

Figure S1. <sup>1</sup>H NMR spectrum of 2-formylpyridine *N*<sup>4</sup>,*S*-diallylthiosemicarbazone (HL<sup>1</sup>) in acetone-d<sub>6</sub>.

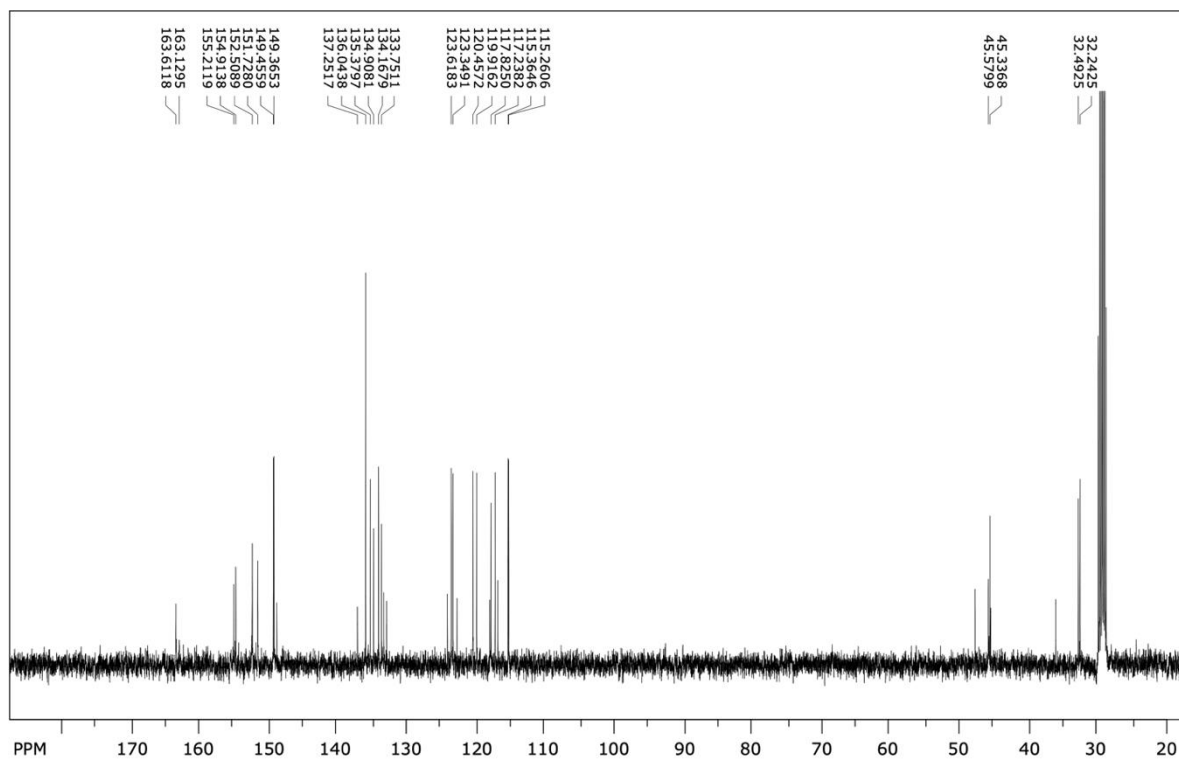


Figure S2. <sup>13</sup>C NMR spectrum of 2-formylpyridine *N*<sup>4</sup>,*S*-diallylthiosemicarbazone (HL<sup>1</sup>) in acetone-d<sub>6</sub>.

