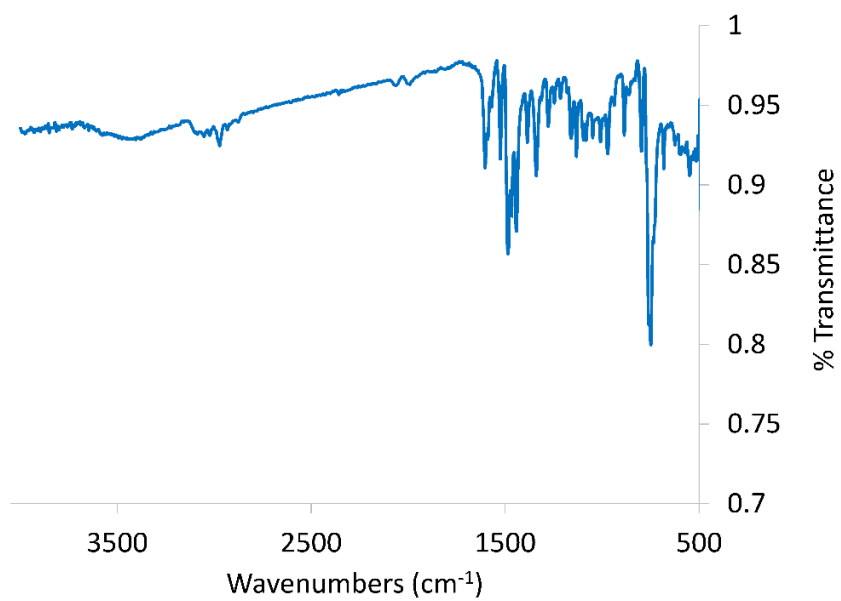
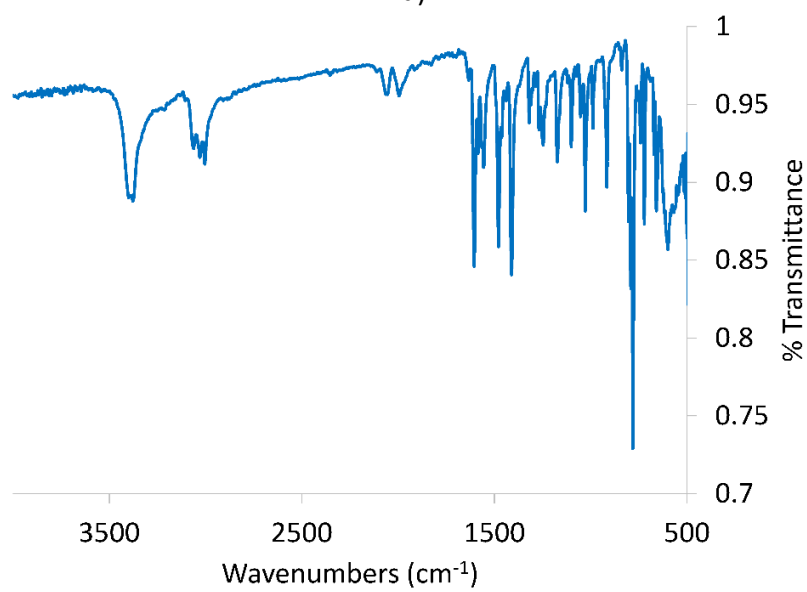


