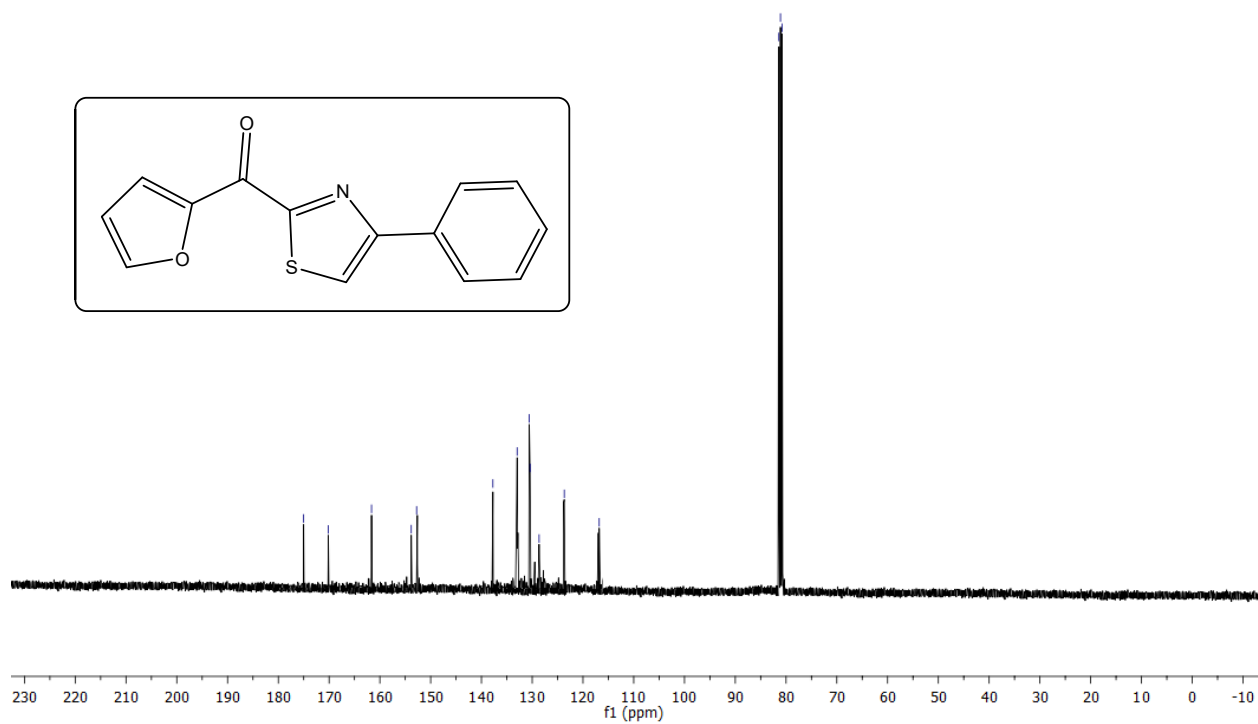
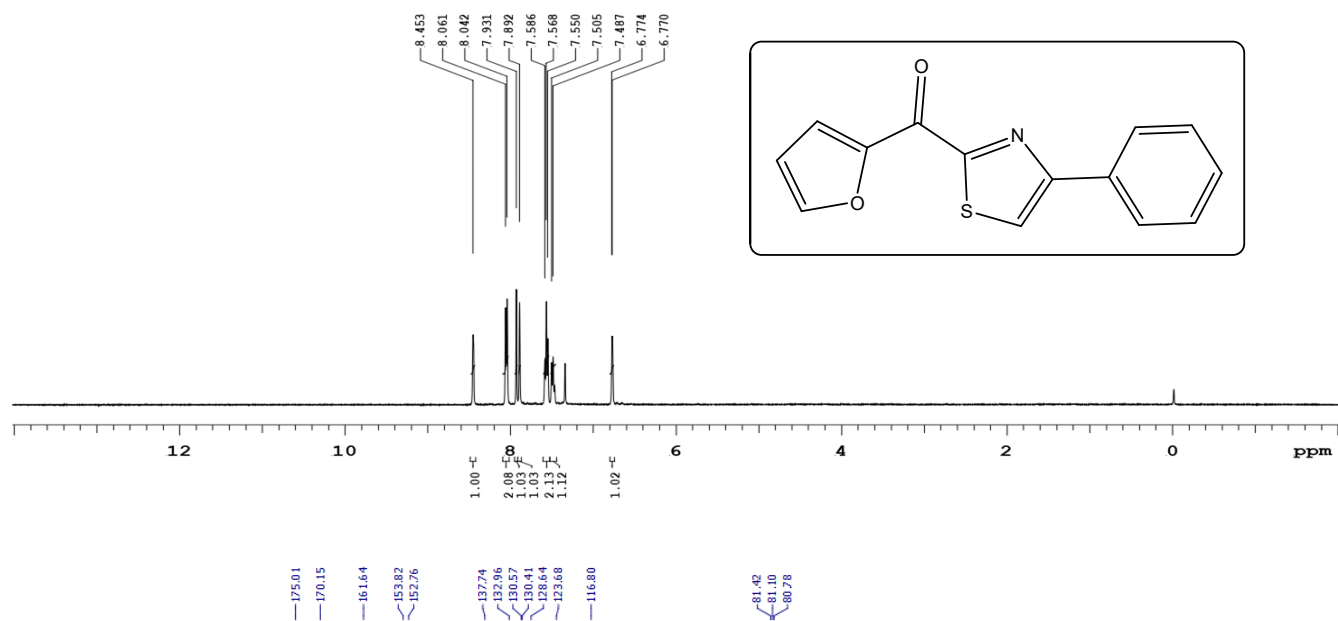


**<sup>1</sup>H & <sup>13</sup>C NMR of Naphthalen-1-yl(4-phenylthiazol-2-yl)methanone (4f)**

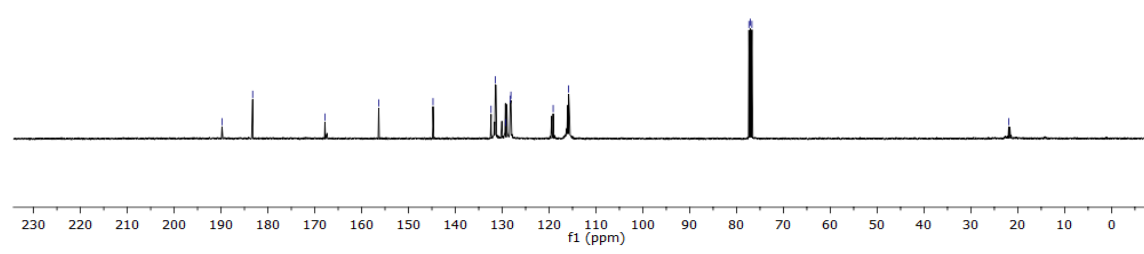
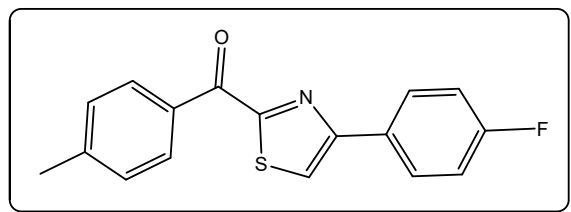
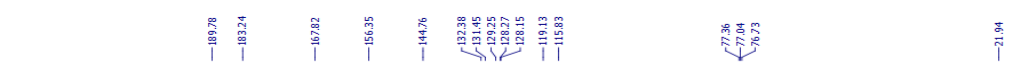
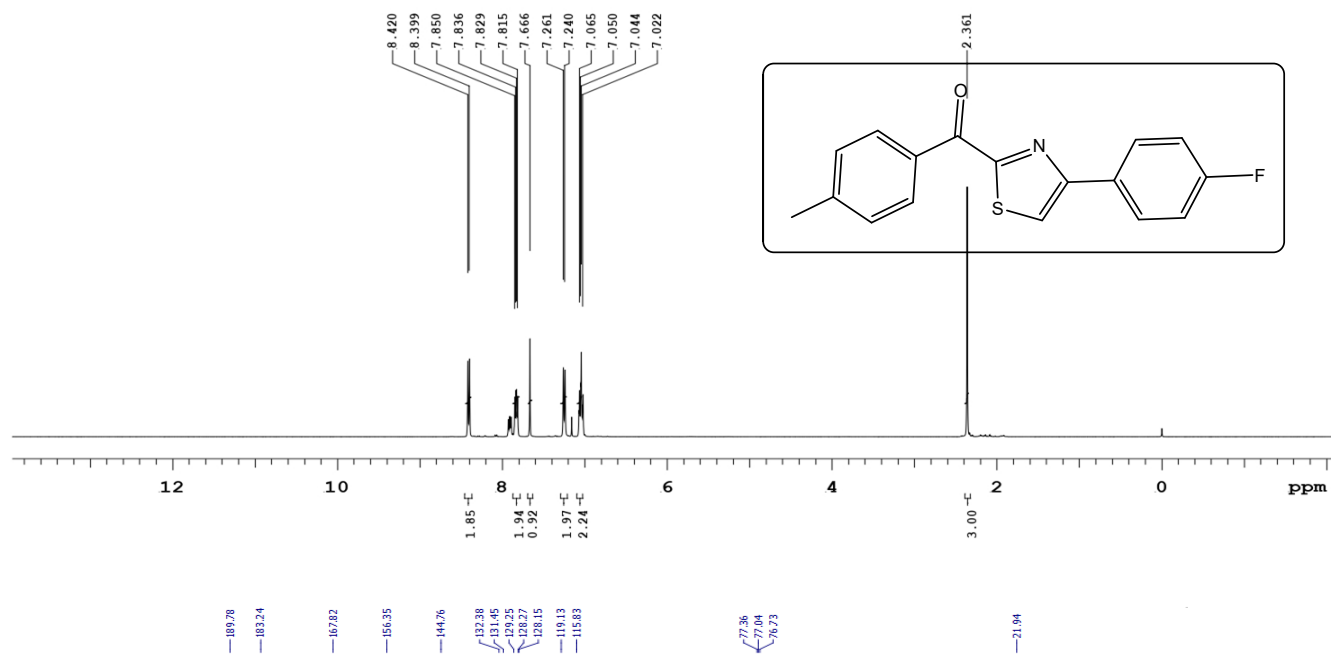