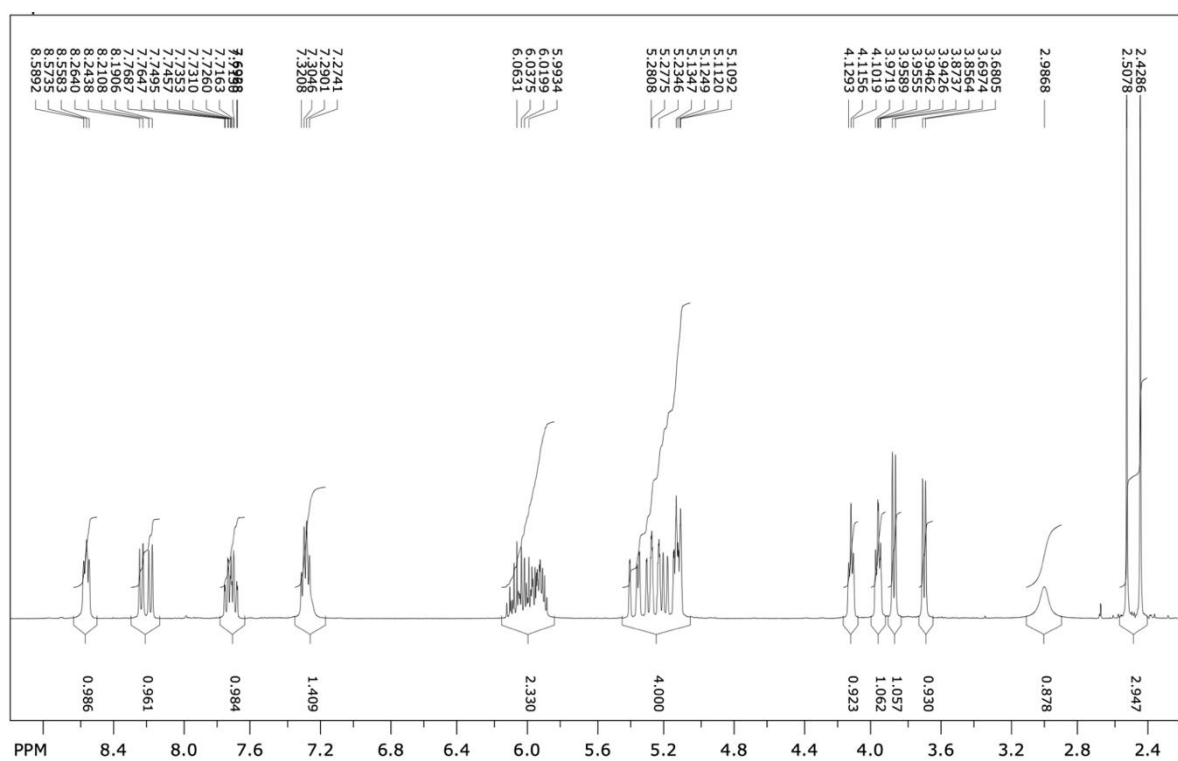


Figure S3. <sup>1</sup>H NMR spectrum of 2-acetylpyridine *N*<sup>4</sup>,*S*-diallylthiosemicarbazone (HL<sup>2</sup>) in acetone-d<sub>6</sub>.