## Supporting Information

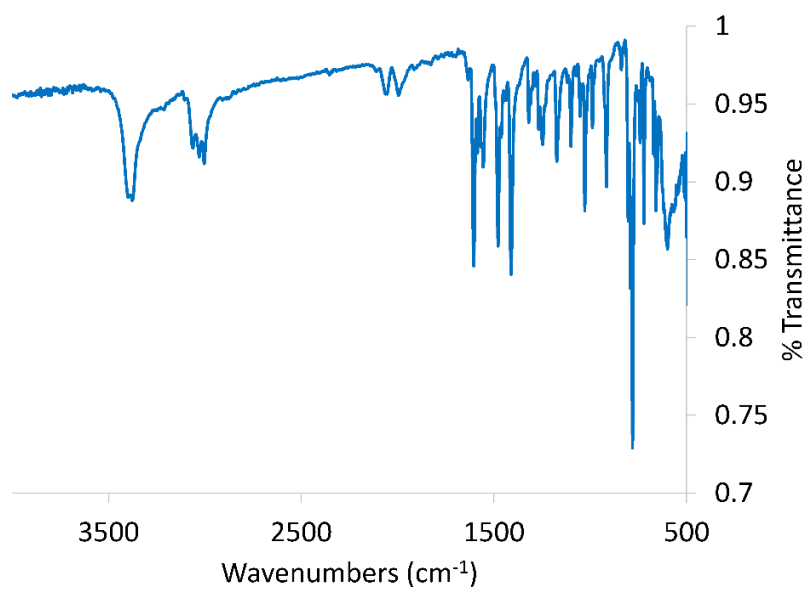
<b>Fig. S1</b>	ATR IR spectra of a) <b>1</b> , b) <b>2</b> , c) <b>3</b> and d) <b>4</b> .	<b>S2</b>
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<b>Fig. S12</b>	Electrospray ionization mass spectra: Experimental (Up) and theoretical (down) ISOTOPIC pattern for {PtCIL} <sup>+</sup> (L = L <sup>BZ</sup> and L <sup>PY</sup> ) ion of a) compounds <b>2</b> and b) <b>4</b> .	<b>S14</b>
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<b>Fig. S17</b>	<sup>1</sup> H NMR spectrum of <b>4</b> in DMSO-d <sub>6</sub> .	<b>S19</b>
<b>Fig. S18</b>	<sup>1</sup> H NMR spectrum of <b>4</b> in DMF-d <sub>7</sub> .	<b>S20</b>
<b>Fig. S19</b>	<sup>19</sup> F NMR spectrum of <b>4</b> in DMF-d <sub>7</sub> .	<b>S21</b>
<b>Fig. S20</b>	<sup>31</sup> P NMR spectrum of <b>4</b> in DMF-d <sub>7</sub> .	<b>S22</b>
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<b>Fig. S22</b>	Solid-state <sup>19</sup> F NMR spectrum of <b>4</b> .	<b>S24</b>
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<b>Fig. S28</b>	UV-Vis spectra of <b>1</b> (0.17 mM) in 2% (v/v) DMSO/H <sub>2</sub> O mixture recorded as a function of time during the incubation for 45 h.	<b>S30</b>
<b>Fig. S29</b>	UV-Vis spectra of <b>2</b> (0.17 mM) in 2% (v/v) DMSO/H <sub>2</sub> O mixture recorded as a function of time during the incubation for 45 h.	<b>S31</b>
<b>Fig. S30</b>	UV-Vis spectra of <b>3</b> (0.17 mM) in 2% (v/v) DMSO/H <sub>2</sub> O mixture recorded as a function of time during the incubation for 45 h.	<b>S32</b>



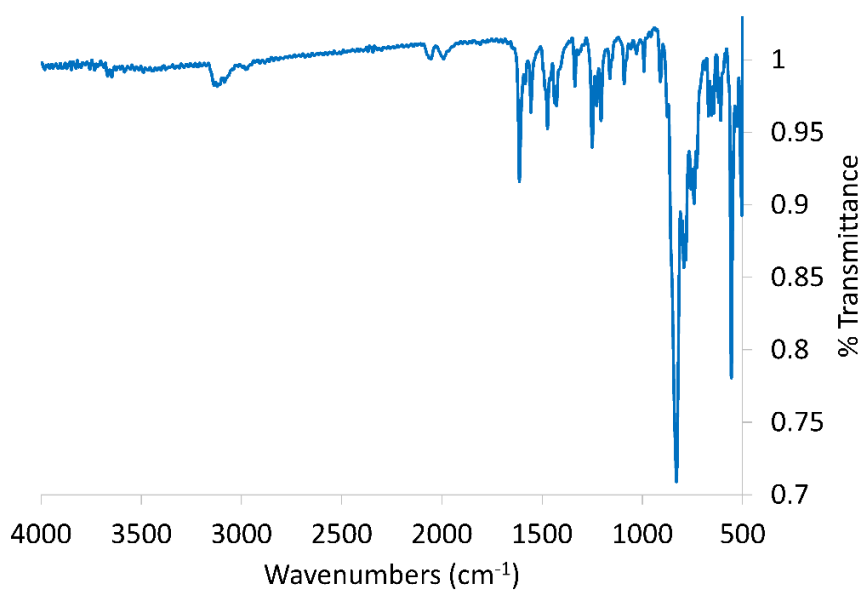
a)



b)