**<sup>1</sup>H & <sup>13</sup>C NMR of (4-Phenylthiazol-2-yl)(thiophen-2-yl)methanone (4g)**

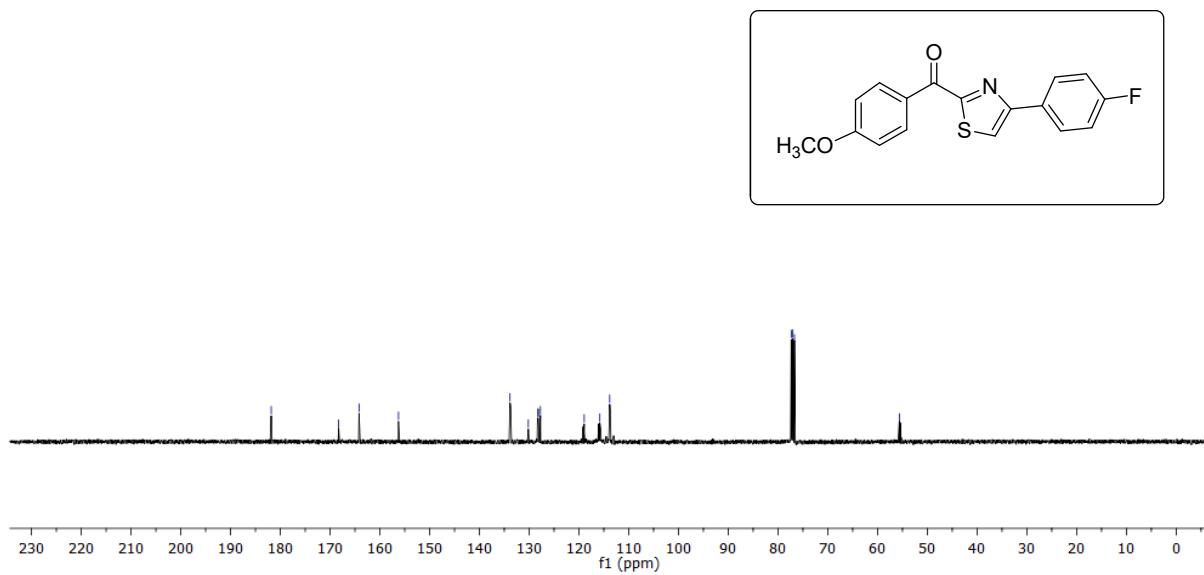
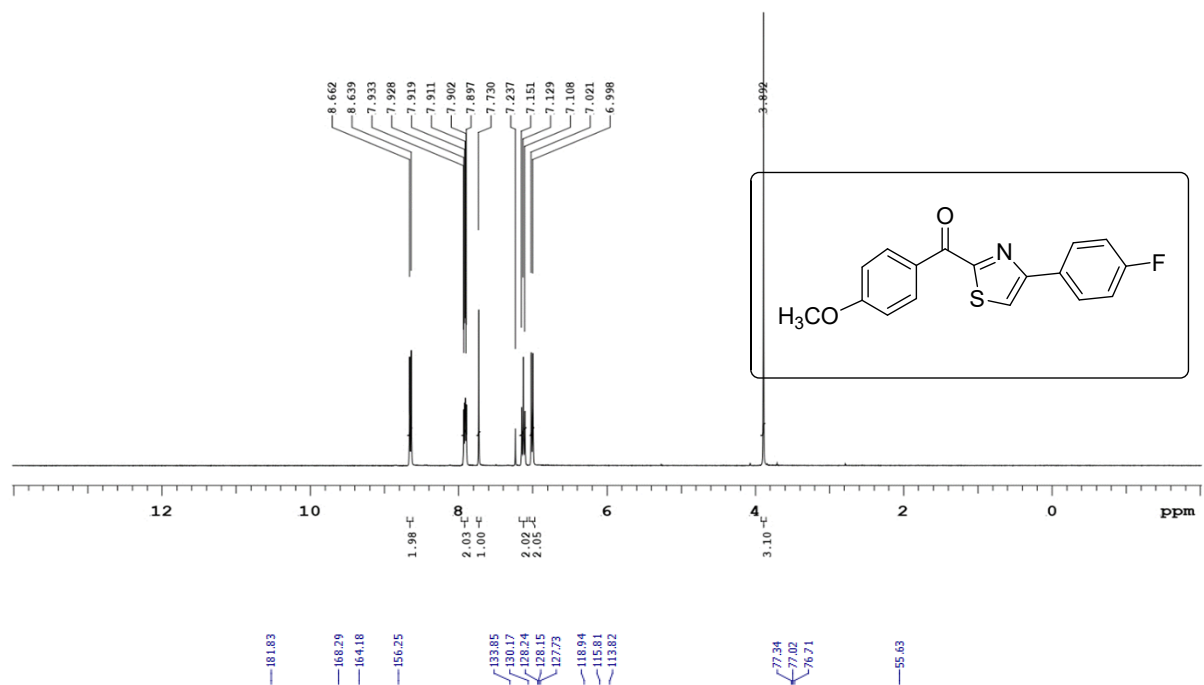




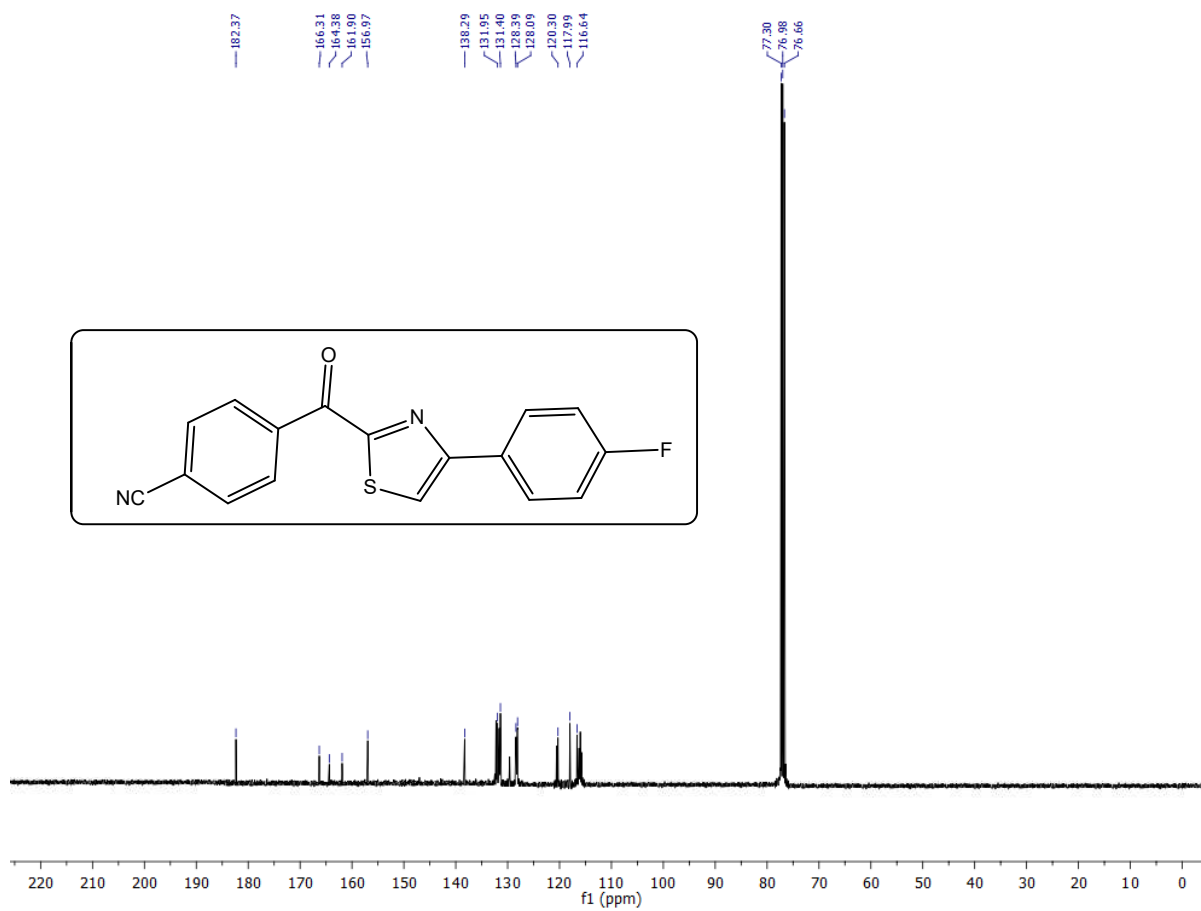
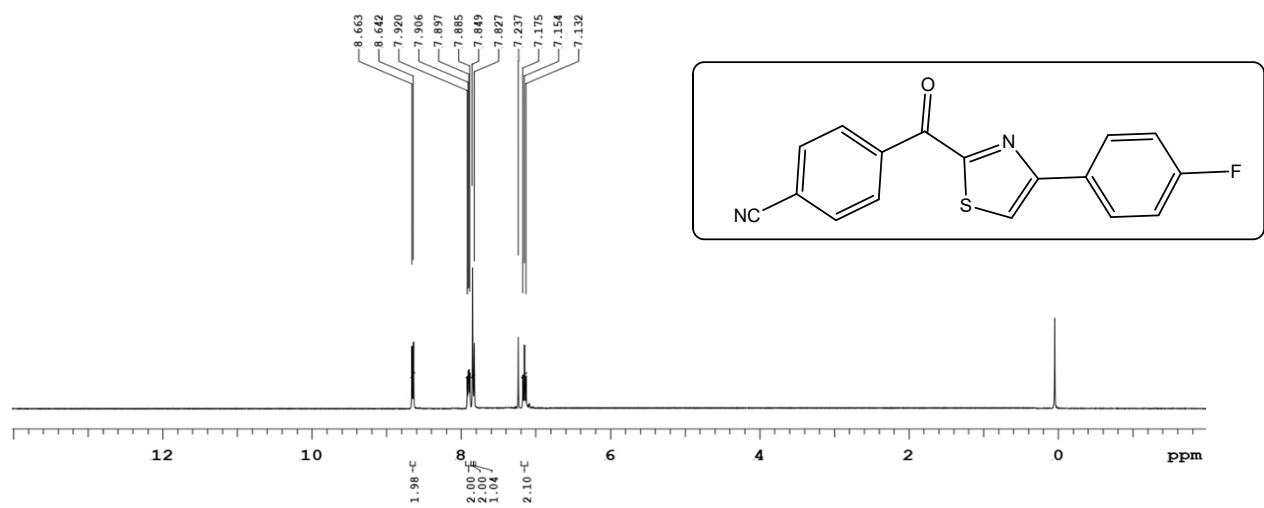
**<sup>1</sup>H & <sup>13</sup>C NMR of Furan-2-yl(4-phenylthiazol-2-yl)methanone (4h)**



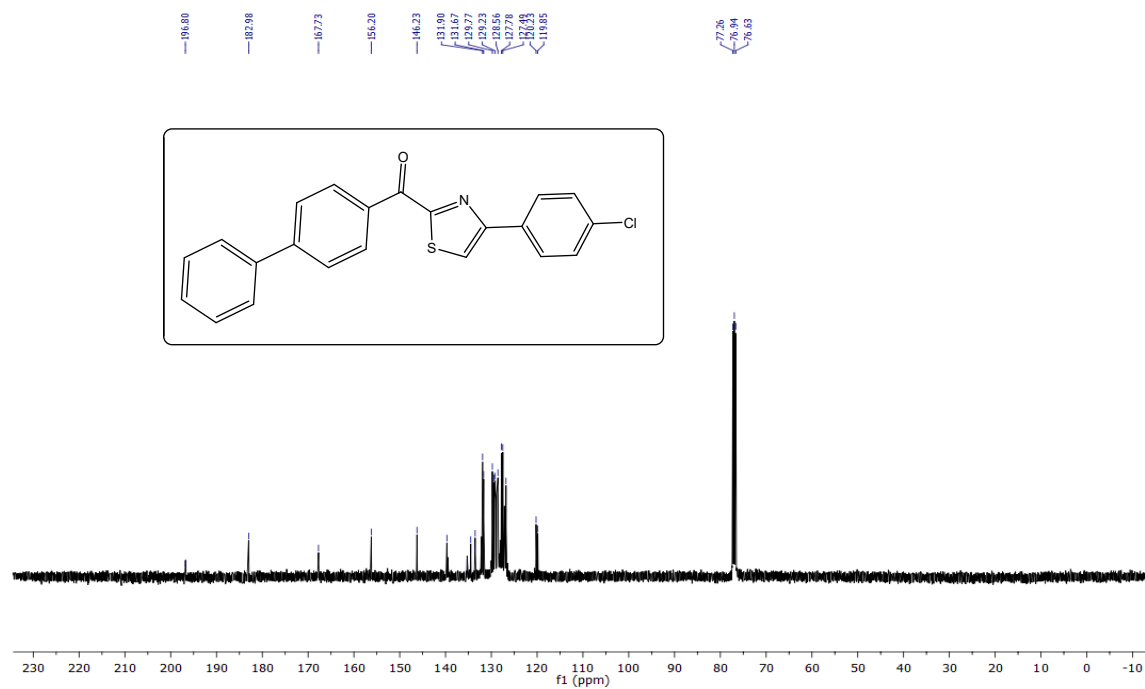
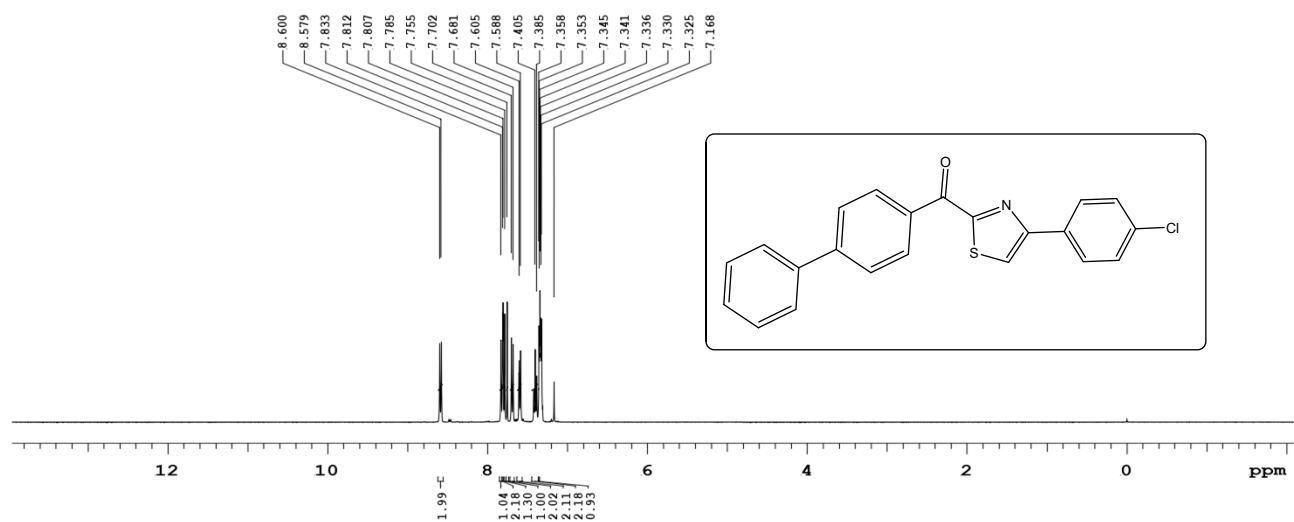
**<sup>1</sup>H & <sup>13</sup>C NMR of (4-(4-Fluorophenyl)thiazol-2-yl)(p-tolyl)methanone (4i)**