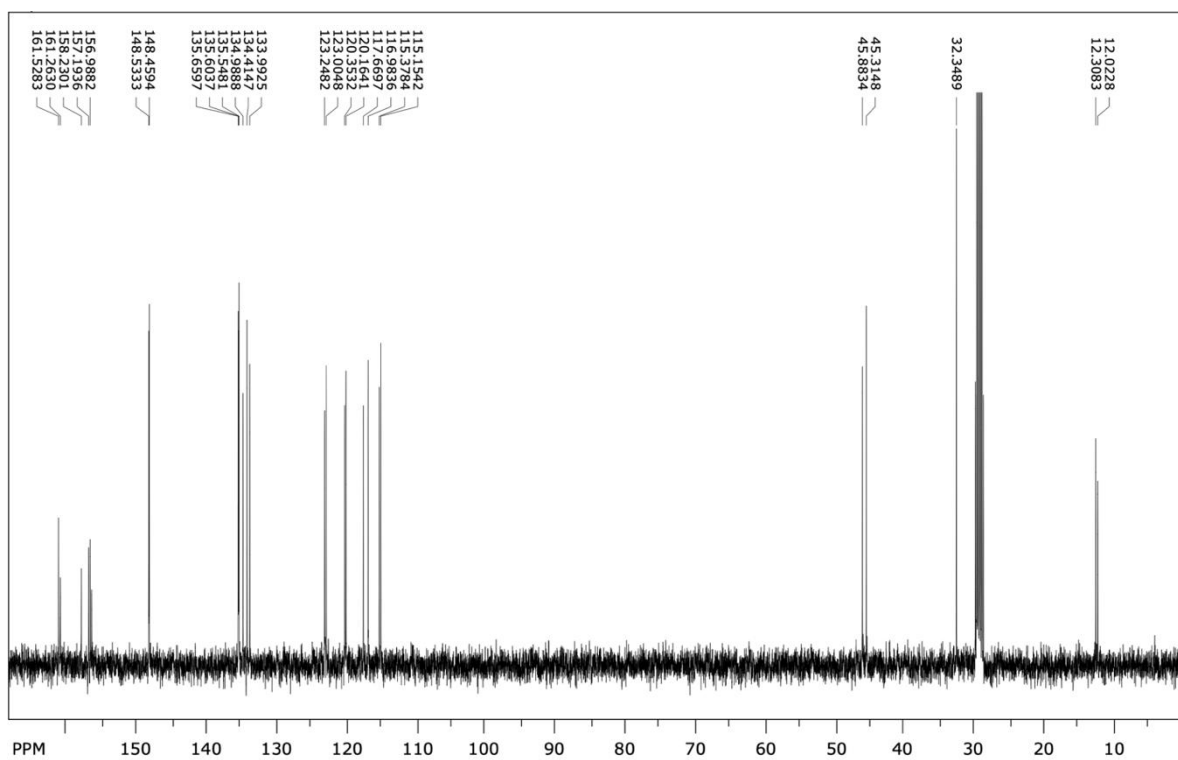


Figure S4. <sup>13</sup>C NMR spectrum of 2-acetylpyridine *N*<sup>4</sup>,*S*-diallylthiosemicarbazone (HL<sup>2</sup>) in acetone-d<sub>6</sub>.

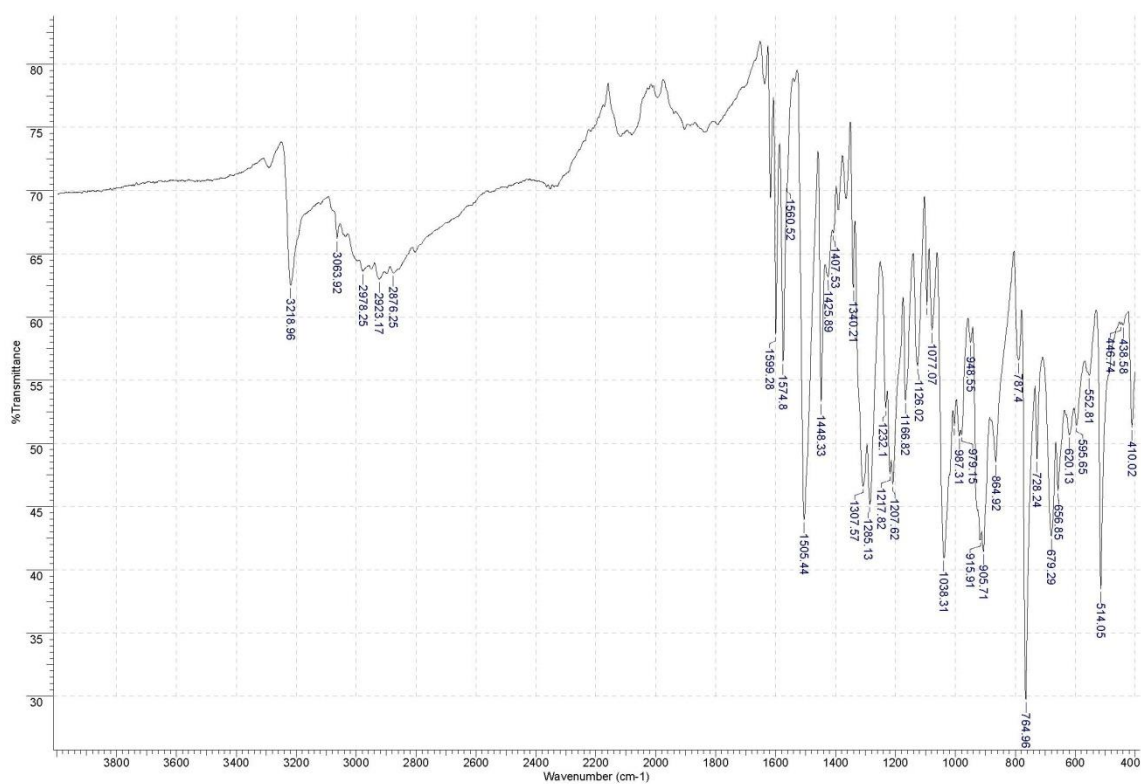


Figure S5. FTIR spectrum of HL<sup>1</sup>.

