## **Supporting Information**

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## Synthesis and biological evaluation of new 4-thiazolidinone derivatives of flurbiprofen

## Pelin Süzgün<sup>1</sup>, Sevil Şenkardeş <sup>1\*</sup>, Merve Gürboğa<sup>2</sup>, Özlem Bingöl Özakpınar <sup>2</sup> and Ş. Güniz Küçükgüzel <sup>3</sup>

<sup>1</sup>Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Marmara University, 34854, Istanbul, Türkiye

<sup>&</sup>lt;sup>3</sup>Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Fenerbahçe University, 34758, Istanbul, Türkiye

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<sup>&</sup>lt;sup>2</sup> Department of Pharmaceutical Biohemistry, Faculty of Pharmacy, Marmara University, 34854, Istanbul, Türkiye

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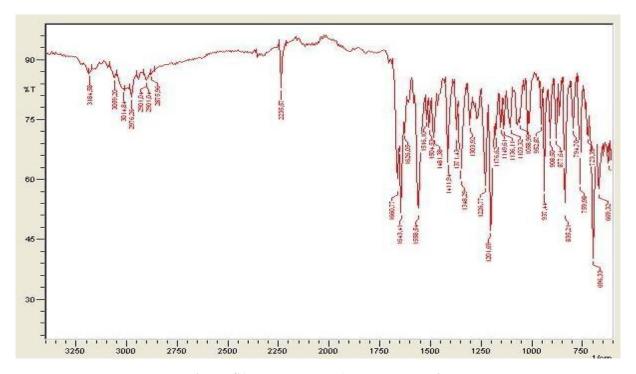


Figure S1: IR spectrum of the compound 3a

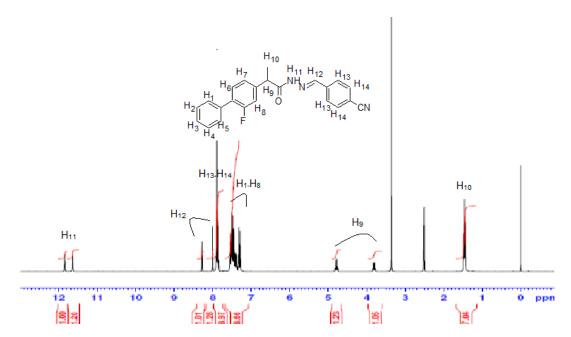


Figure S2: <sup>1</sup>H-NMR spectrum of the compound 3a

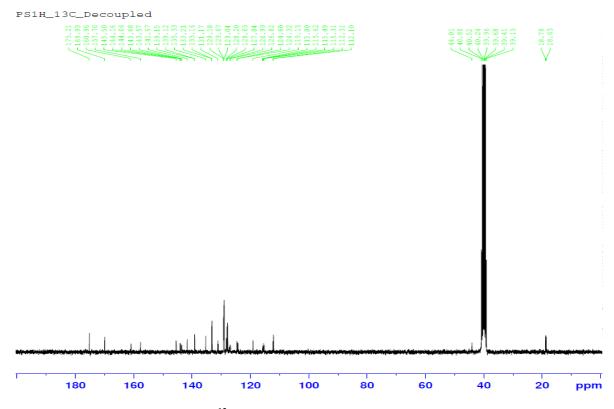


Figure S3: <sup>13</sup>C-NMR spectrum of the compound 3a

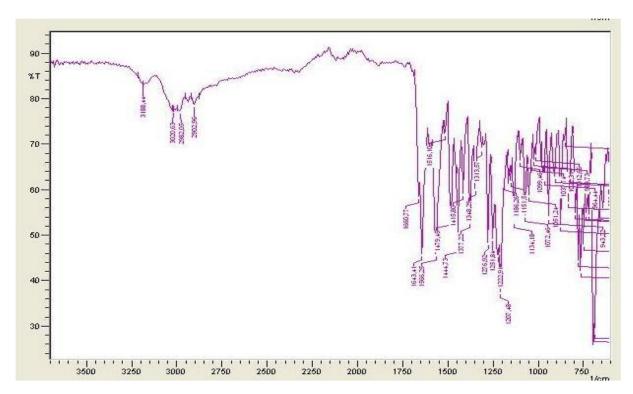


Figure S4: IR spectrum of the compound 3b

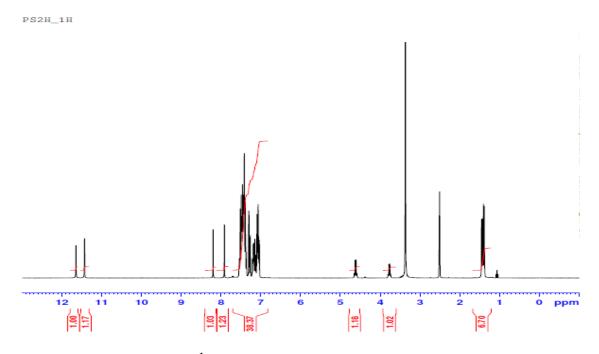


Figure S5: <sup>1</sup>H-NMR spectrum of the compound 3b

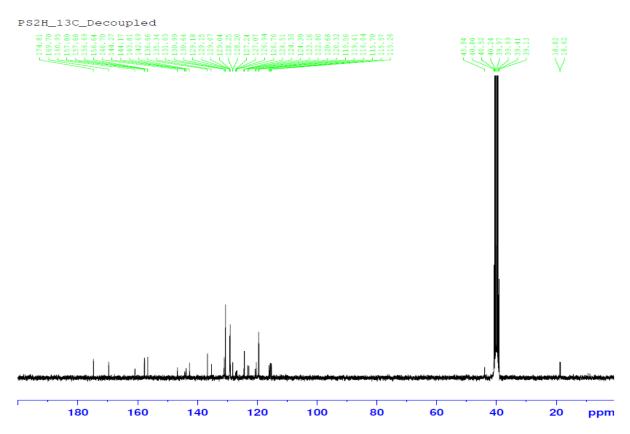
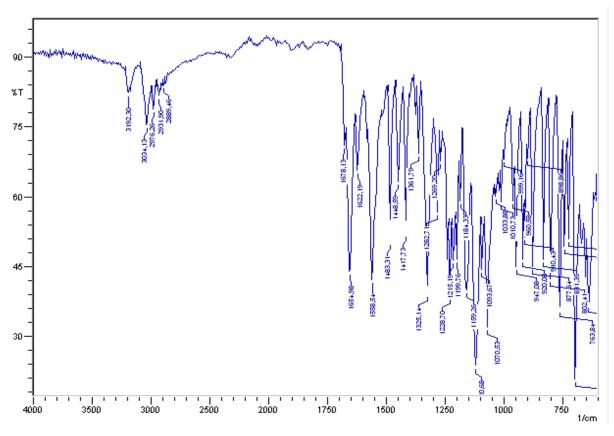


Figure S6:  $^{13}$ C-NMR spectrum of the compound 3b



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Figure S7: IR spectrum of the compound 3c

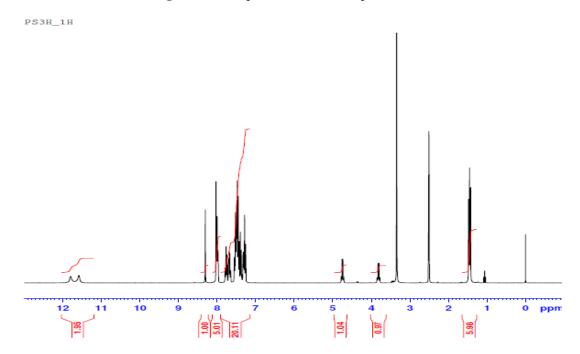


Figure S8: <sup>1</sup>H-NMR spectrum of the compound 3c

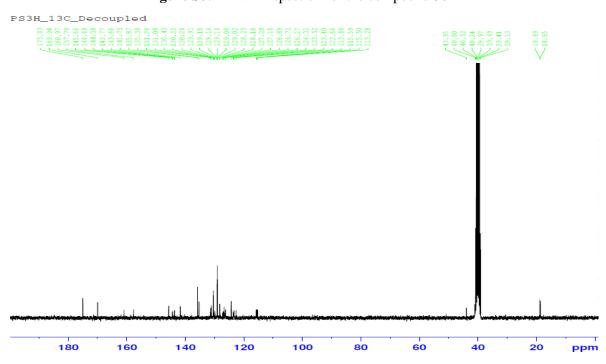


Figure S9: <sup>13</sup>C-NMR spectrum of the compound 3c

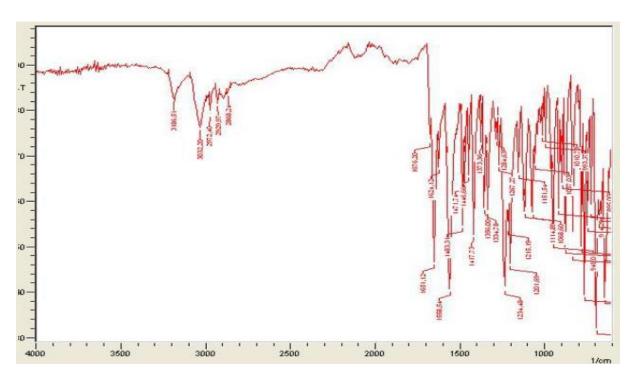


Figure S10: IR spectrum of the compound 3d

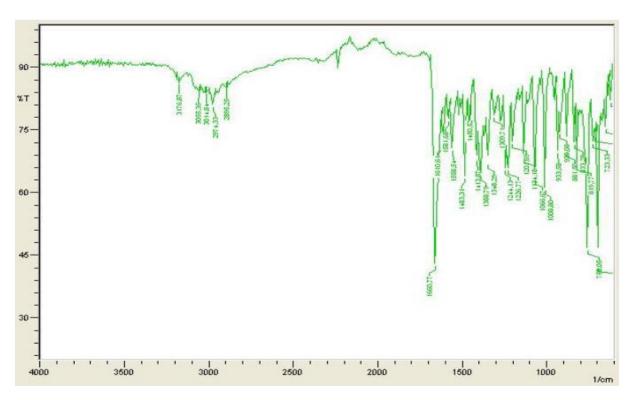


Figure S11: IR spectrum of the compound 3e

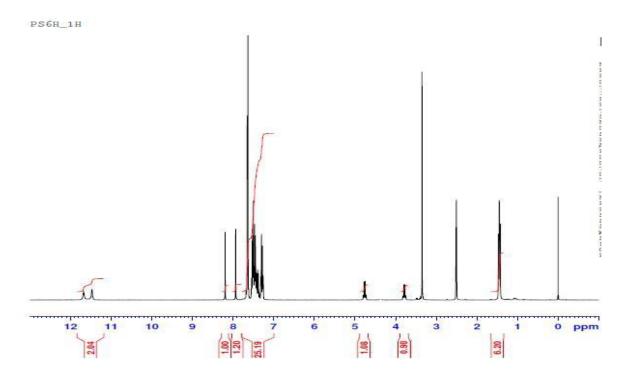
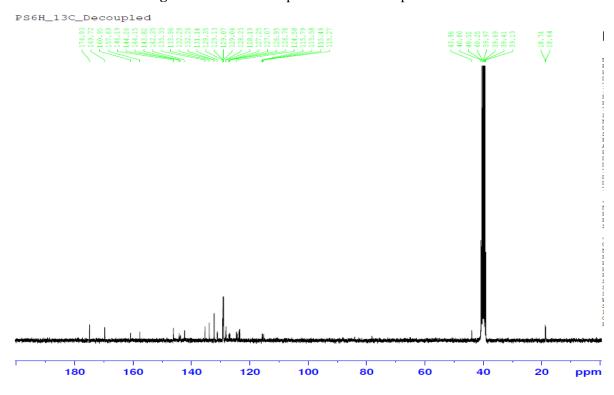