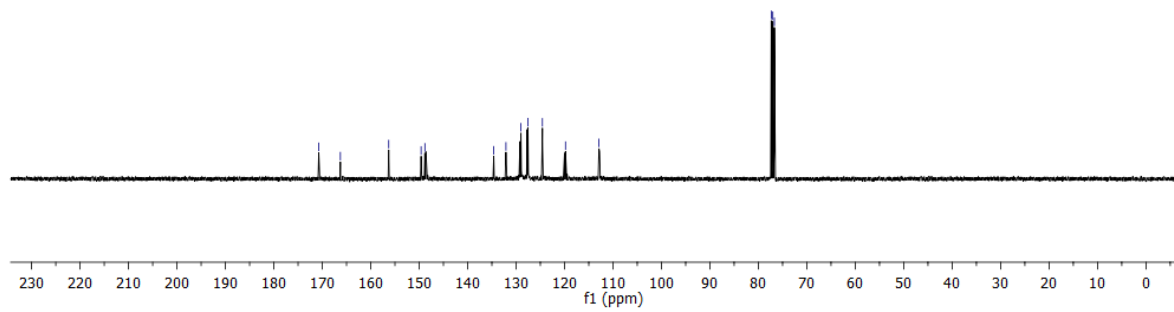
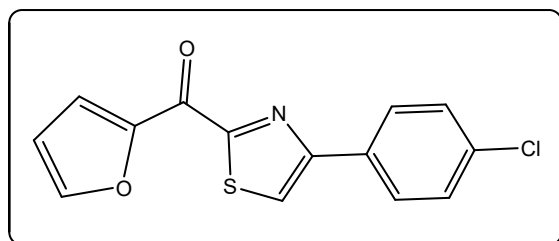
**<sup>1</sup>H & <sup>13</sup>C NMR of (4-(4-Fluorophenyl)thiazol-2-yl)(4-methoxyphenyl)methanone (4j)**



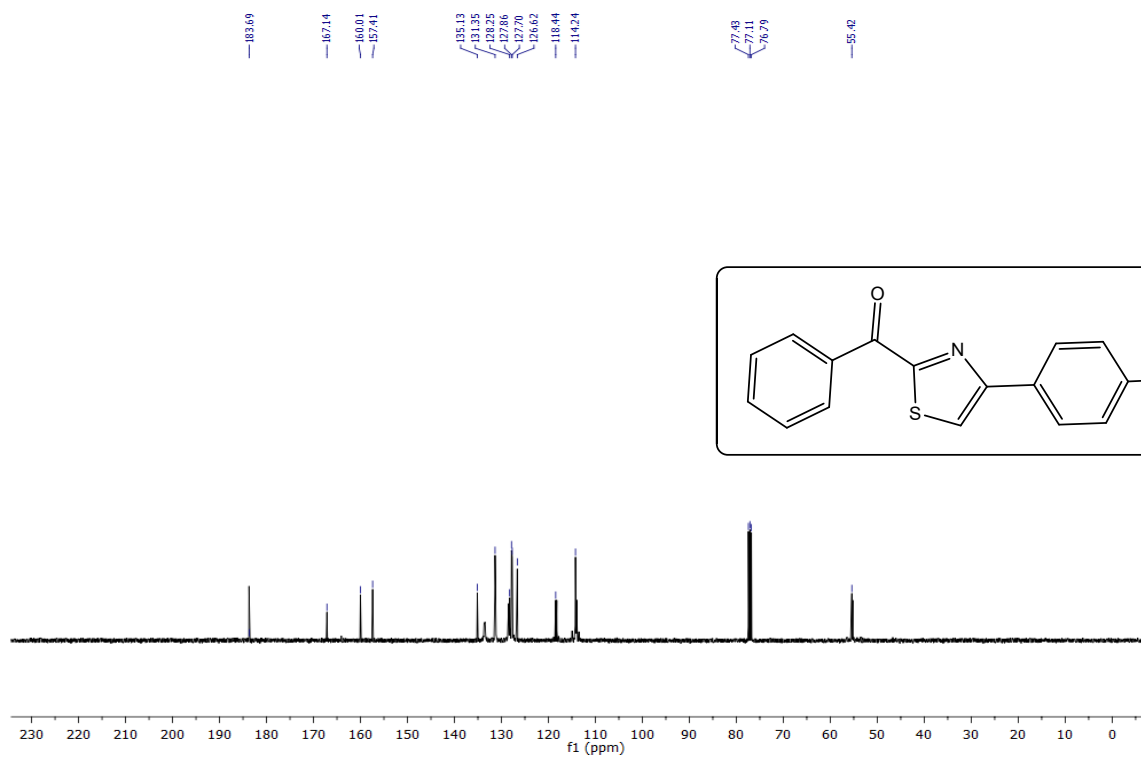
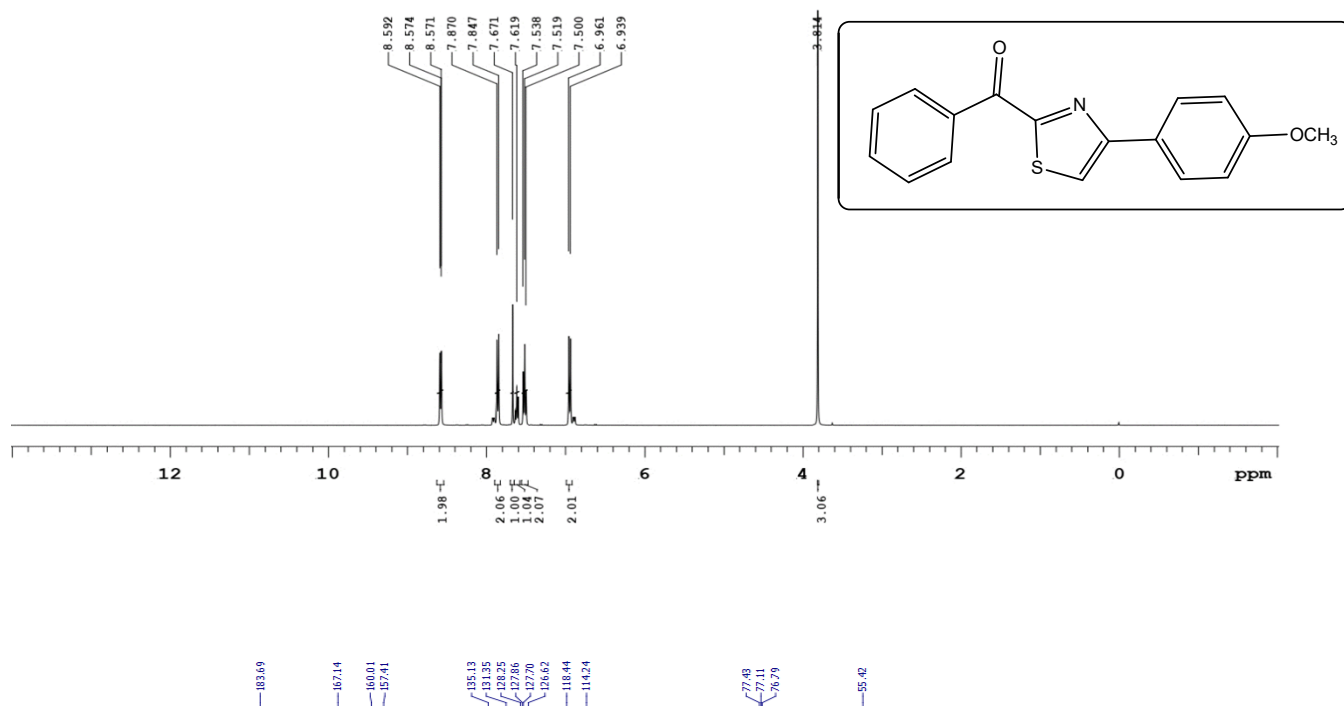
**<sup>1</sup>H & <sup>13</sup>C NMR of 4-(4-(4-Fluorophenyl)thiazole-2-carbonyl)benzonitrile (4k)**



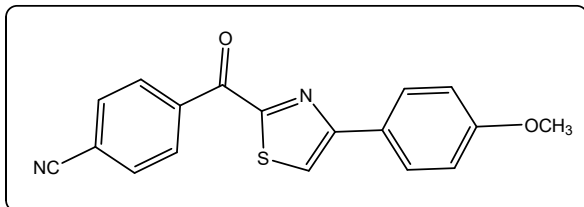
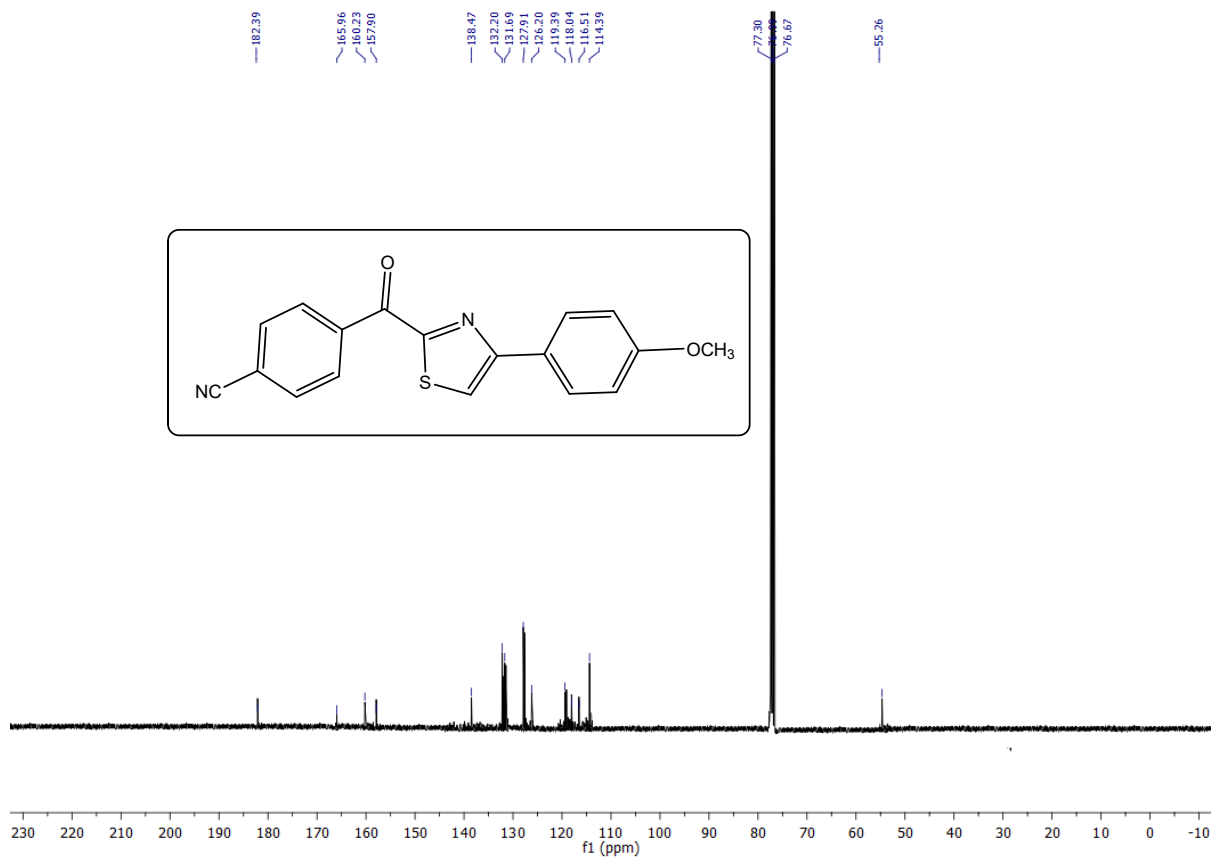
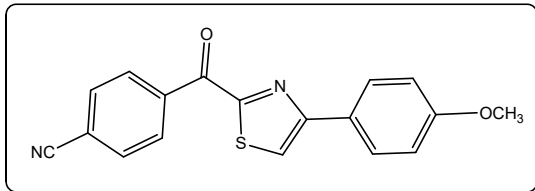
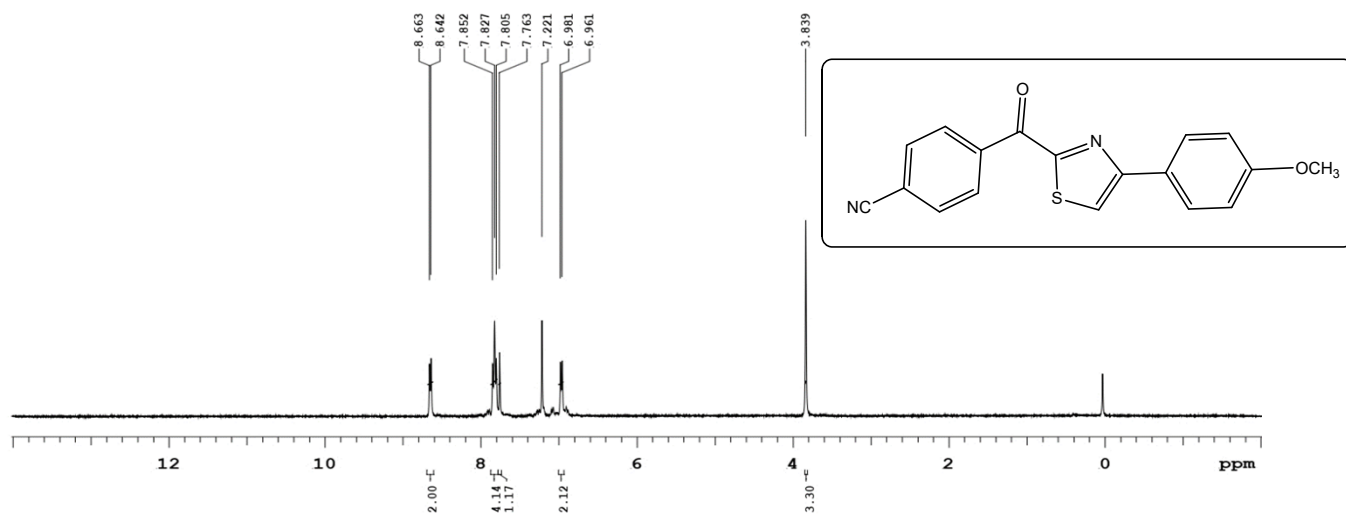
**<sup>1</sup>H & <sup>13</sup>C NMR of [1,1'-Biphenyl]-4-yl(4-(4-chlorophenyl)thiazol-2-yl)methanone (4l)**