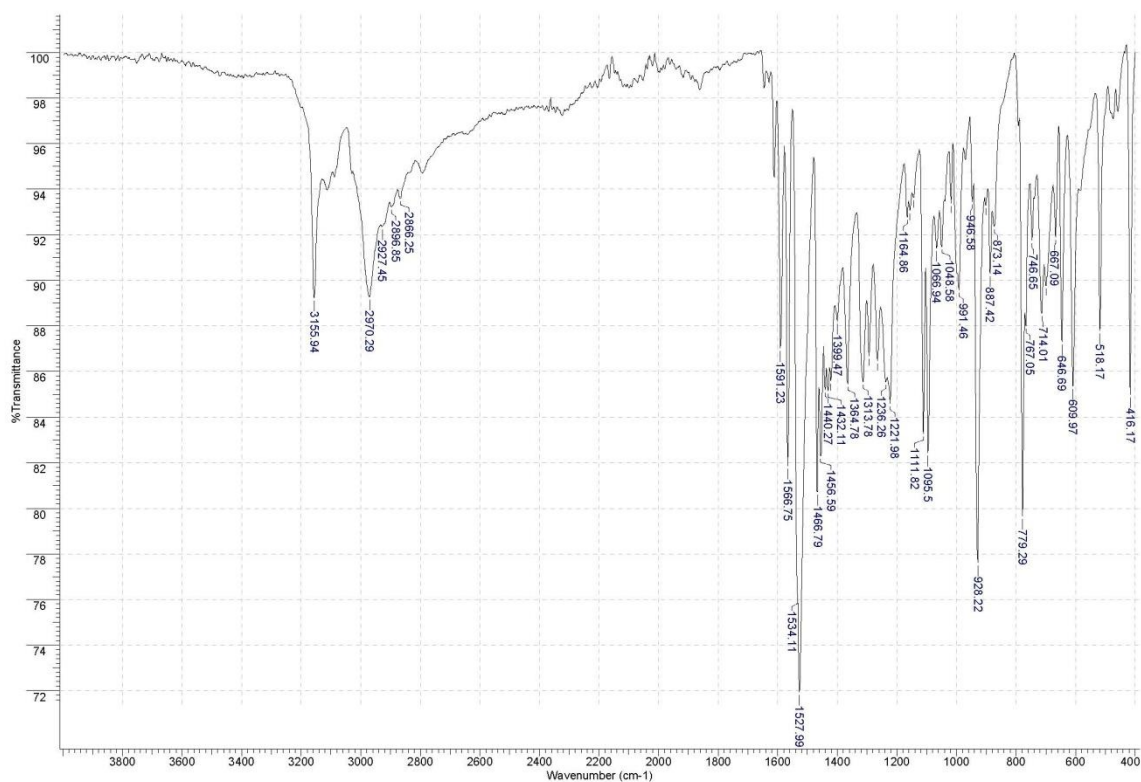


Figure S6. FTIR spectrum of **1**.