Figure S12: <sup>1</sup>H-NMR spectrum of the compound 3e



**Figure S13:** <sup>13</sup>C-NMR spectrum of the compound **3e** 

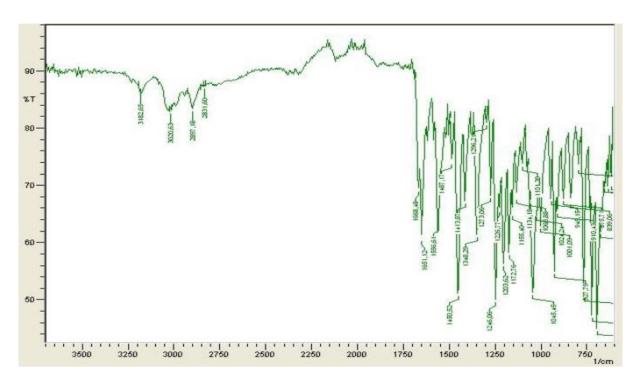


Figure S14: IR spectrum of the compound 3f

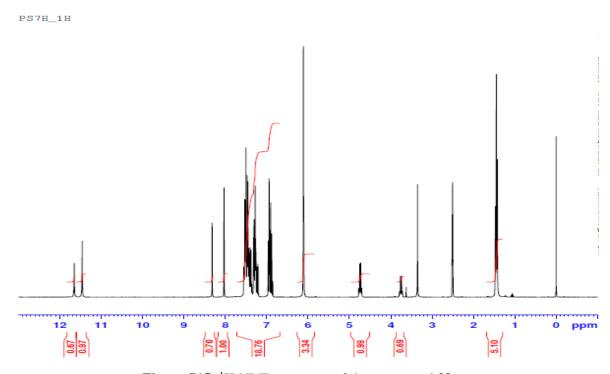
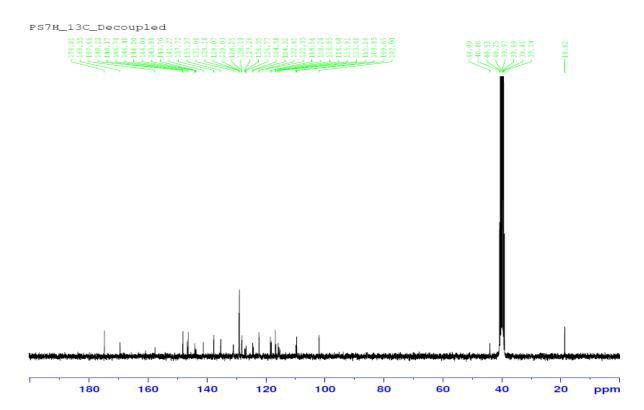