**<sup>1</sup>H & <sup>13</sup>C NMR of (4-(4-Chlorophenyl)thiazol-2-yl)furan-2-ylmethanone (4m)**

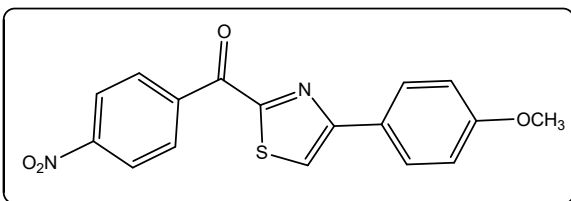
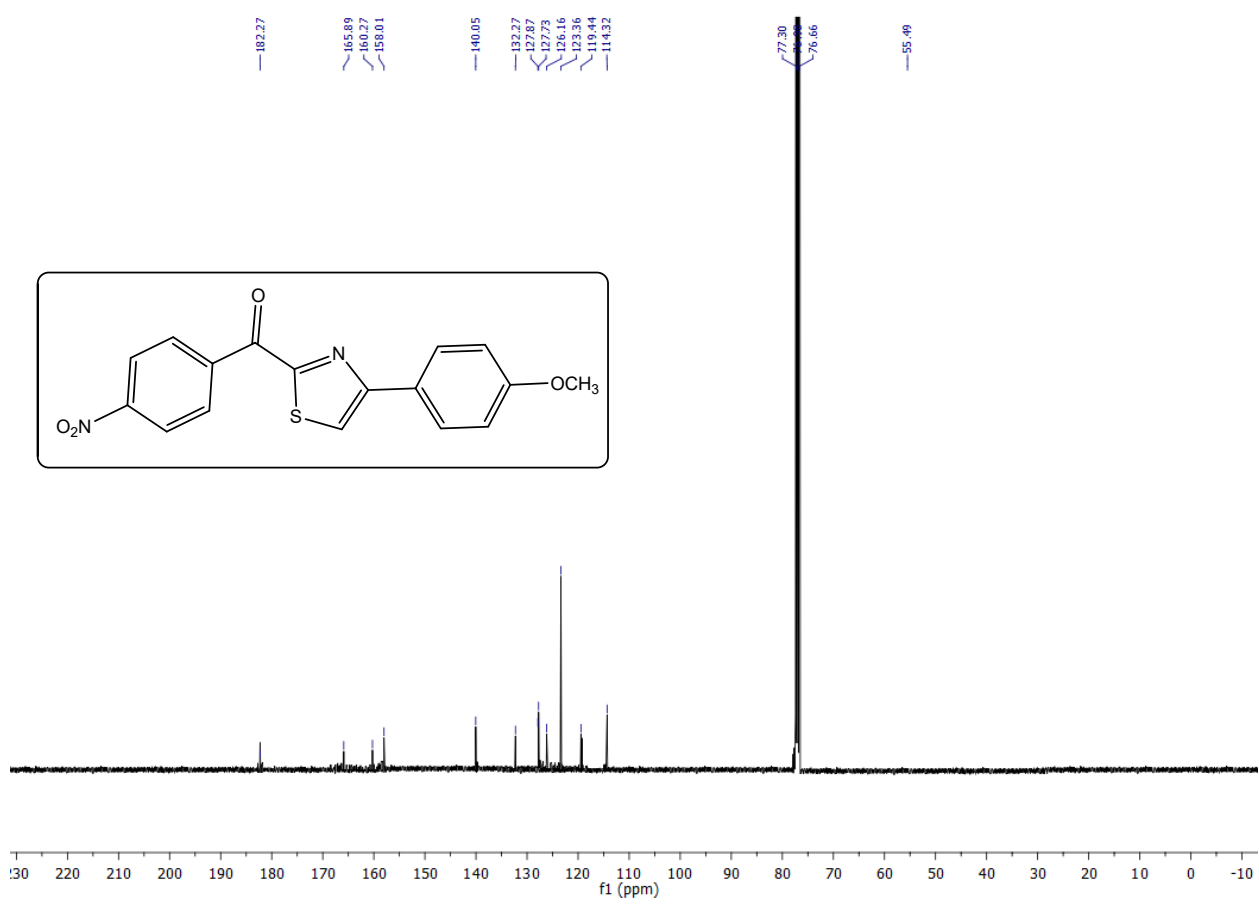
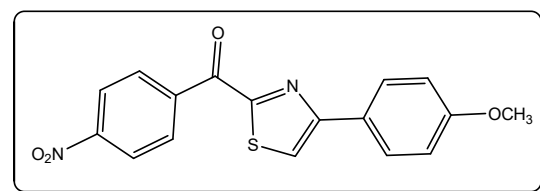
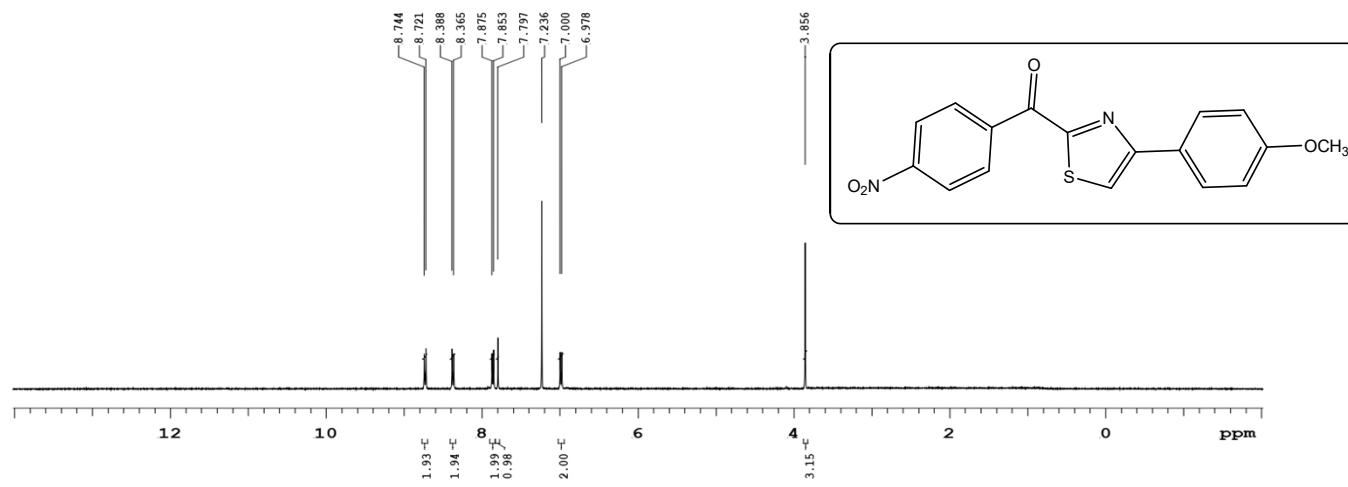