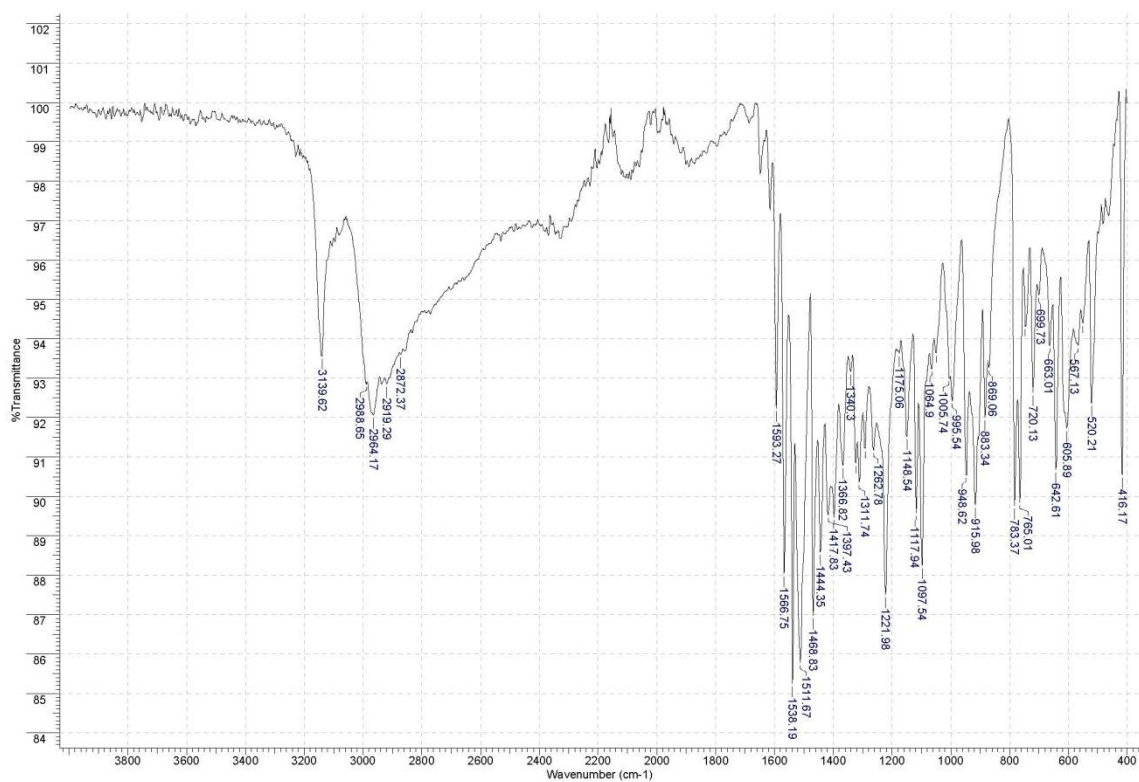


Figure S7. FTIR spectrum of **2**.