Figure S15:  $^{1}\text{H-NMR}$  spectrum of the compound 3f



**Figure S16:** <sup>13</sup>C-NMR spectrum of the compound **3f** 

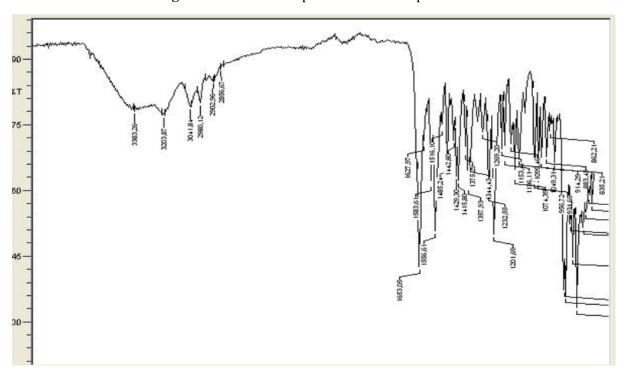


Figure S17: IR spectrum of the compound 3g

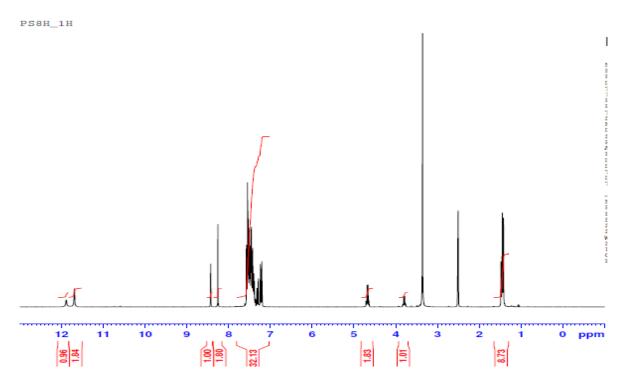


Figure S18: <sup>1</sup>H-NMR spectrum of the compound 3g

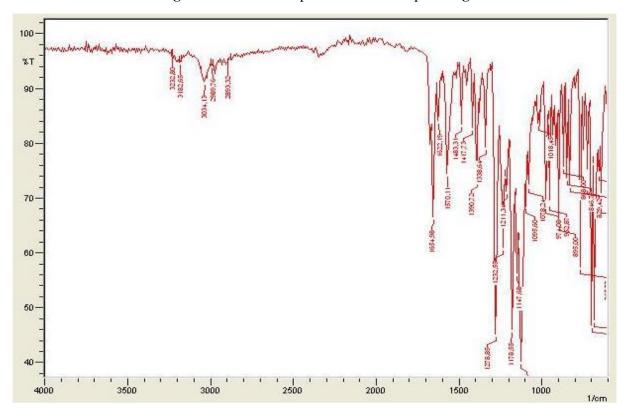


Figure S19: IR spectrum of the compound 3h

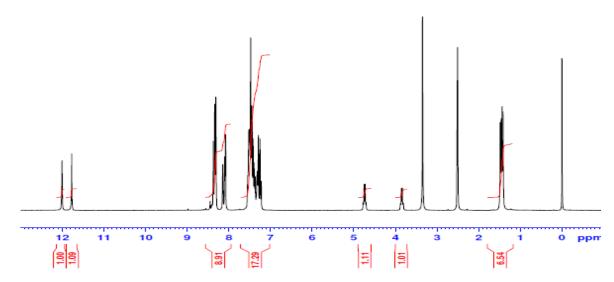


Figure S20: <sup>1</sup>H-NMRspectrum of the compound 3h

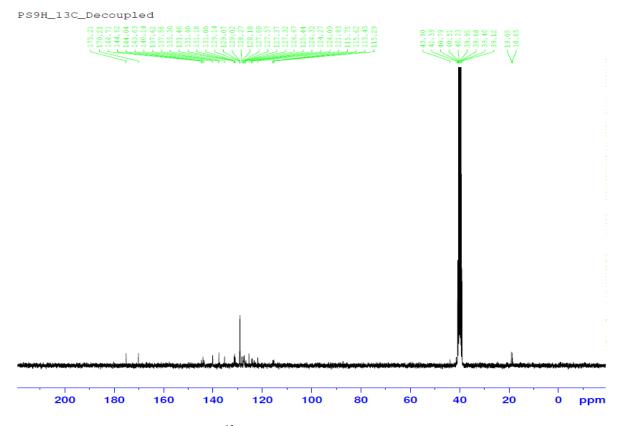


Figure S21: <sup>13</sup>C-NMR spectrum of the compound 3h

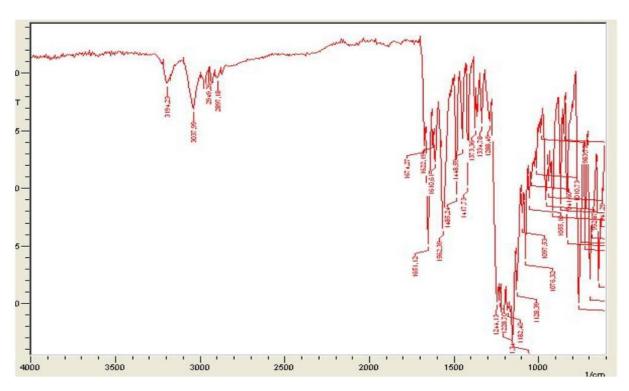


Figure S22: IR spectrum of the compound 3i

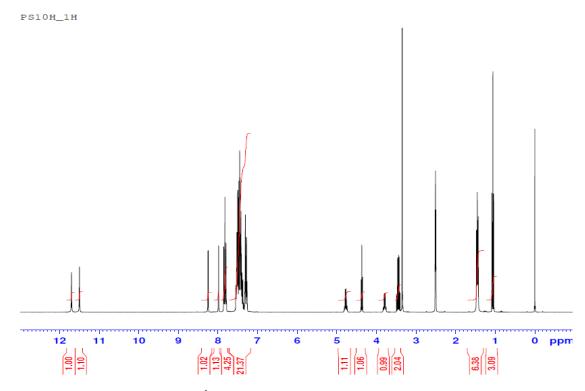


Figure S23: <sup>1</sup>H-NMR spectrum of the compound 3i

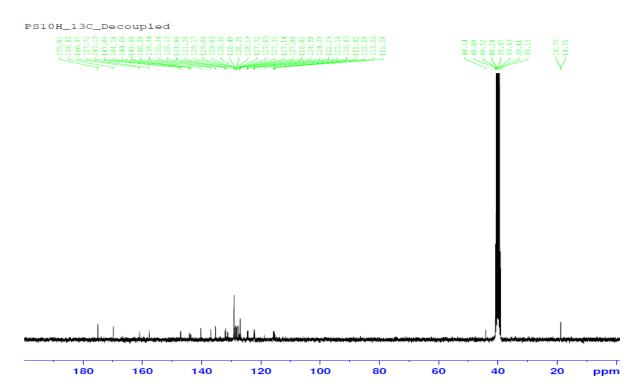


Figure S24: <sup>13</sup>C-NMR spectrum of the compound 3i

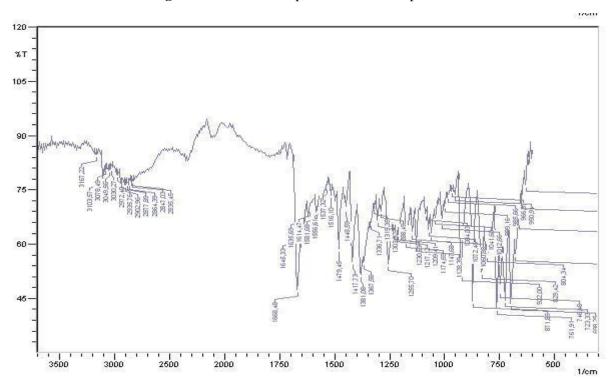


Figure S25: IR spectrum of the compound 3j

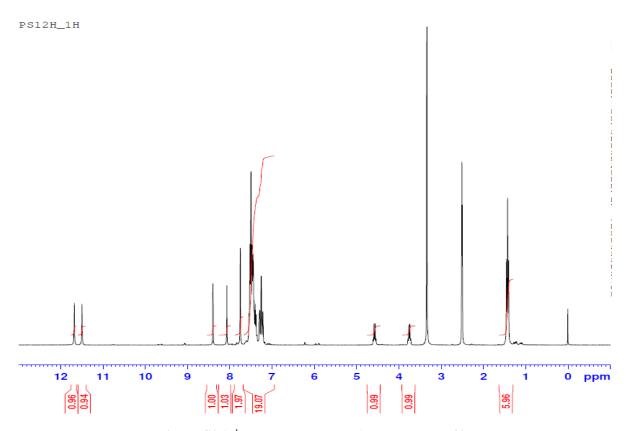


Figure S26: <sup>1</sup>H-NMR spectrum of the compound 3j

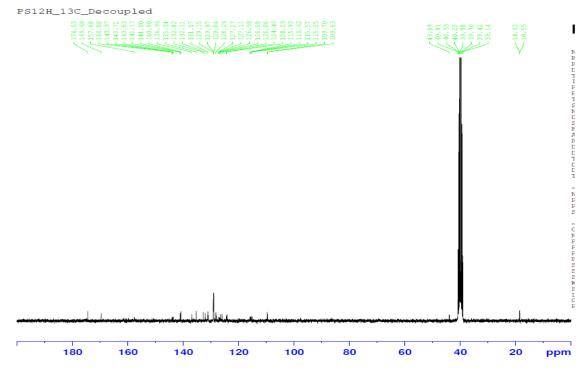