**<sup>1</sup>H & <sup>13</sup>C NMR of (4-(4-Methoxyphenyl)thiazol-2-yl)(phenyl)methanone (4n)**

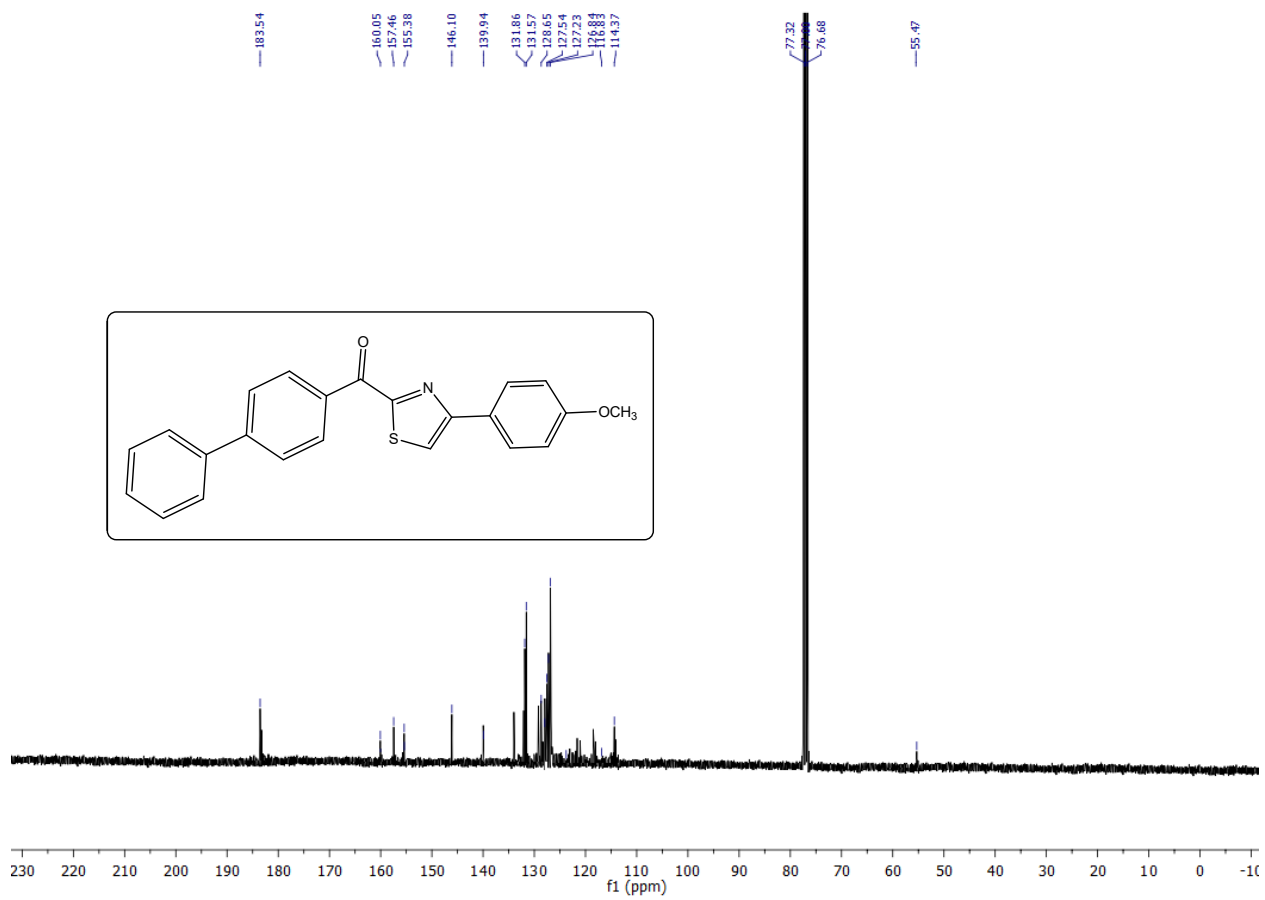
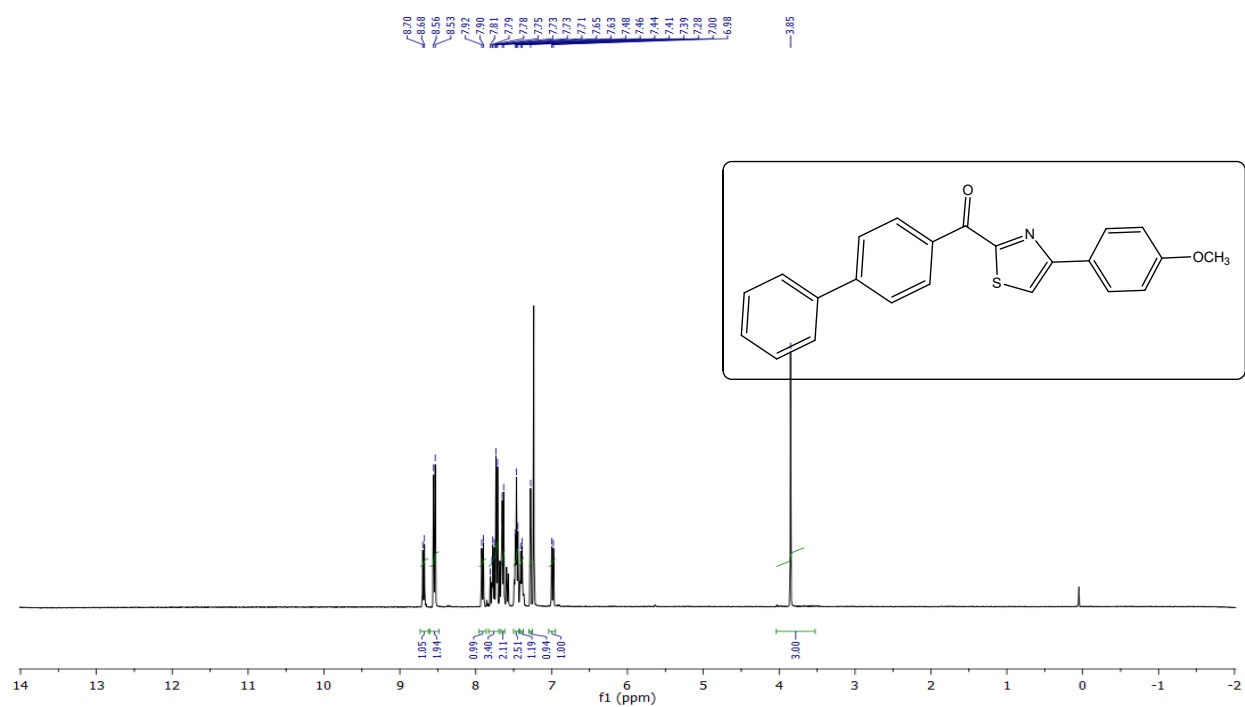


**<sup>1</sup>H & <sup>13</sup>C NMR of 4-(4-(4-Methoxyphenyl)thiazole-2-carbonyl)benzonitrile (4o)**

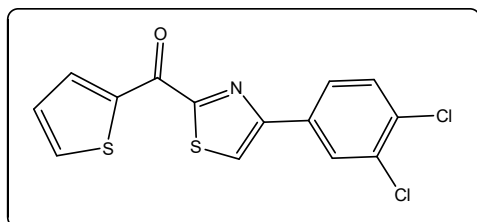
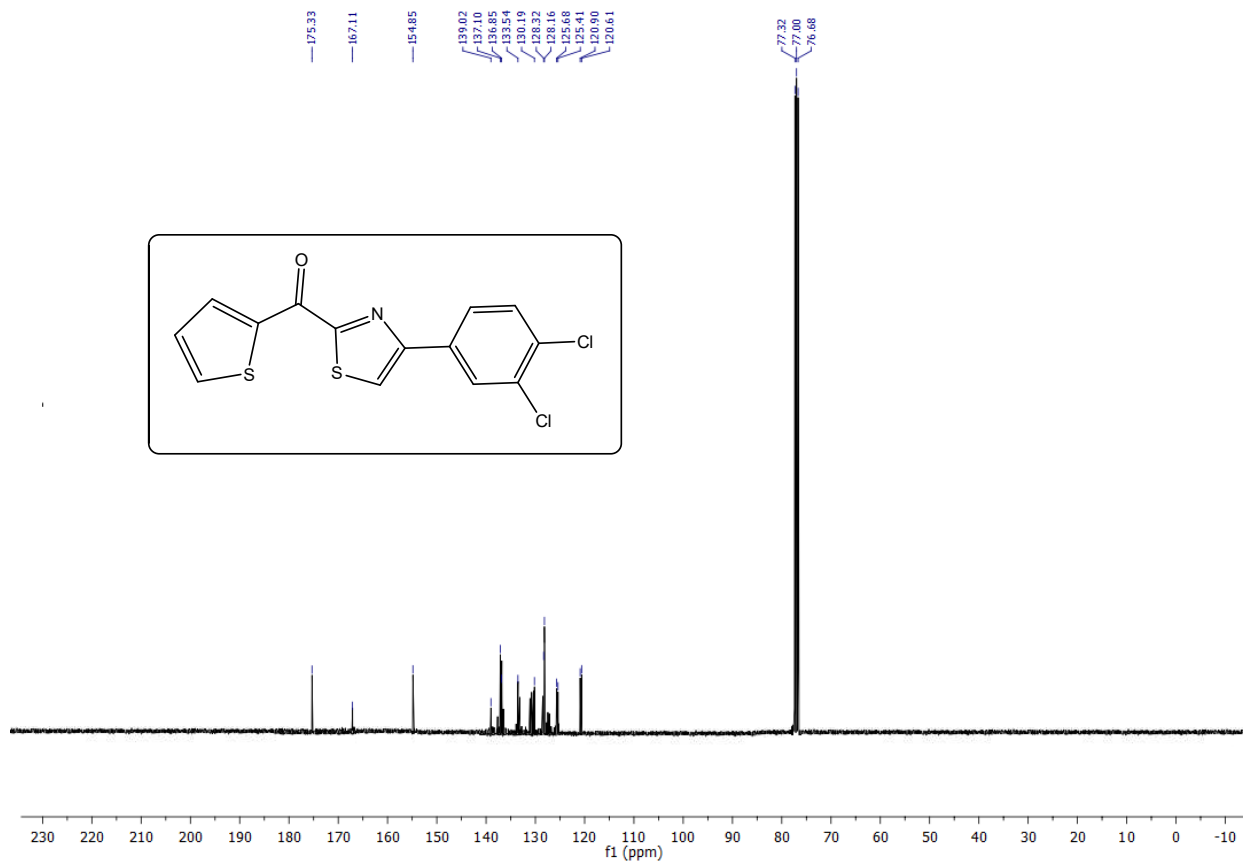
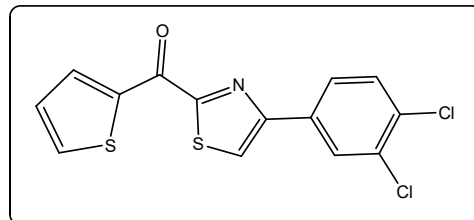
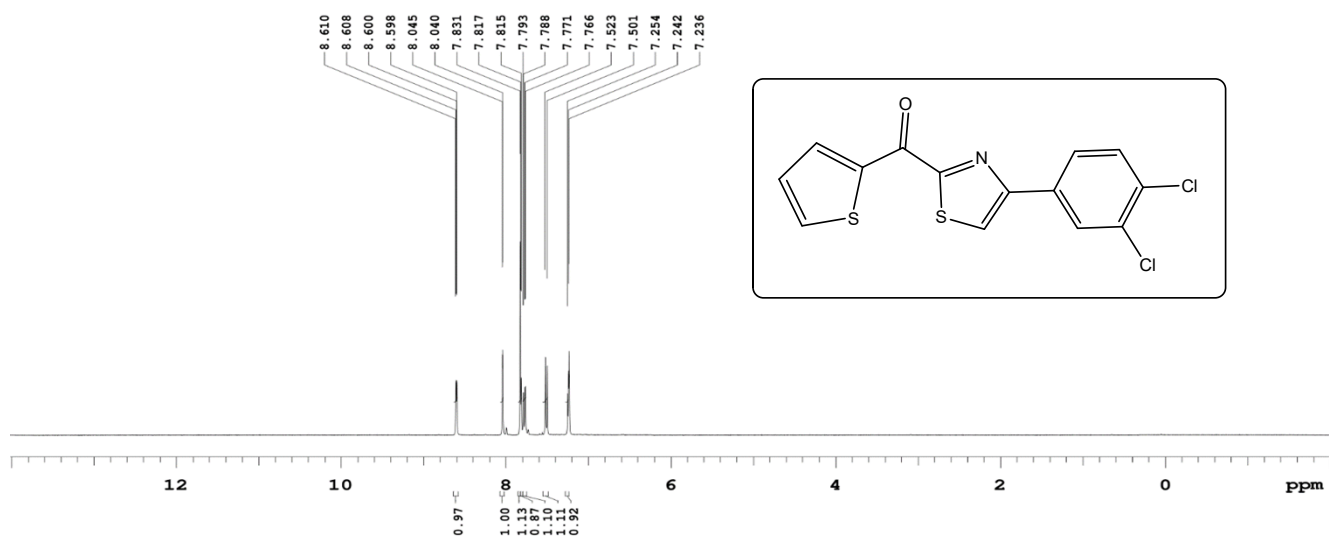