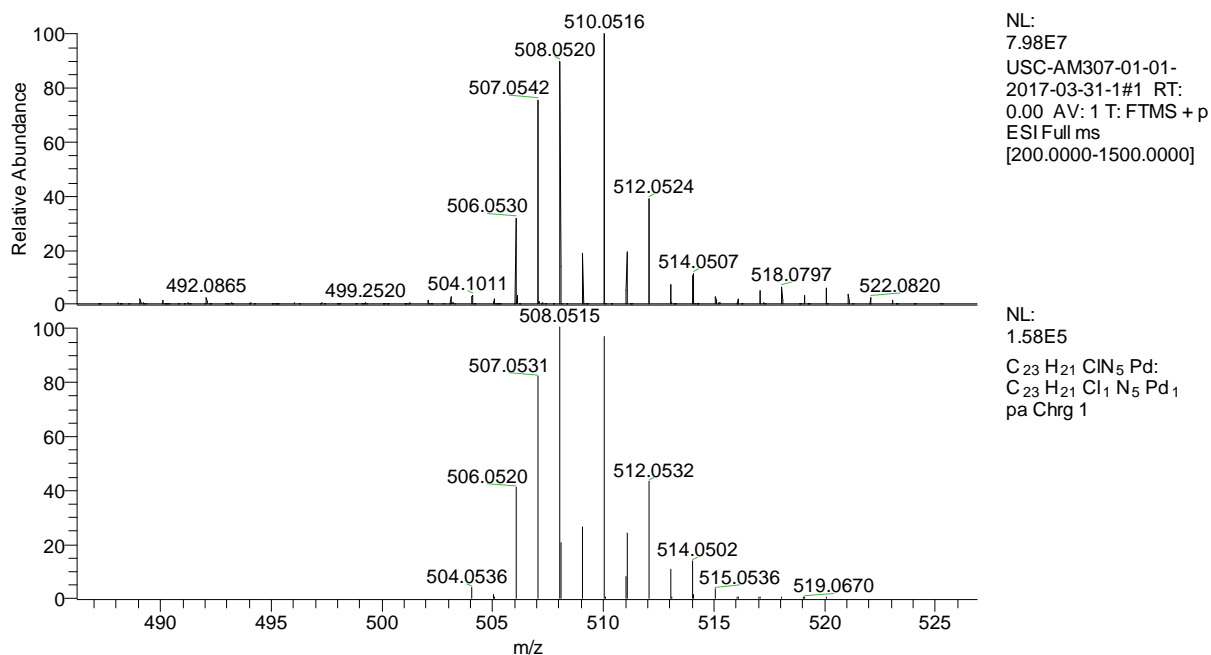


c)

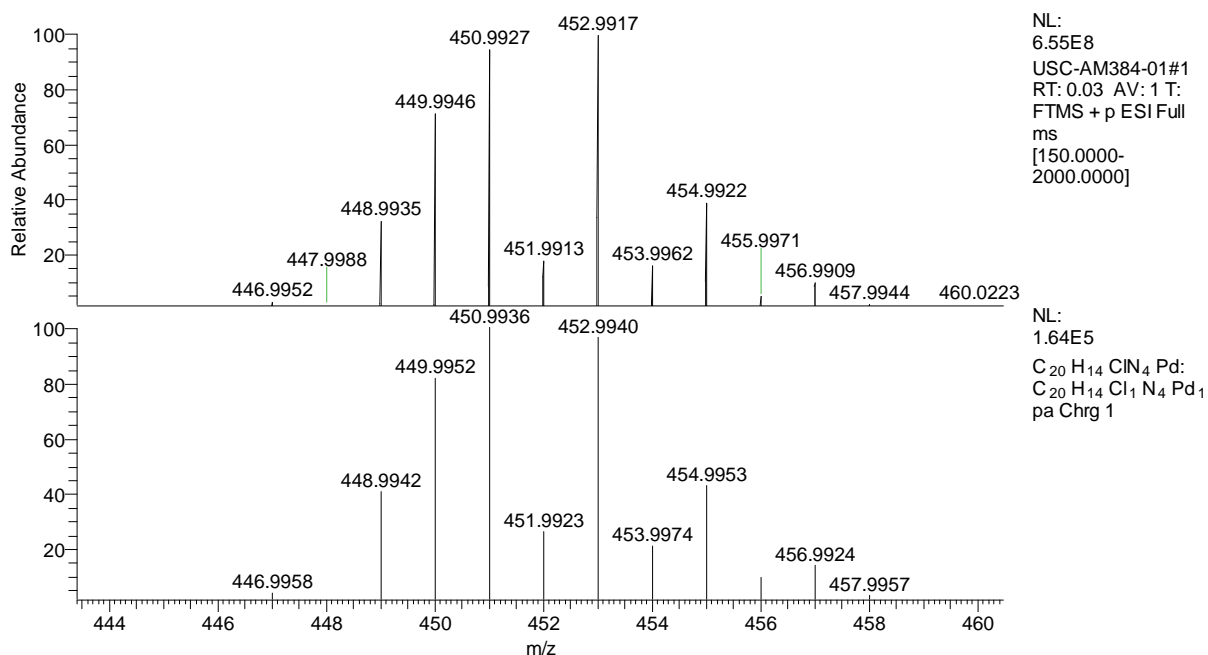


d)