Figure S27: <sup>13</sup>C-NMR spectrum of the compound 3j

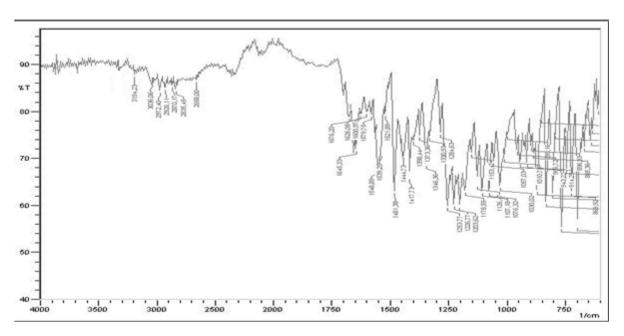


Figure S28: IR spectrum of the compound 3k

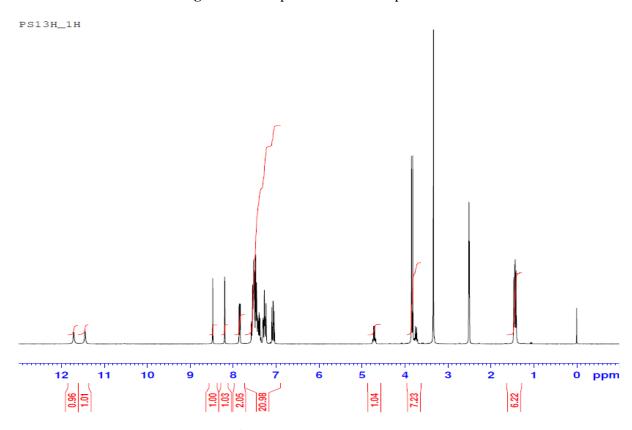


Figure S29:  $^{1}\text{H-NMR}$  spectrum of the compound 3k

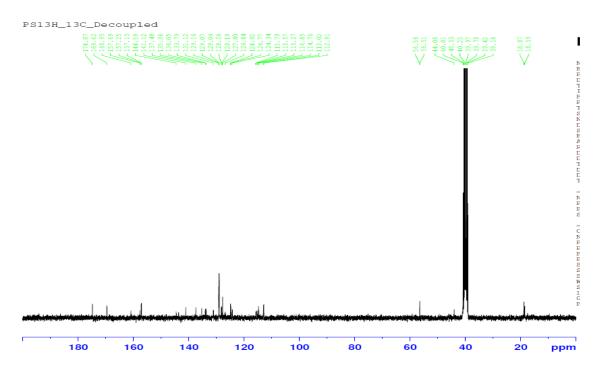


Figure S30: <sup>13</sup>C-NMR spectrum of the compound 3k

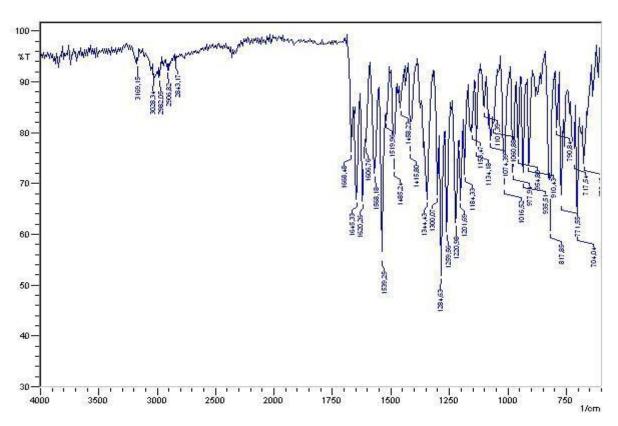


Figure S31: IR spectrum of the compound 31

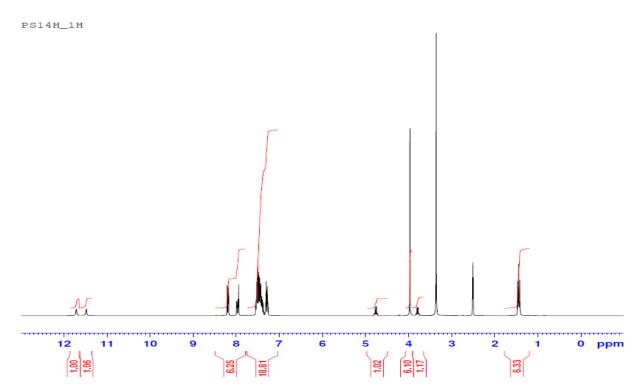


Figure S32: <sup>1</sup>H-NMR spectrum of the compound 3l

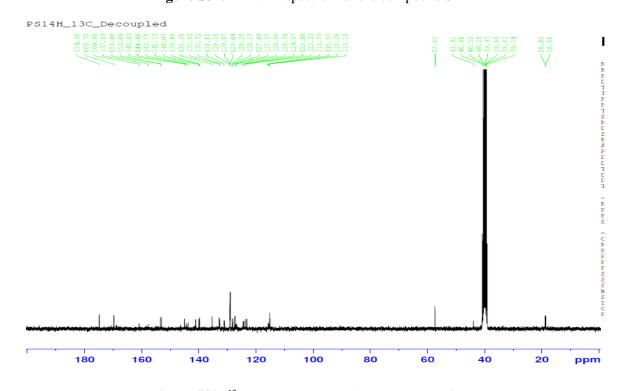


Figure S33: <sup>13</sup>C-NMR spectrum of the compound 31

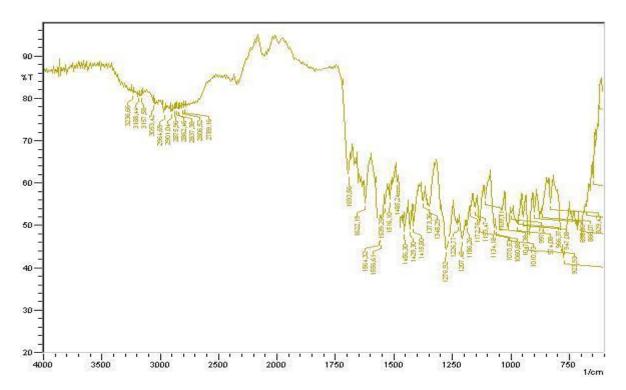


Figure S34: IR spectrum of the compound 3m

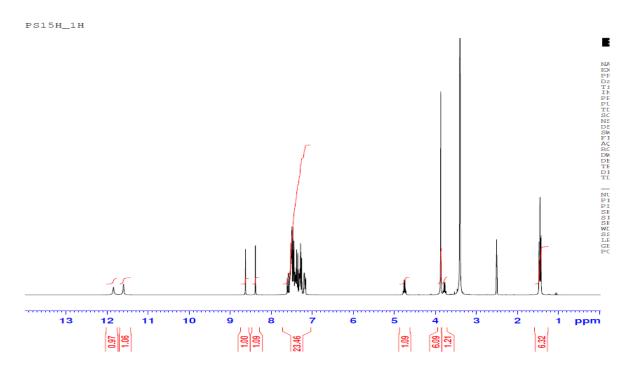


Figure S35: <sup>1</sup>H-NMR spectrum of the compound 3m

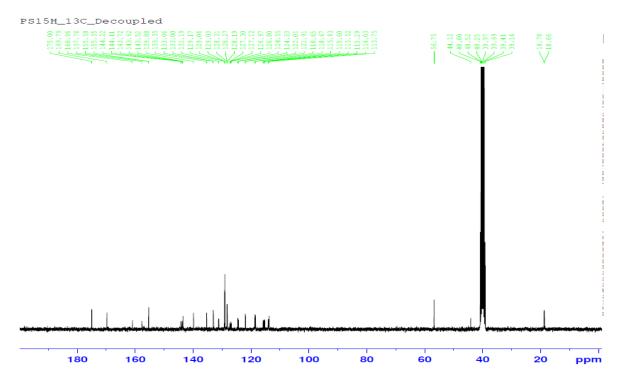


Figure S36: <sup>13</sup>C-NMR spectrum of the compound 3m

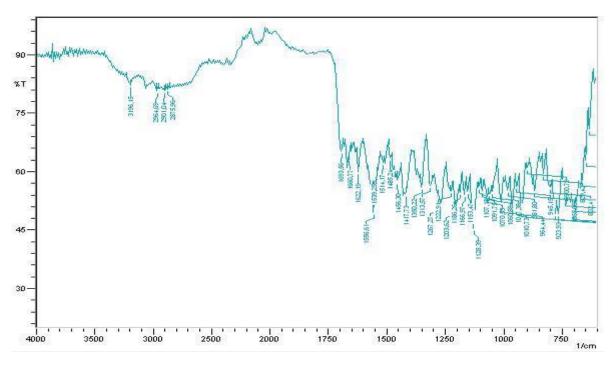


Figure S37: IR spectrum of the compound 3n

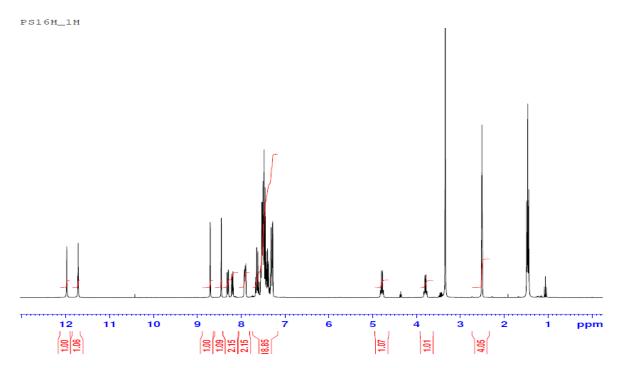
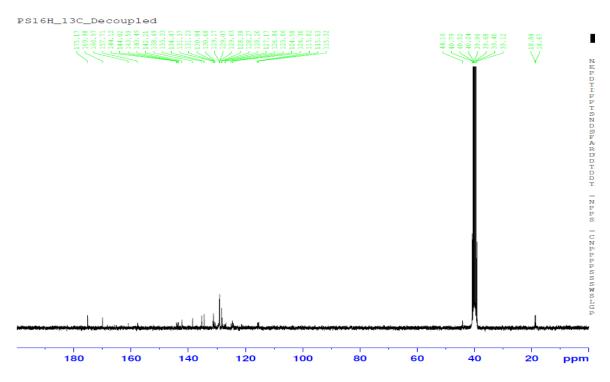