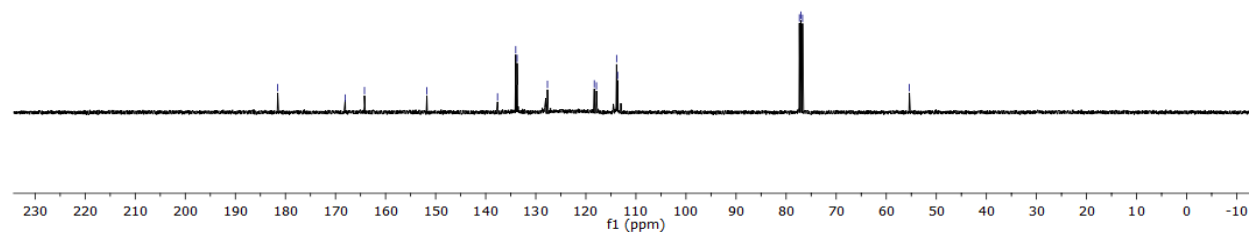
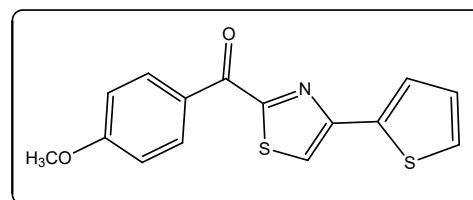
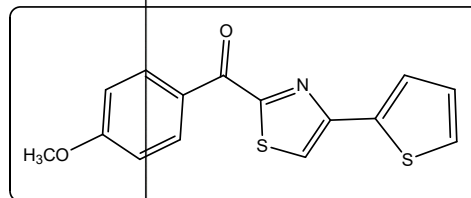
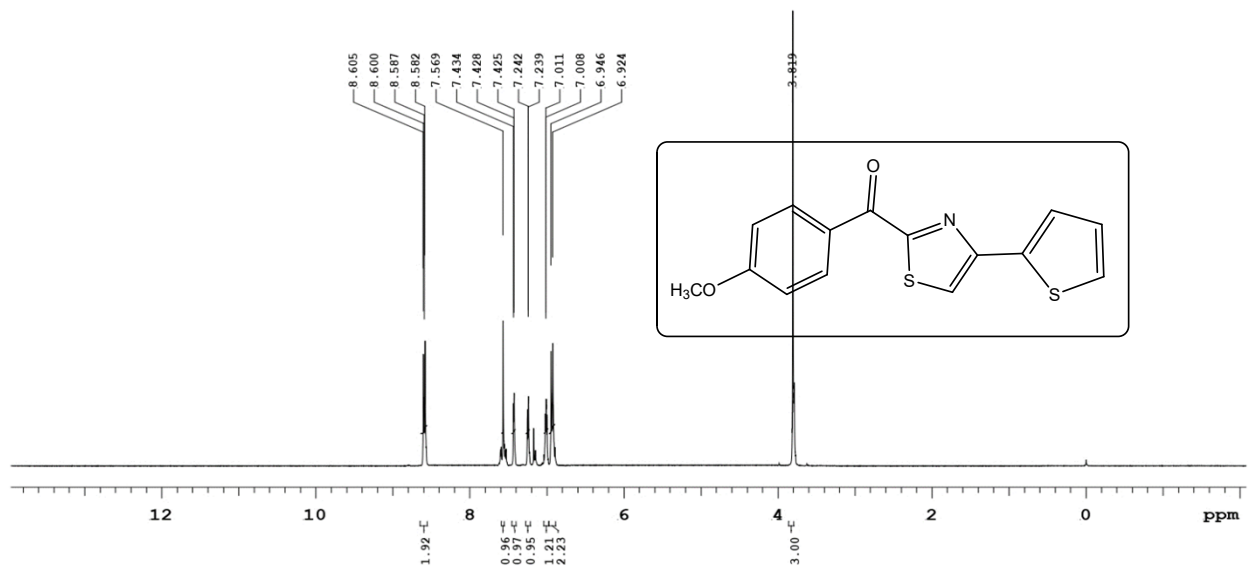
**<sup>1</sup>H & <sup>13</sup>C NMR of (4-(4-Methoxyphenyl)thiazol-2-yl)(4-nitrophenyl)methanone (4p)**



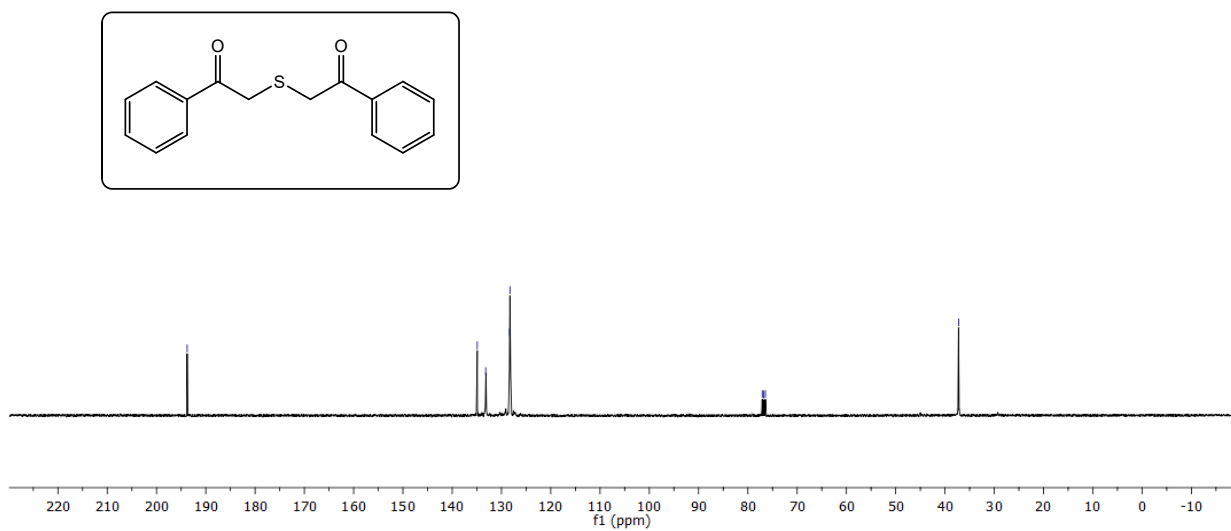
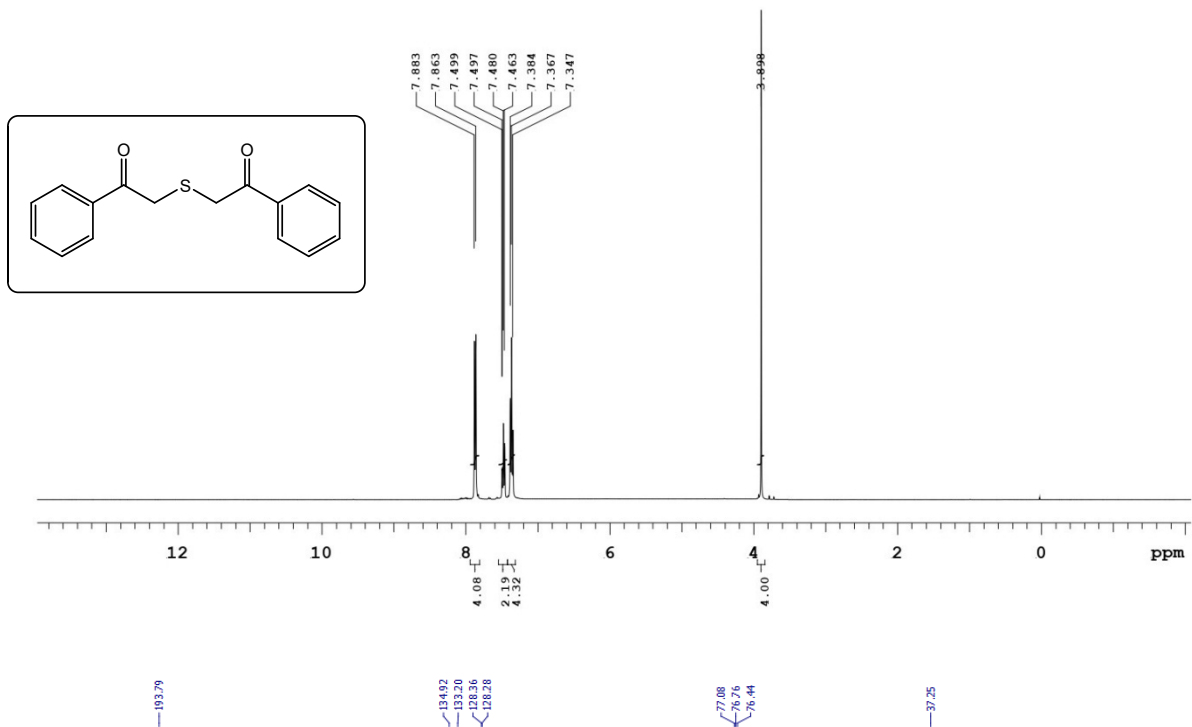
**$^1\text{H}$  &  $^{13}\text{C}$  NMR of [1,1'-Biphenyl]-4-yl(4-(4-methoxyphenyl)thiazol-2-yl)methanone (4q)**



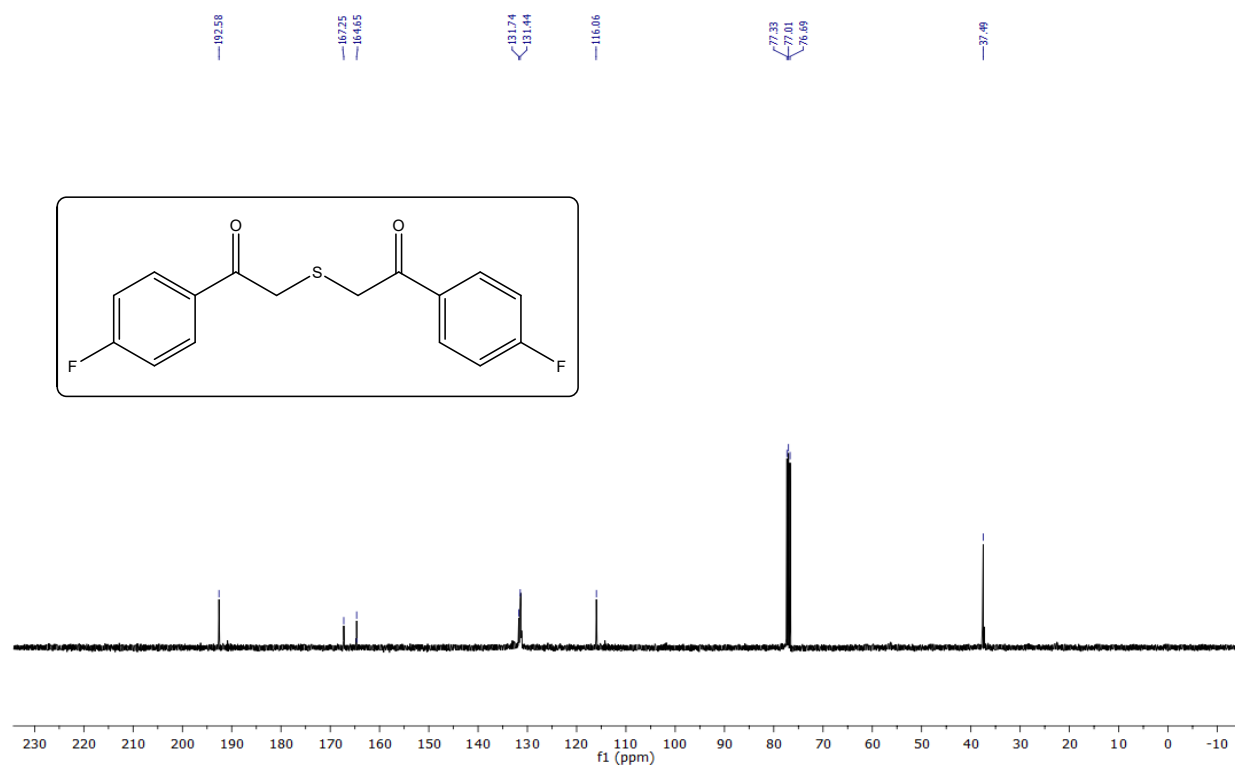
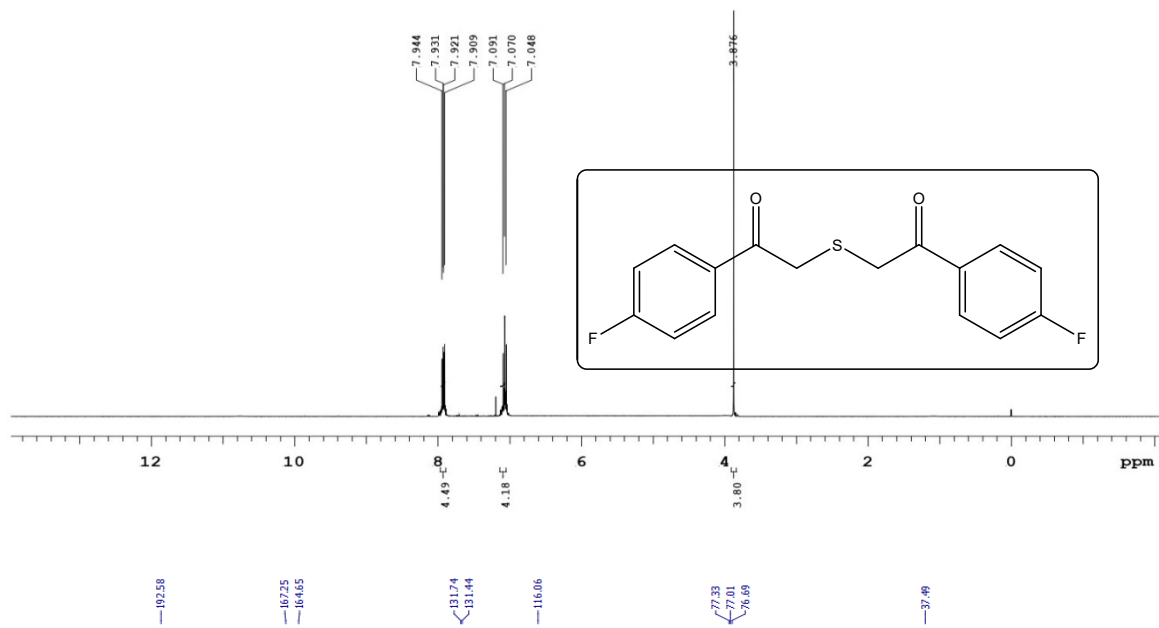
**<sup>1</sup>H & <sup>13</sup>C NMR of (4-(3,4-Dichlorophenyl)thiazol-2-yl)(thiophen-2-yl)methanone (4r)**