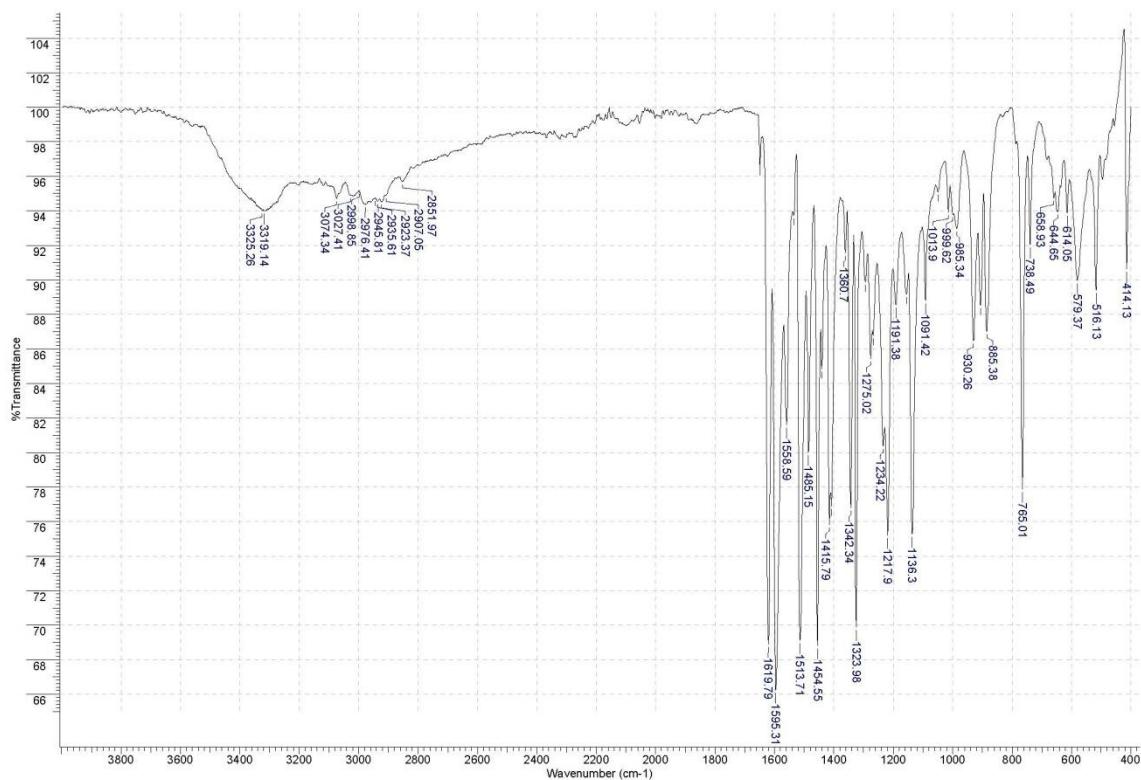


Figure S8. FTIR spectrum of **3**.

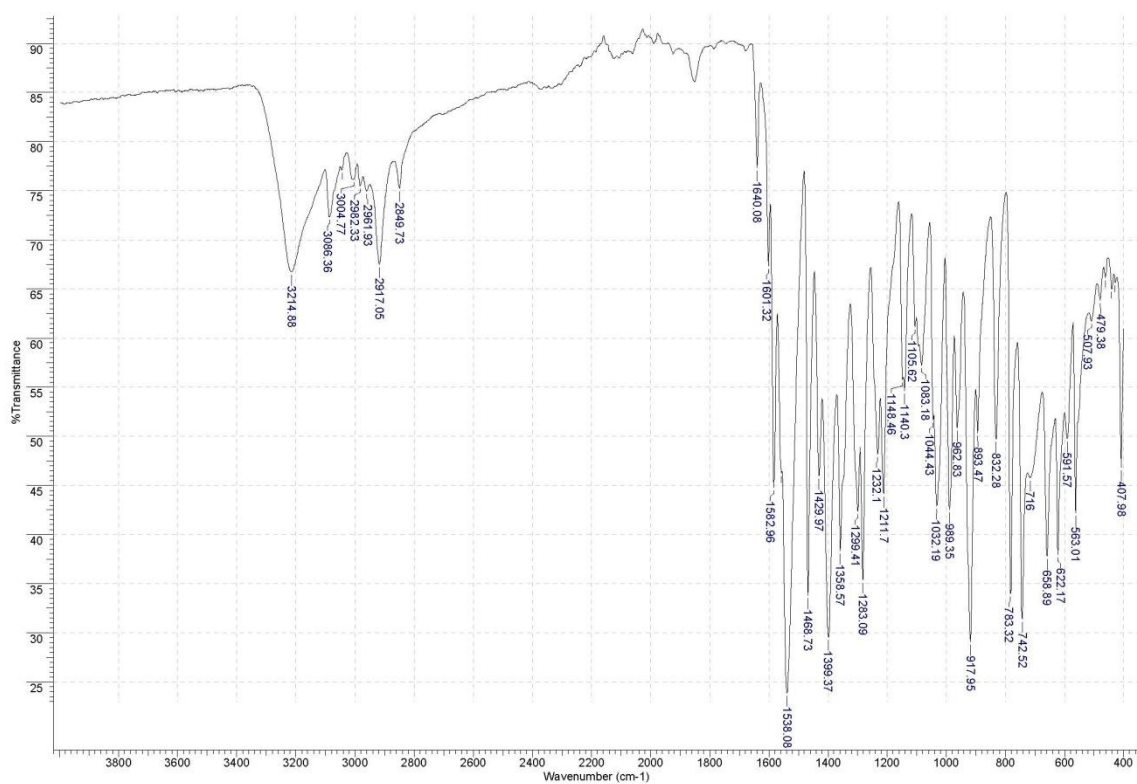


Figure S9. FTIR spectrum of HL<sup>2</sup>.