Figure S38: <sup>1</sup>H-NMR spectrum of the compound 3n



**Figure S39:** <sup>13</sup>C-NMR spectrum of the compound **3n** 

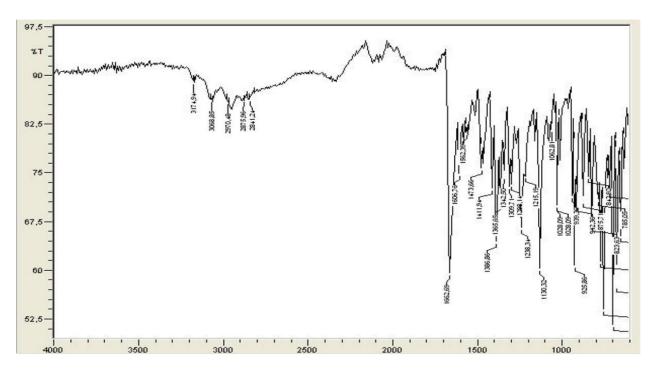


Figure S40: IR spectrum of the compound 30

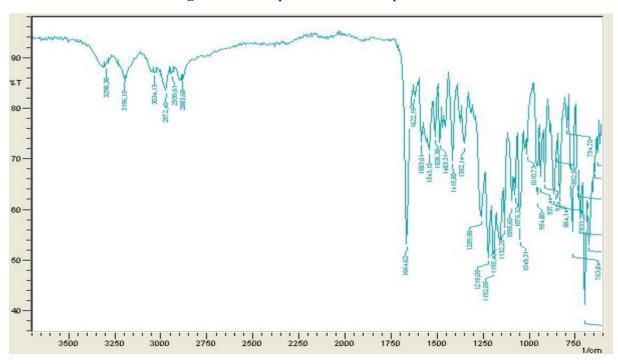


Figure S41: IR spectrum of the compound 3p

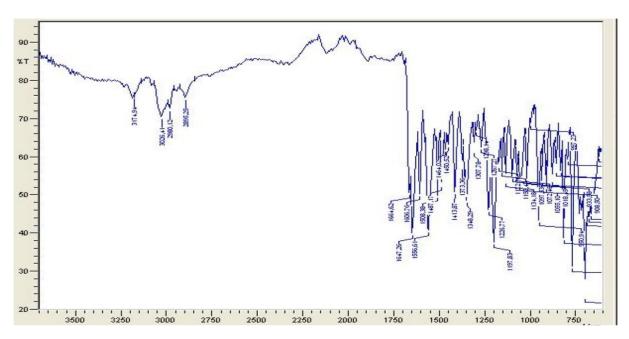


Figure S42: IR spectrum of the compound 3r

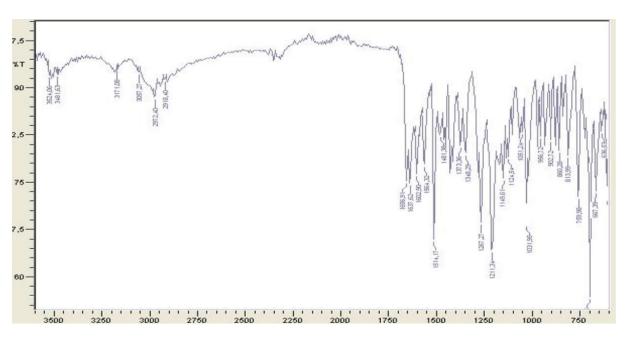


Figure S43: IR spectrum of the compound 3s

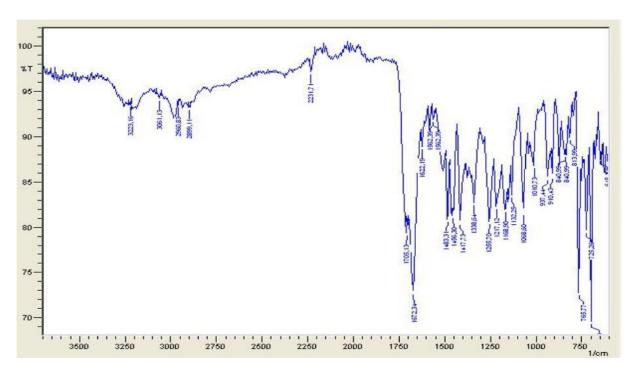


Figure S44: IR spectrum of the compound 4a

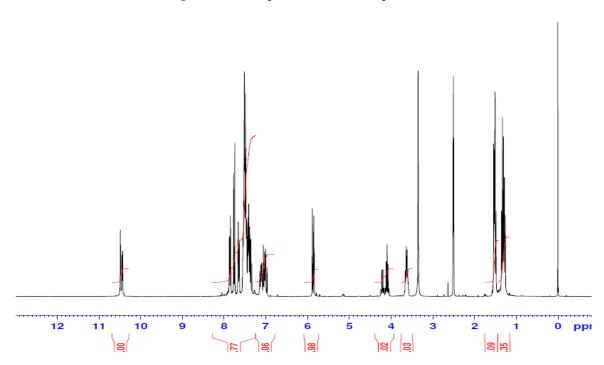


Figure S45: <sup>1</sup>H-NMR spectrum of the compound 4a

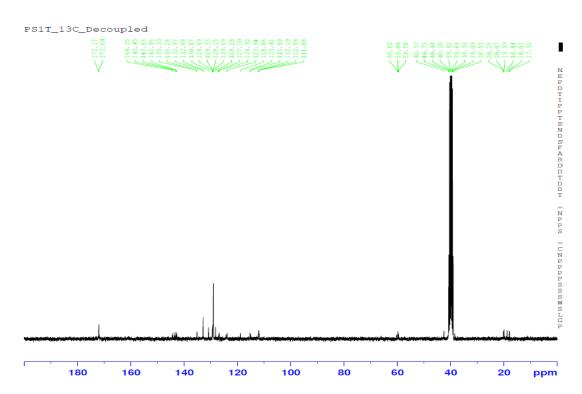


Figure S46: <sup>13</sup>C-NMR spectrum of the compound 4a

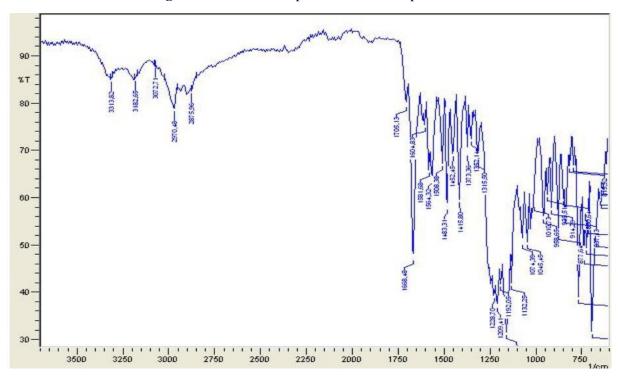


Figure S47: IR spectrum of the compound 4b

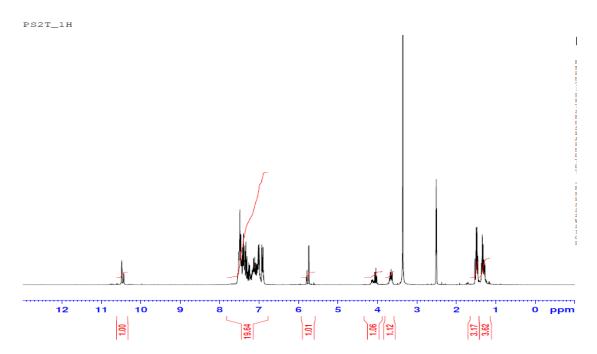


Figure S48: 1H-NMR spectrum of the compound 4b

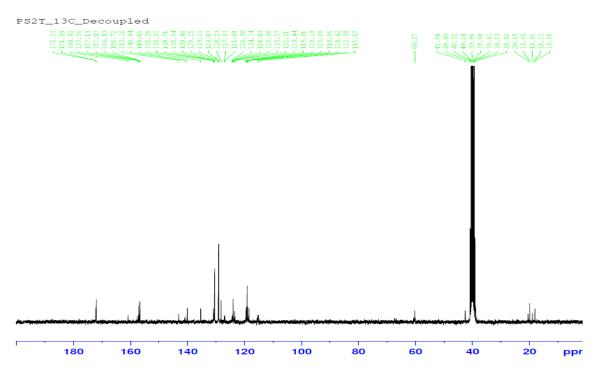


Figure S49:<sup>13</sup>C-NMR spectrum of the compound 4b

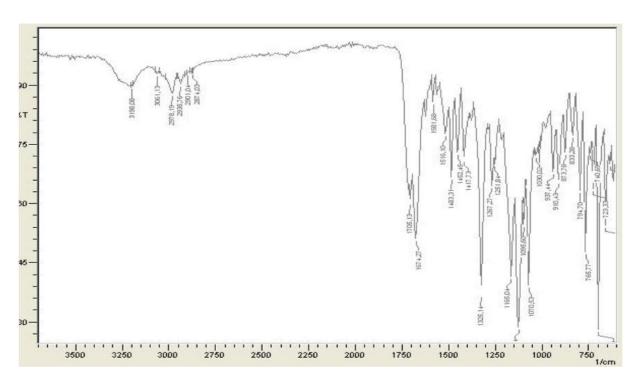


Figure S50: IR spectrum of the compound 4c

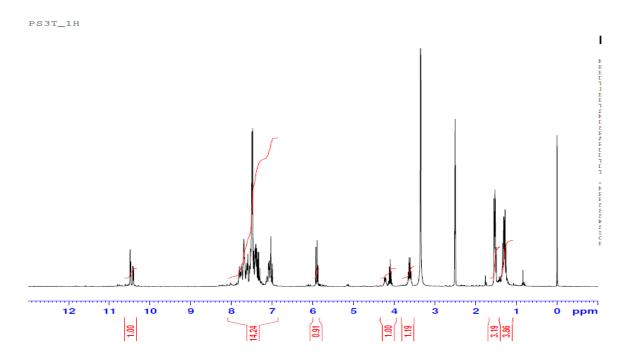


Figure S51: <sup>1</sup>H-NMR spectrum of the compound 4c

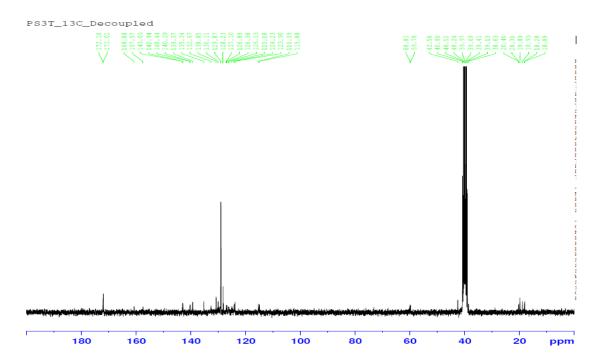


Figure S52: <sup>13</sup>C-NMR spectrum of the compound 4c

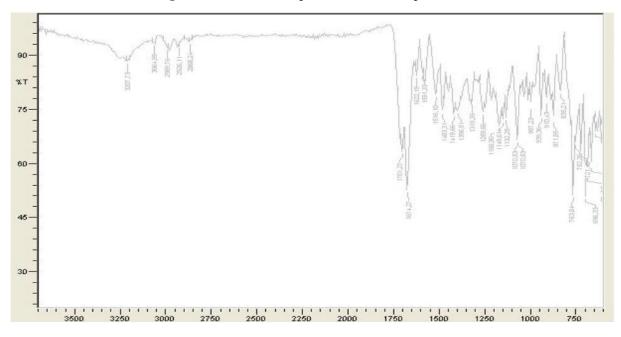


Figure S53: IR spectrum of the compound 4d

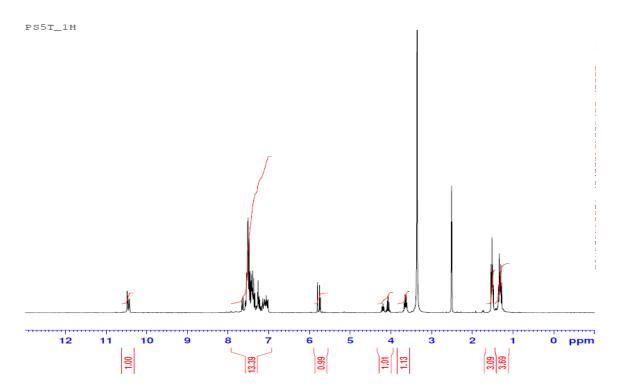


Figure S54: <sup>1</sup>H-NMR spectrum of the compound 4d