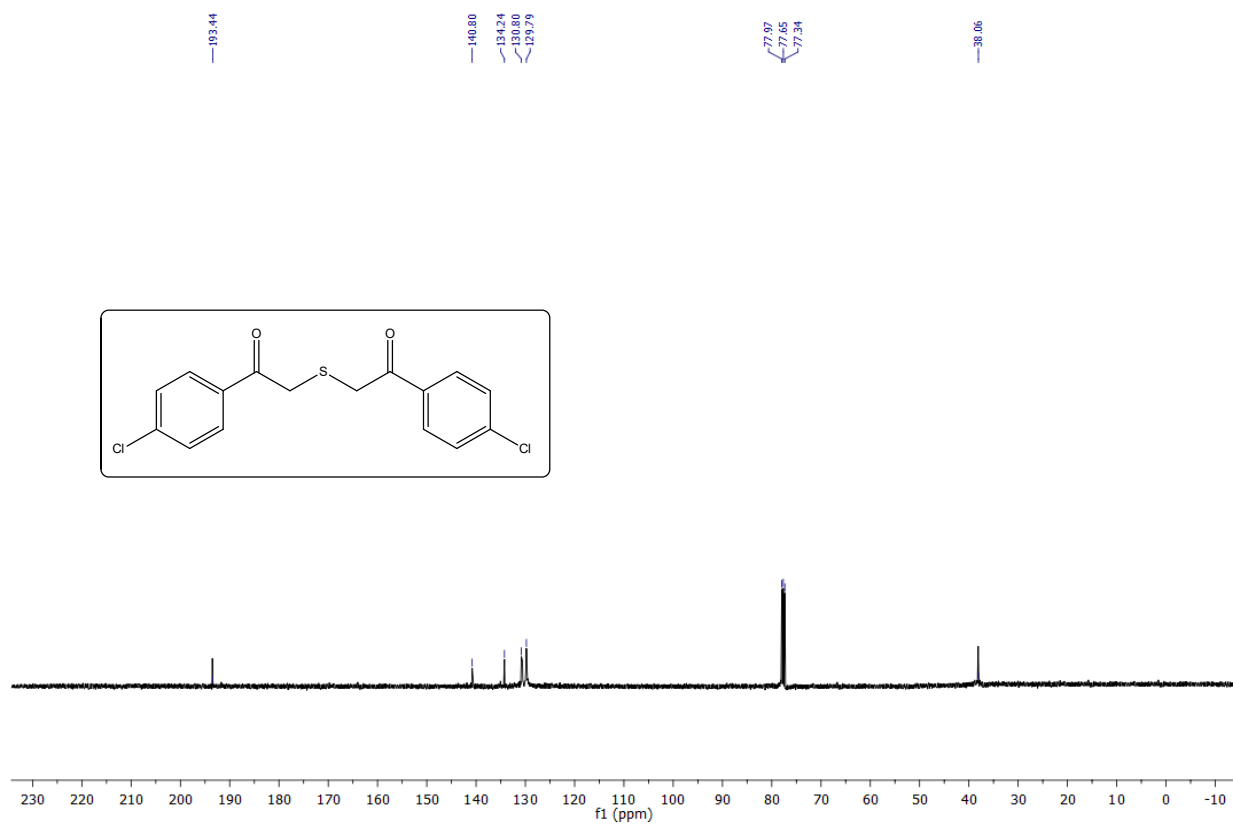
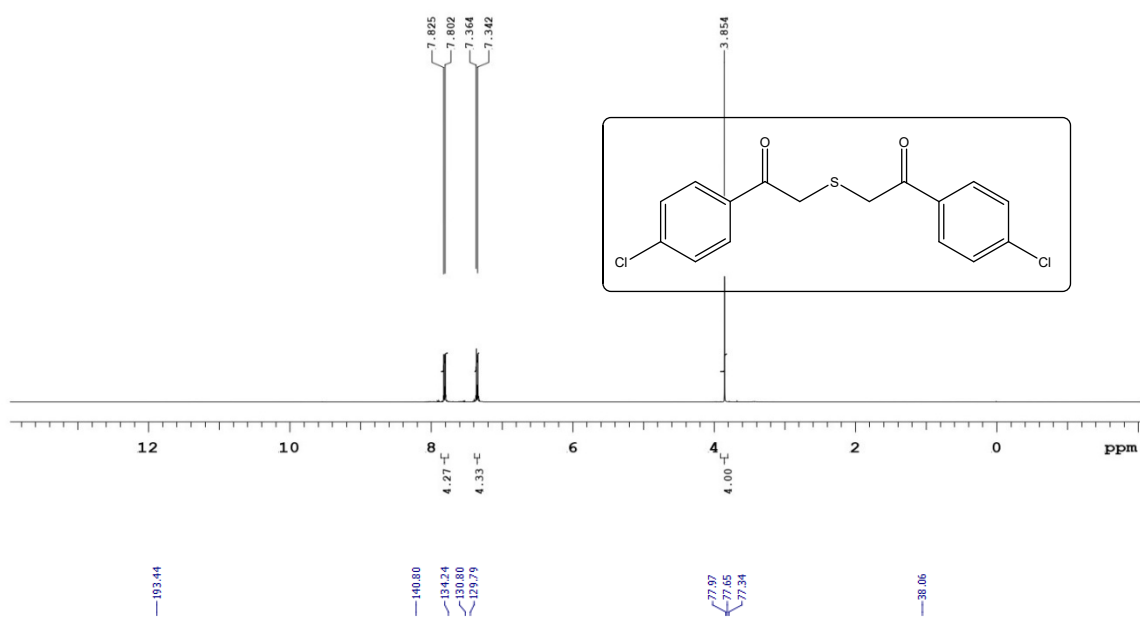
**<sup>1</sup>H & <sup>13</sup>C NMR of (4-methoxyphenyl)(4-(thiophen-2-yl)thiazol-2-yl)methanone (4s)**



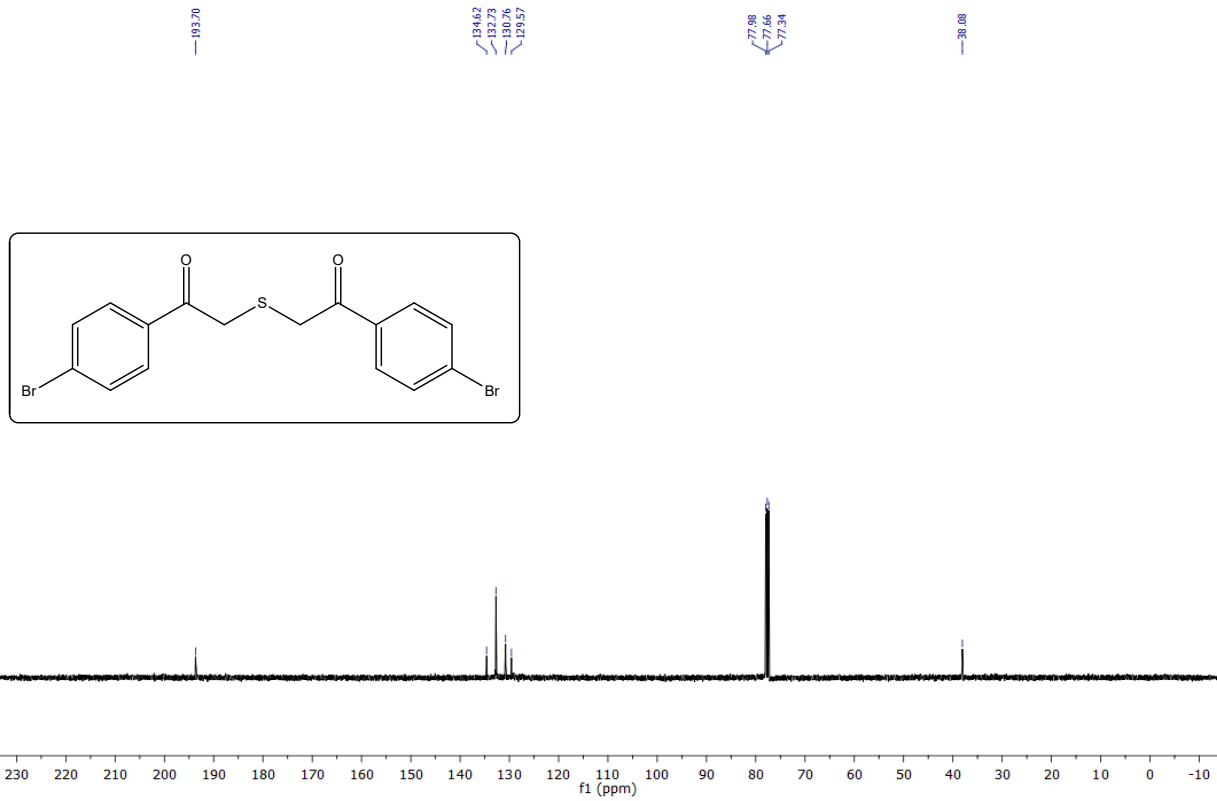
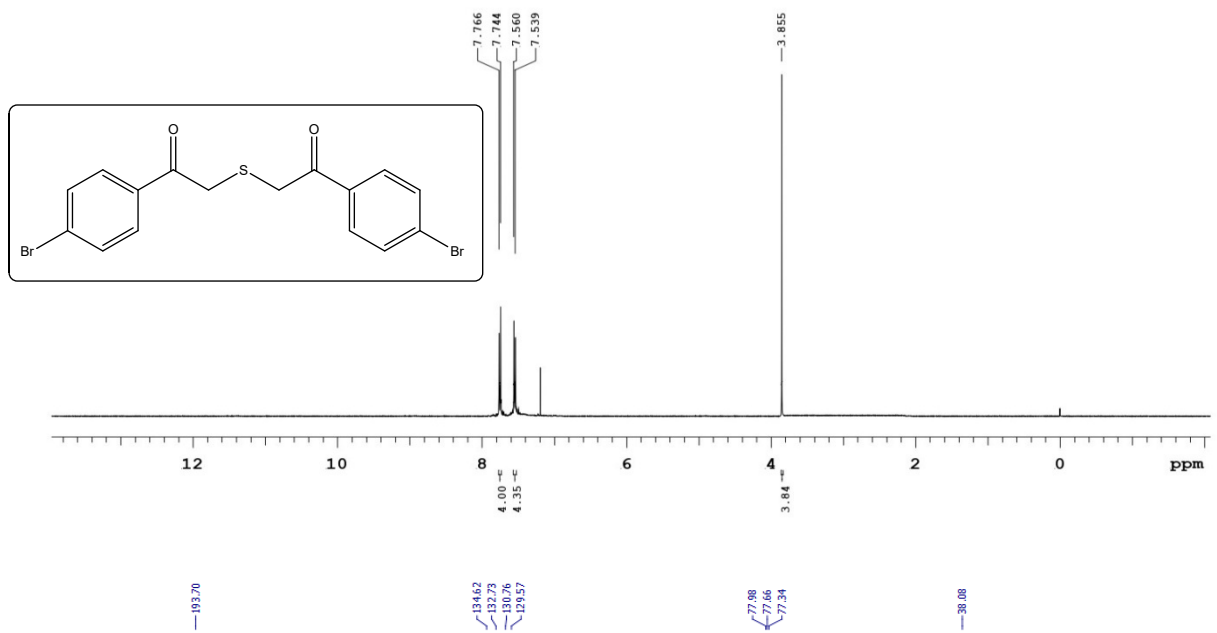
**<sup>1</sup>H & <sup>13</sup>C NMR of 2,2'-thiobis(1-phenylethanone) (5a)**