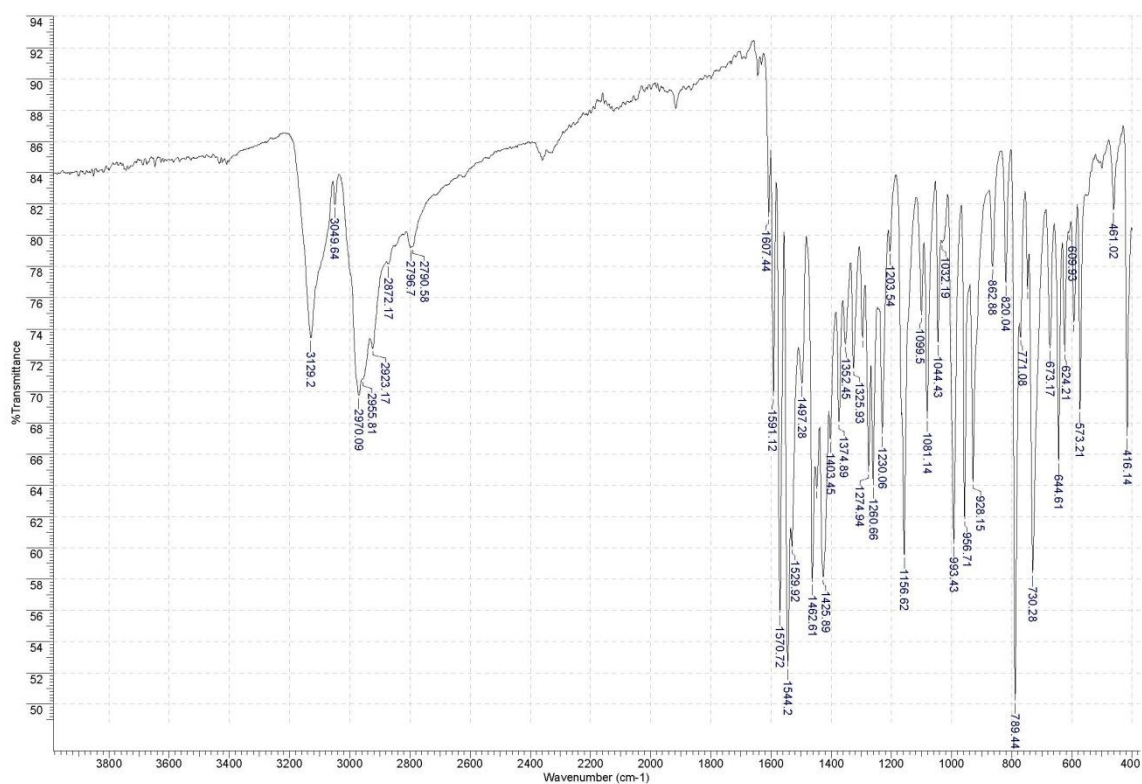


Figure S10. FTIR spectrum of 4.