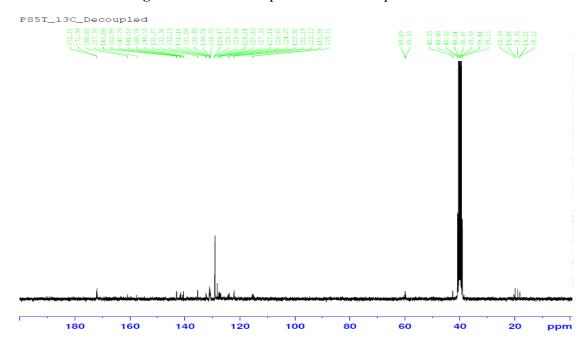


Figure S55: <sup>13</sup>C-NMR spectrum of the compound 4d

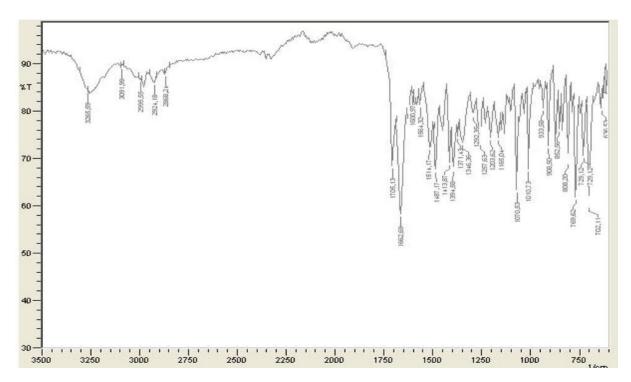


Figure S56: IR spectrum of the compound 4e

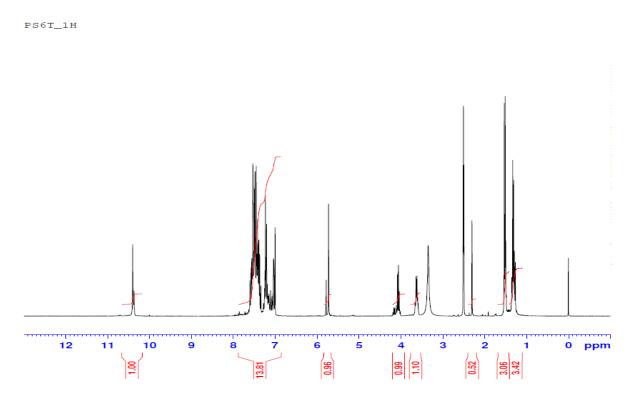


Figure S57: <sup>1</sup>H-NMR spectrum of the compound 4e

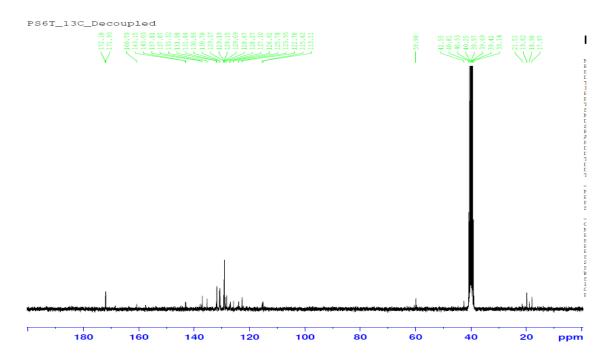


Figure S58: <sup>13</sup>C-NMR spectrum of the compound 4e

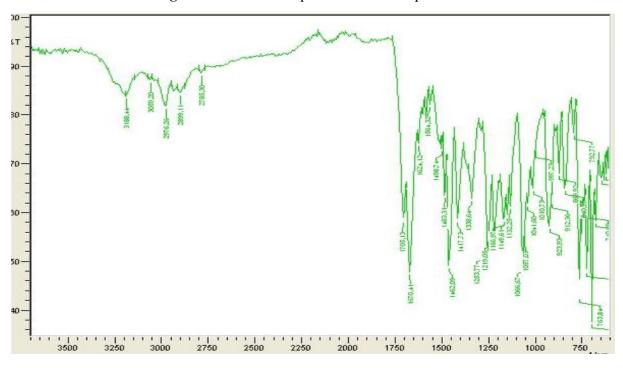


Figure S59: IR spectrum of the compound 4f

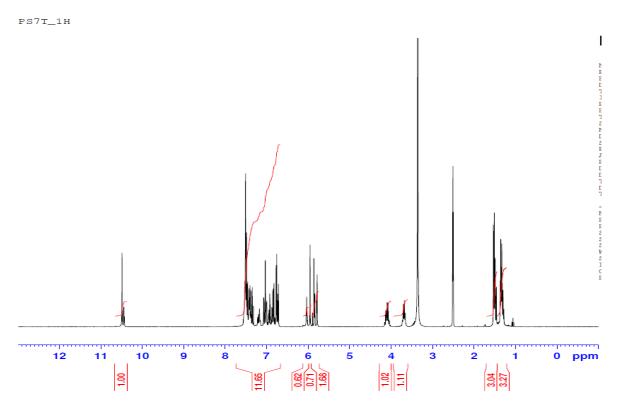


Figure S60:  $^{1}\text{H-NMR}$  spectrum of the compound 4f

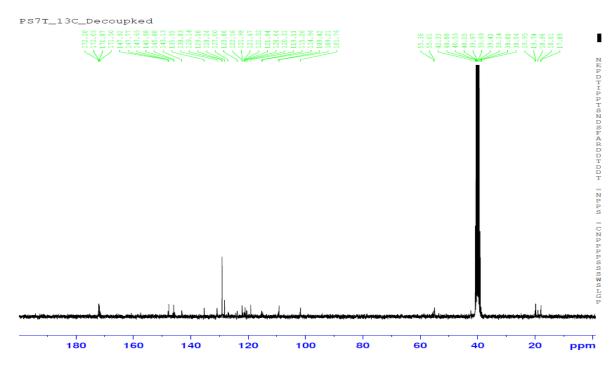


Figure S61: <sup>13</sup>C-NMR spectrum of the compound 4f

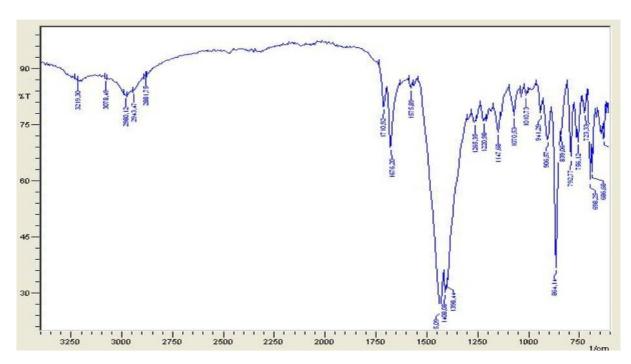


Figure S62: IR spectrum of the compound 4g

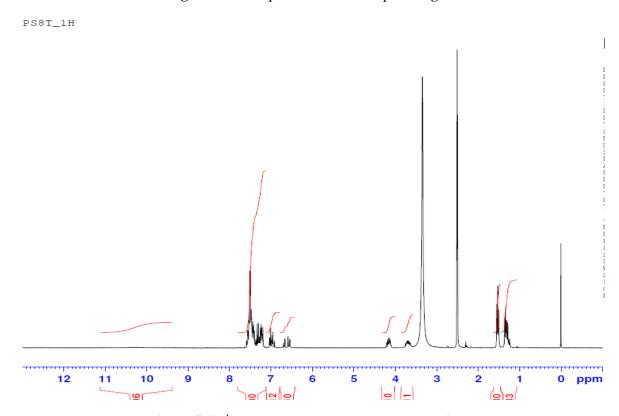


Figure S63: <sup>1</sup>H-NMR spectrum of the compound 4g

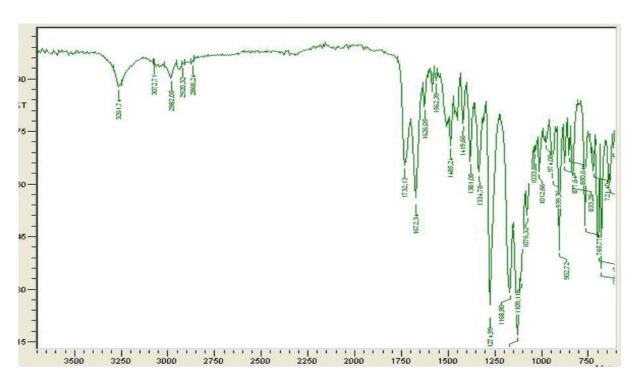


Figure S64: IR spectrum of the compound 4h

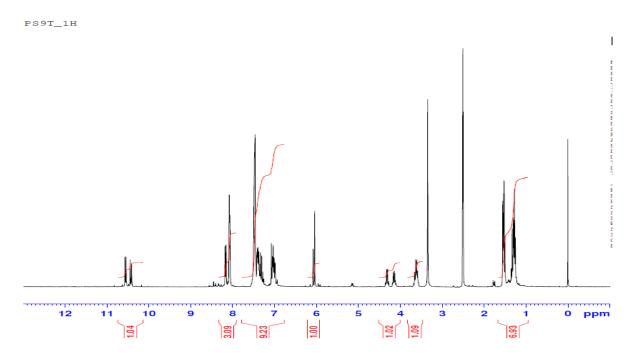


Figure S65: <sup>1</sup>H-NMR spectrum of the compound 4h

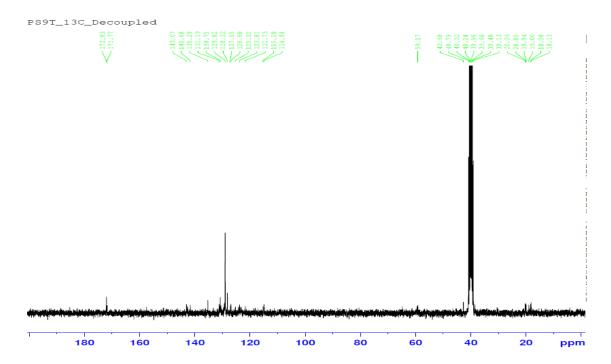


Figure S66: <sup>13</sup>C-NMR spectrum of the compound 4h

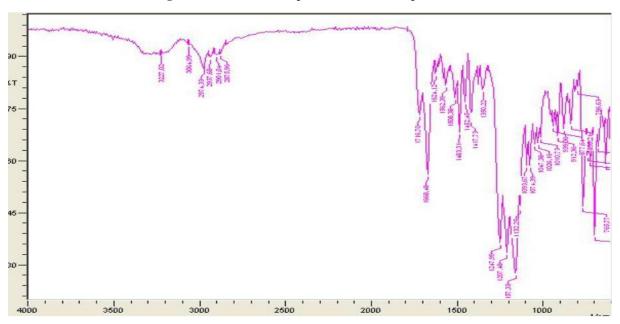


Figure S67: IR spectrum of the compound 4i

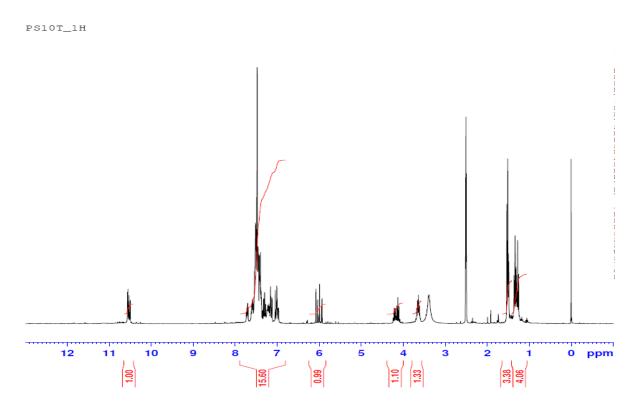


Figure S68: <sup>1</sup>H-NMR spectrum of the compound 4i

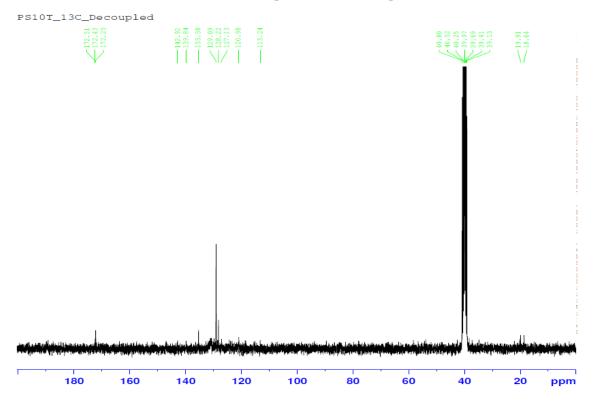


Figure S69: <sup>13</sup>C-NMR spectrum of the compound 4i

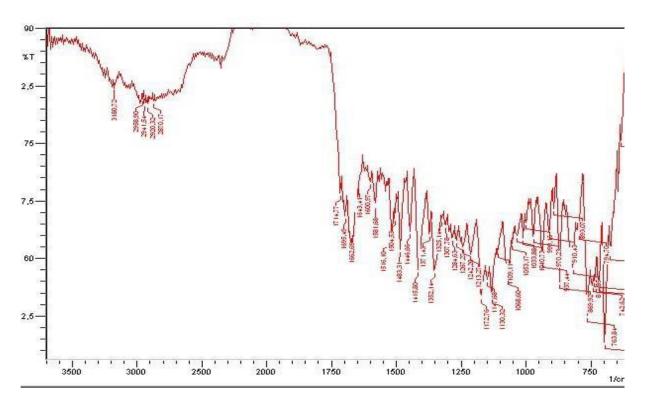


Figure S70: IR spectrum of the compound 4j