**<sup>1</sup>H & <sup>13</sup>C NMR of 2, 2'-thiobis(1-(4-fluorophenyl)ethanone) (5b)**

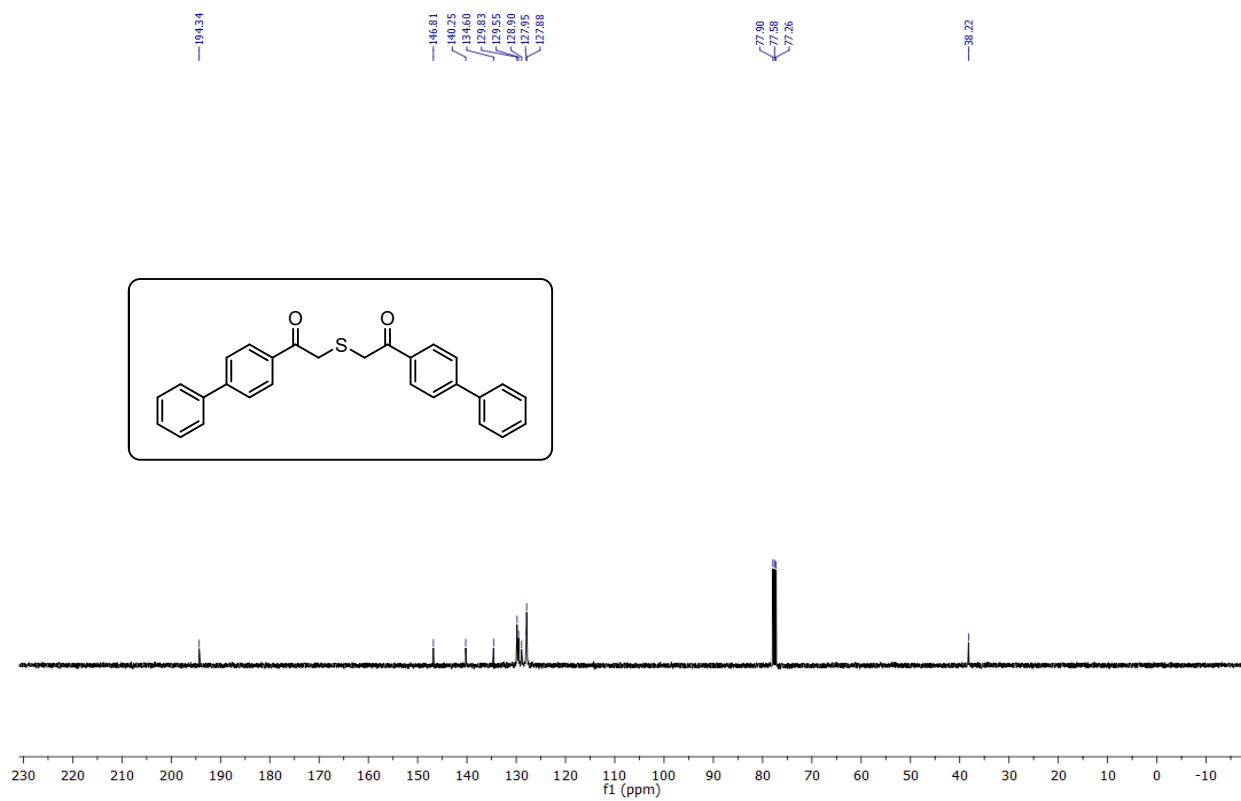
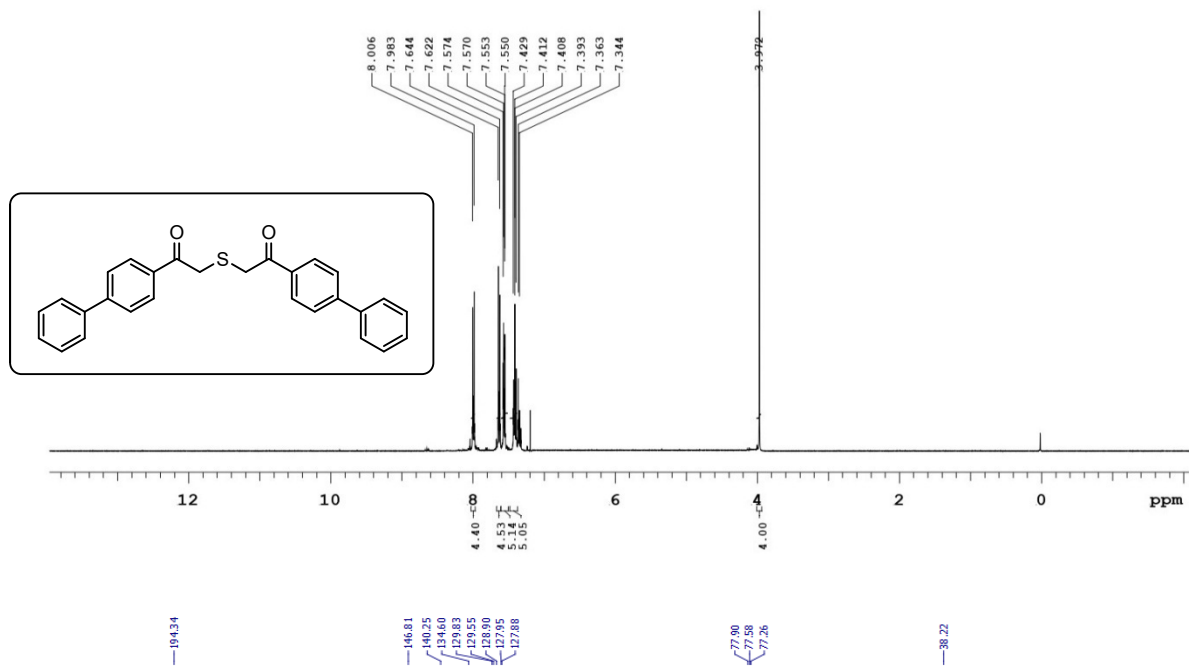


**<sup>1</sup>H & <sup>13</sup>C NMR of 2,2'-thiobis(1-(4-chlorophenyl)ethanone) (5c)**

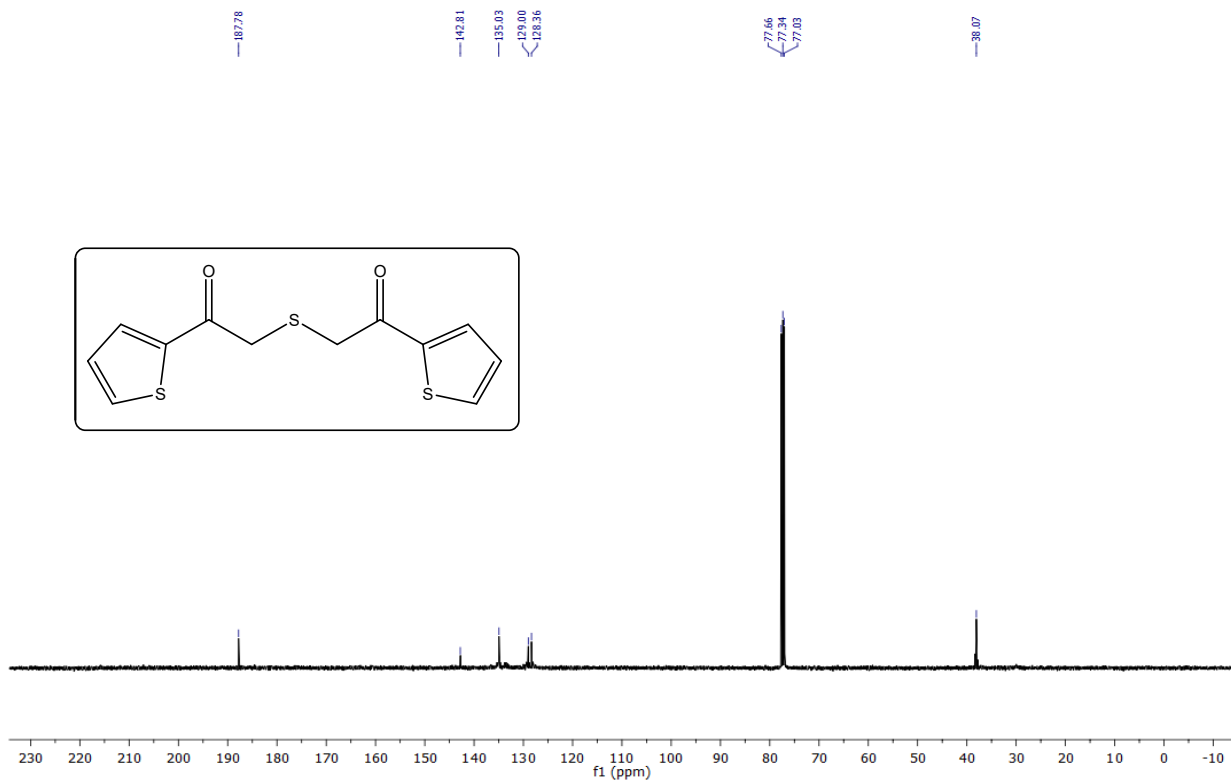
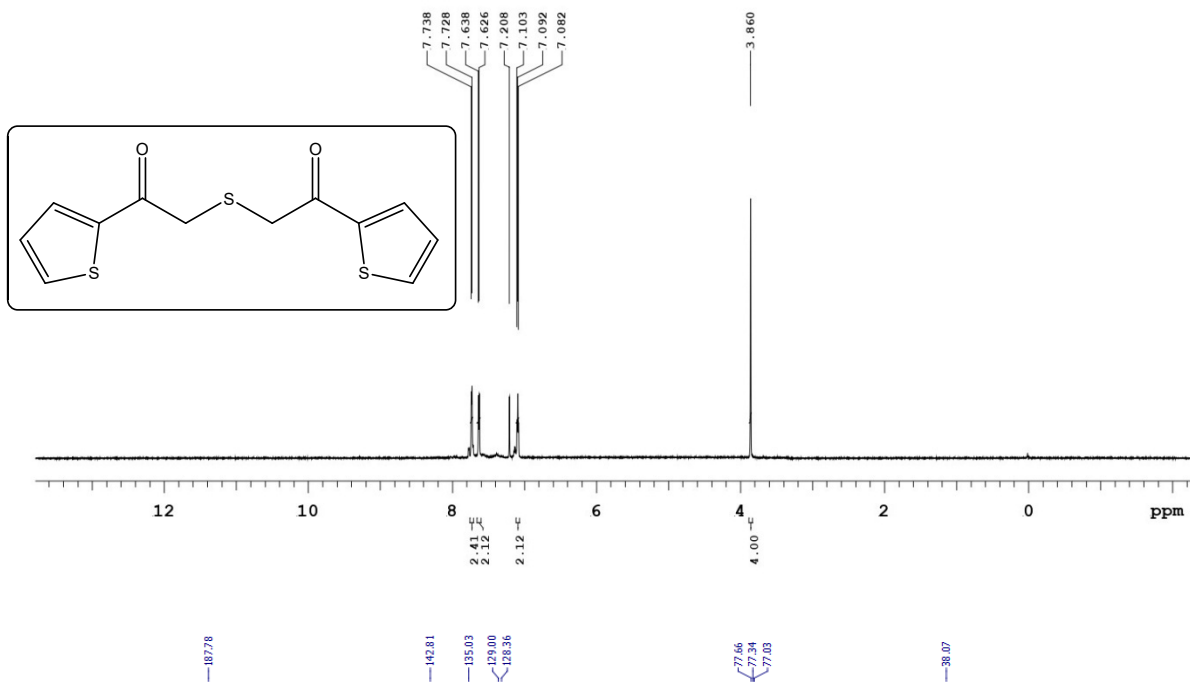


**<sup>1</sup>H & <sup>13</sup>C NMR of 2,2'-thiobis(1-(4-bromophenyl)ethanone) (5d)**





**<sup>1</sup>H & <sup>13</sup>C NMR of 2,2'-thiobis(1-([1,1'-biphenyl]-4-yl)ethanone) (5e)**



**<sup>1</sup>H & <sup>13</sup>C NMR of 2,2'-thiobis(1-(thiophen-2-yl)ethanone) (5f)**