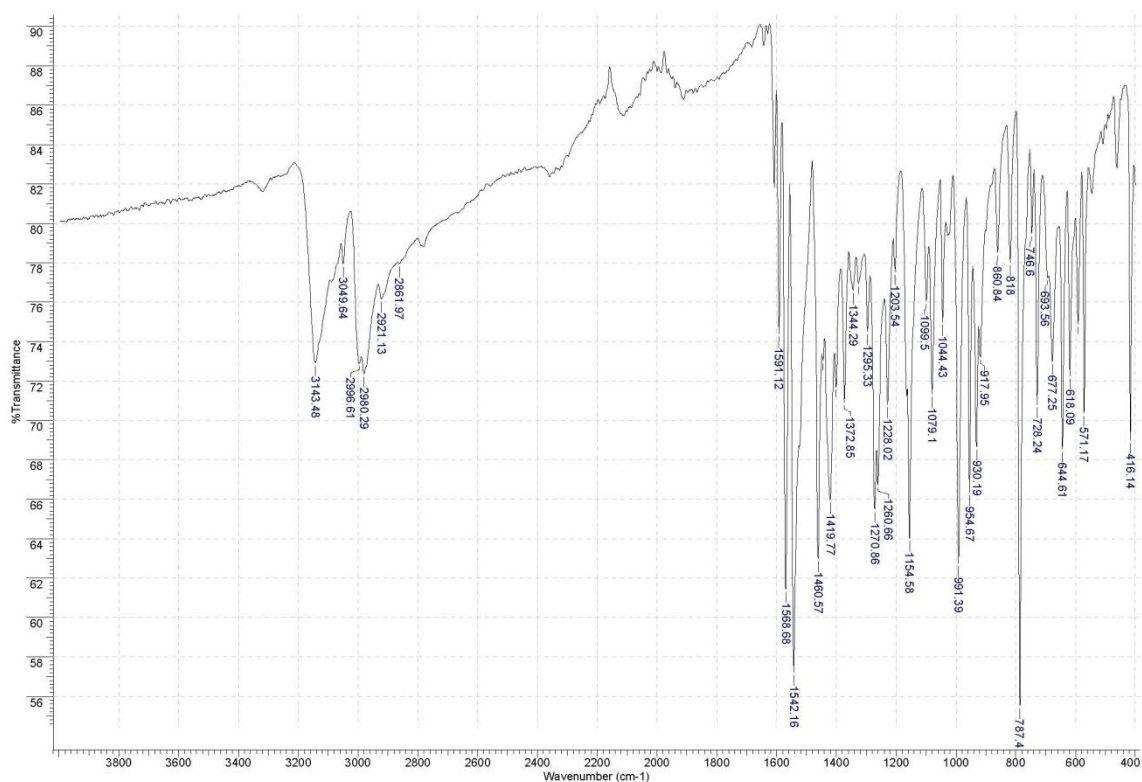


Figure S11. FTIR spectrum of **5**.

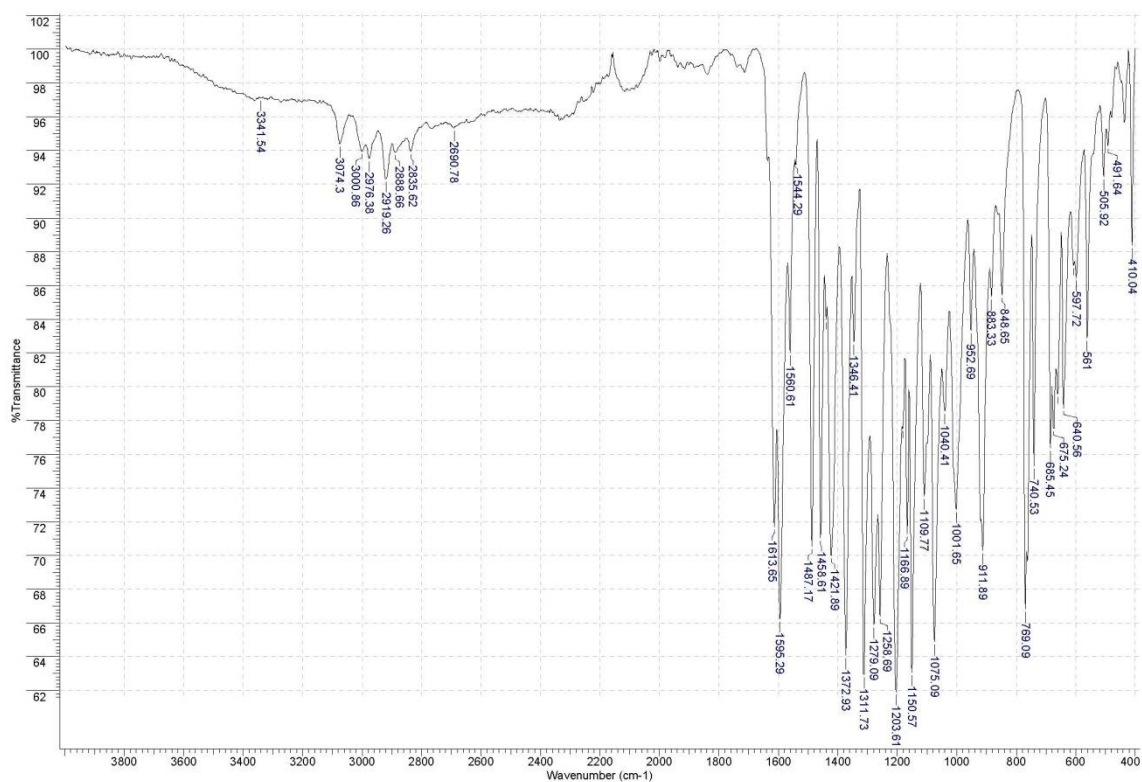


Figure S12. FTIR spectrum of **6**.