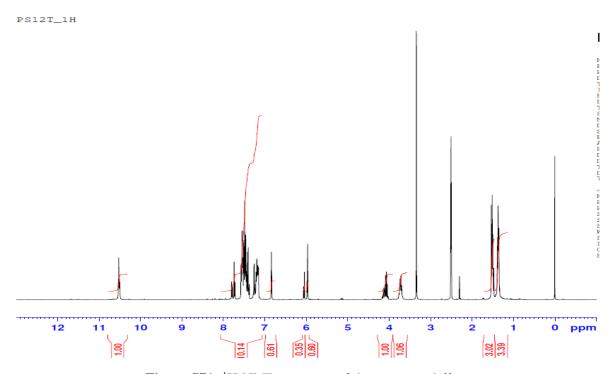


Figure S71: <sup>1</sup>H-NMR spectrum of the compound 4j

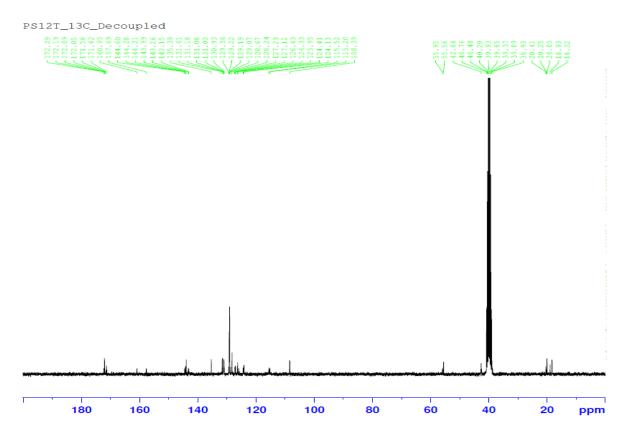


Figure S72: <sup>13</sup>C-NMR spectrum of the compound 4j

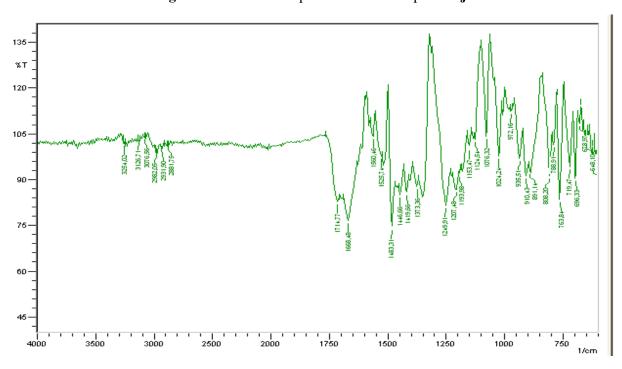


Figure S73: IR spectrum of the compound 4k

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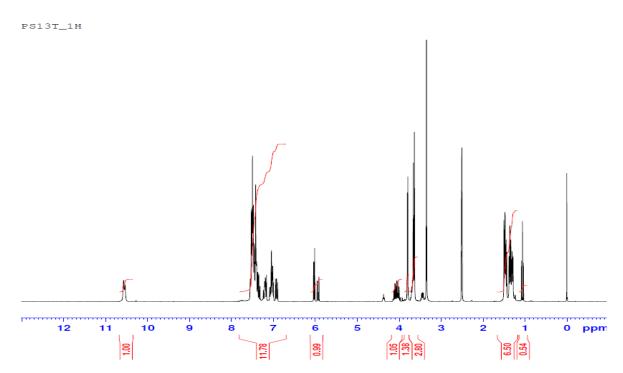


Figure S74:  $^1\text{H-NMR}$  spectrum of the compound 4k

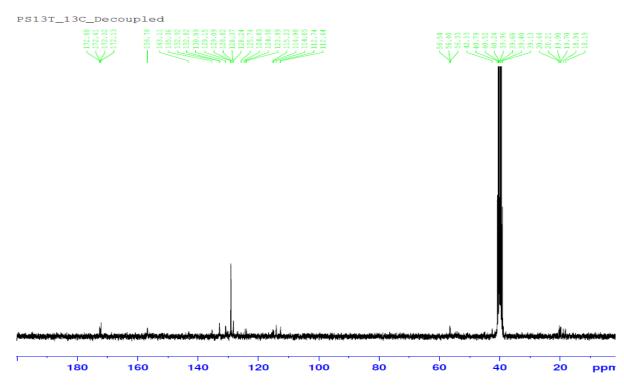


Figure S75: <sup>13</sup>C-NMR spectrum of the compound 4k

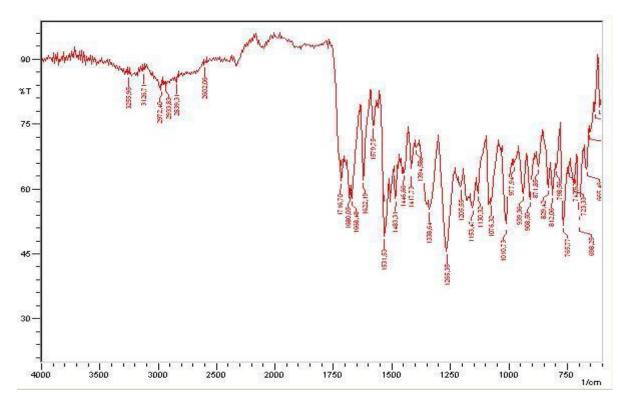
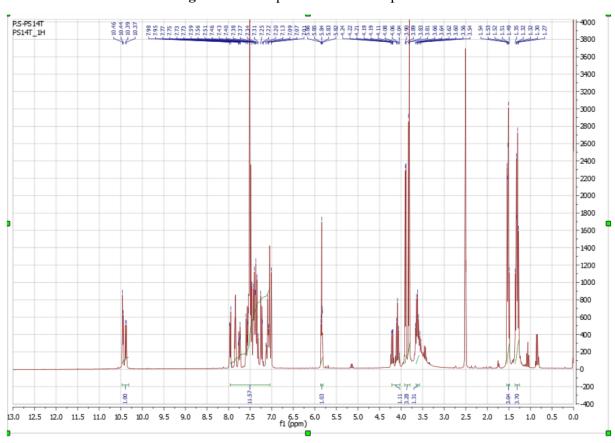


Figure S76: IR spectrum of the compound 4l



**Figure S77:** <sup>1</sup>H-NMR spectrum of the compound **41** © 2023 ACG Publications. All rights reserved.

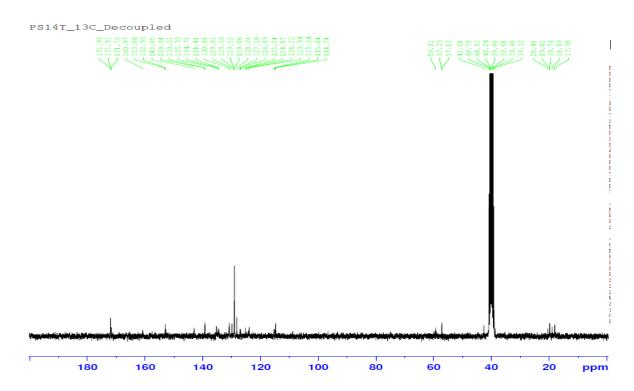


Figure S78: <sup>13</sup>C-NMR spectrum of the compound 4l

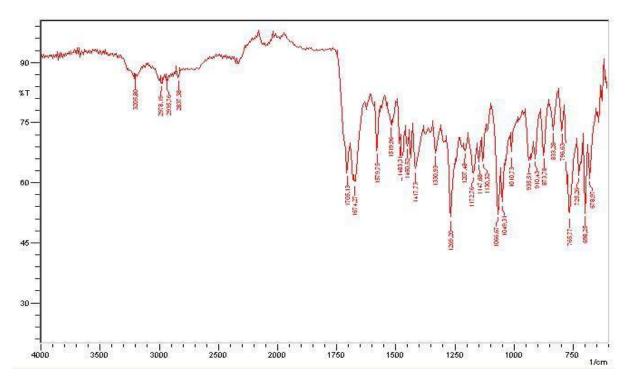


Figure S79: IR spectrum of the compound 4m

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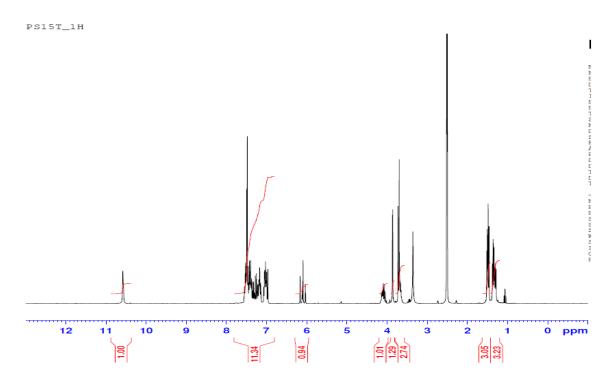


Figure S80: <sup>1</sup>H-NMR spectrum of the compound 4m

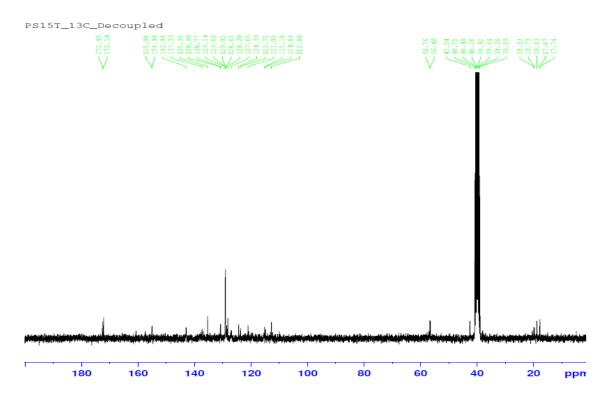


Figure S81: <sup>13</sup>C-NMR spectrum of the compound 4m

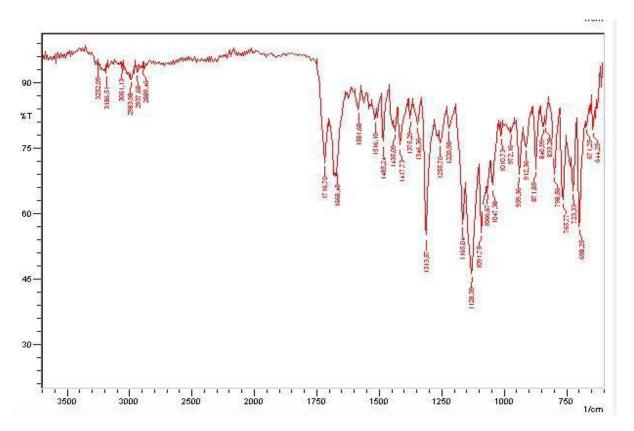


Figure S82: IR spectrum of the compound 4n

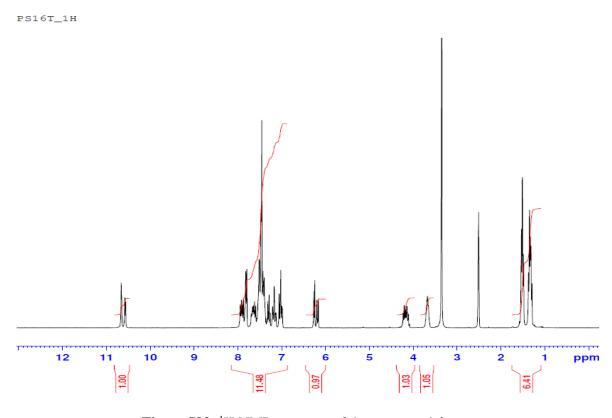


Figure S83: <sup>1</sup>H-NMR spectrum of the compound 4n

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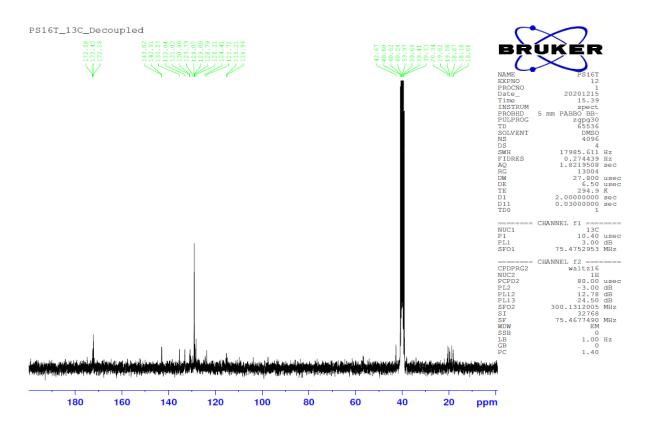


Figure S84: <sup>13</sup>C-NMR spectrum of the compound 4n

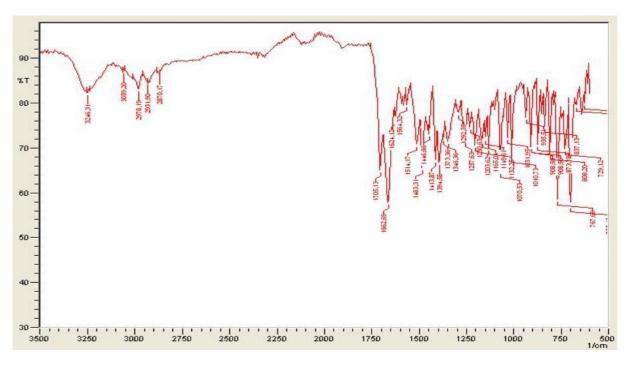


Figure S85: IR spectrum of the compound 40

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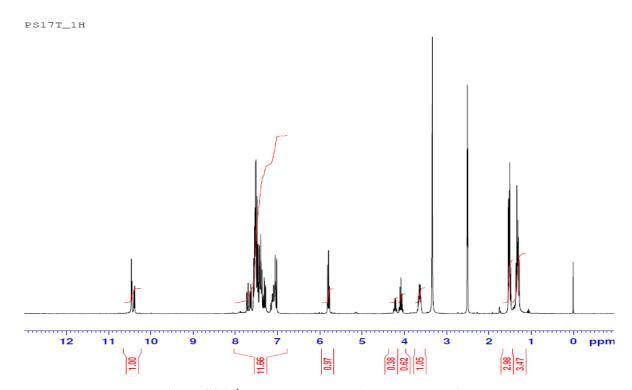


Figure S86: <sup>1</sup>H-NMR spectrum of the compound 40

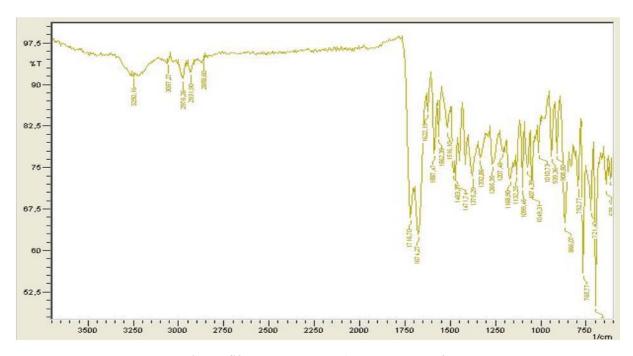


Figure S87: IR spectrum of the compound 4p

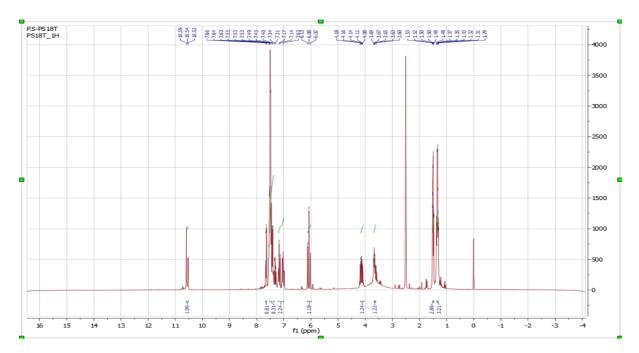


Figure S88: <sup>1</sup>H-NMR spectrum of the compound 4p

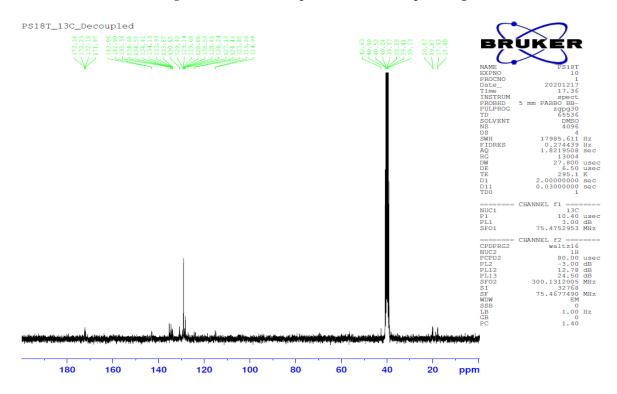


Figure S89: <sup>13</sup>C-NMR spectrum of the compound **4p** 

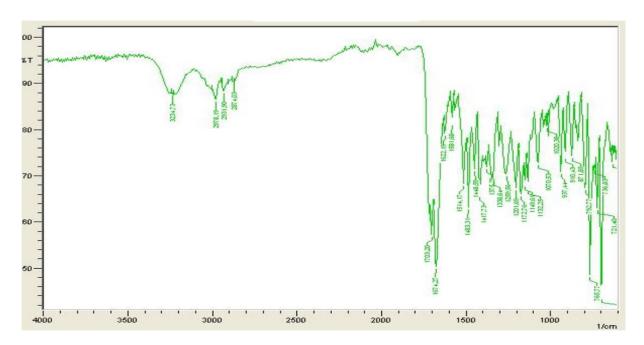


Figure S90: IR spectrum of the compound 4r

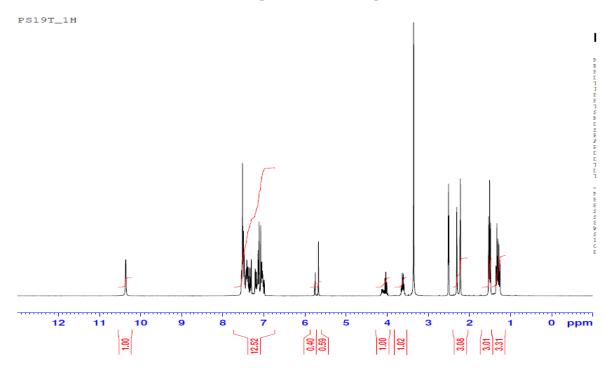
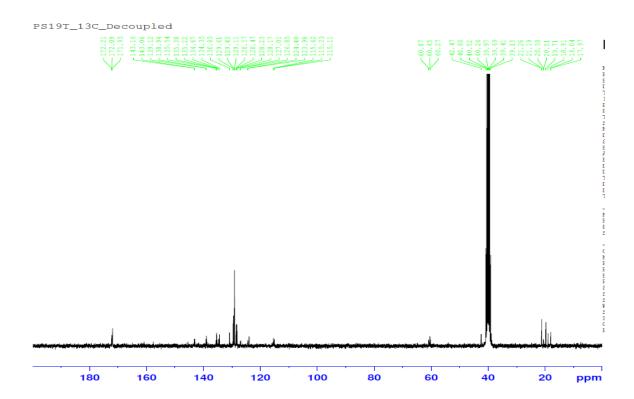


Figure S91: <sup>1</sup>H-NMR spectrum of the compound 4r



**Figure S92:** <sup>13</sup>C-NMR spectrum of the compound **4r** 

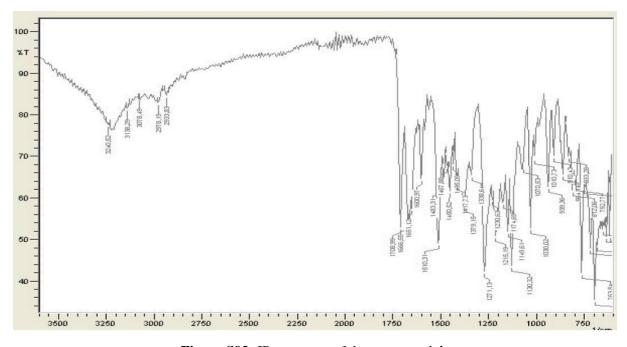


Figure S93: IR spectrum of the compound 4s

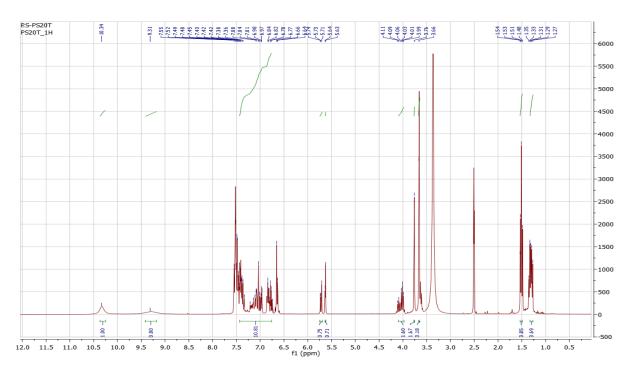


Figure S94: <sup>1</sup>H-NMR spectrum of the compound 4s

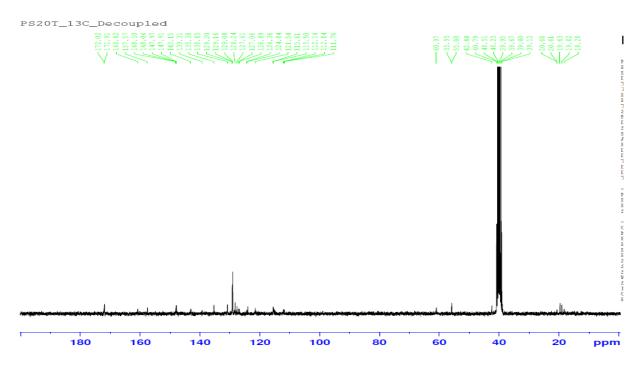


Figure S95: <sup>13</sup>C-NMR spectrum of the compound 4s