**Fig. S1** ATR IR spectra of a) 1, b) 2, c) 3 and d) 4.

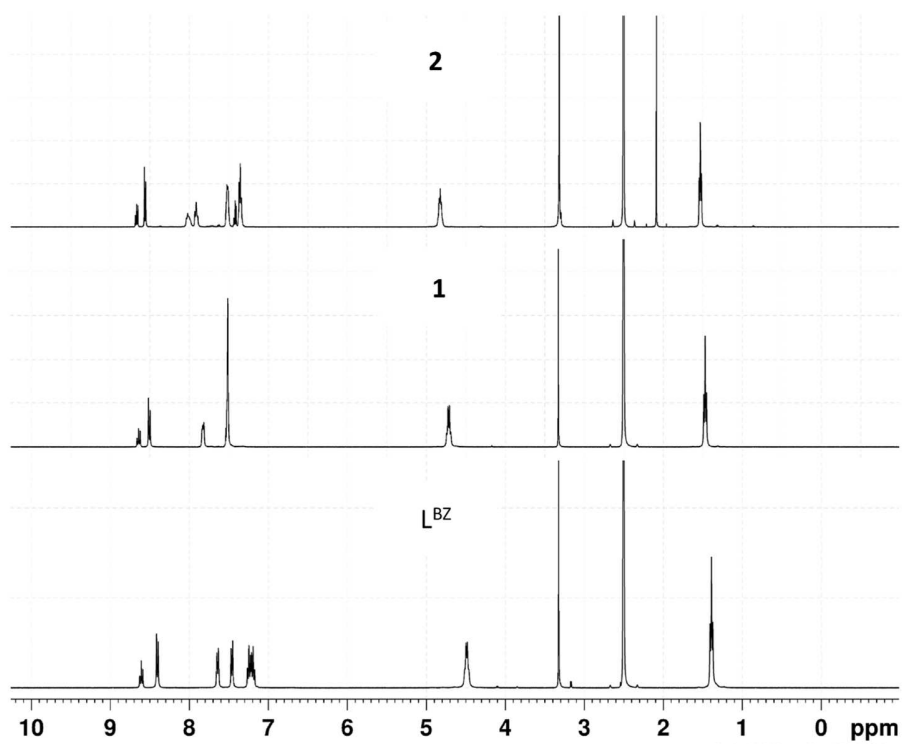


a)

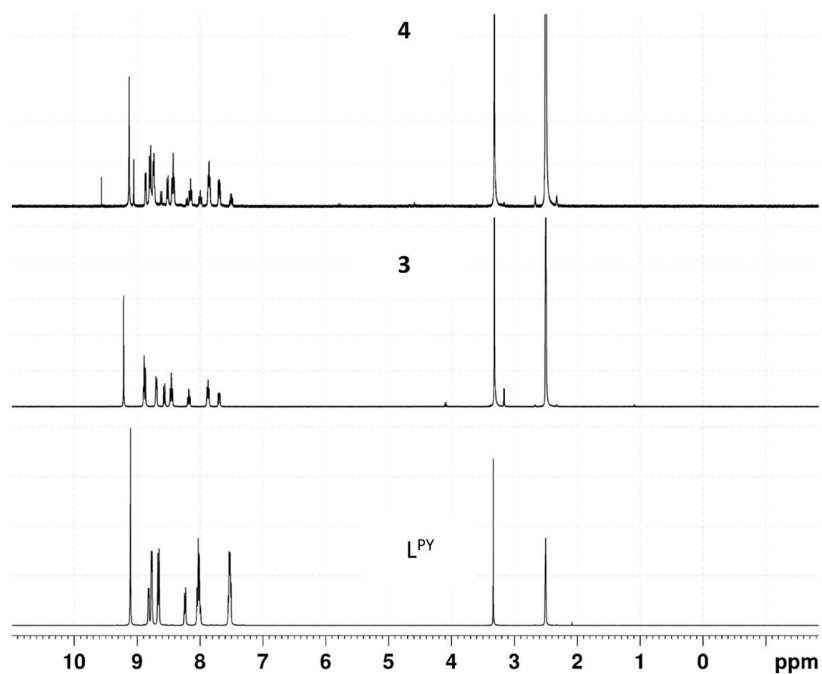


b)

**Fig. S2** Electrospray ionization mass spectra: Experimental (Up) and theoretical (down) ISOTOPIC pattern for  $\{PdClL\}^+$  ( $L = L^{BZ}$  and  $L^{PY}$ ) ion of a) compounds **1** and b) **3**.



a)



b)

**Fig. S3** Comparative  $^1\text{H}$  NMR spectra of the free ligands and their complexes a)  $\text{L}^{\text{BZ}}$  and b)  $\text{L}^{\text{PY}}$ .

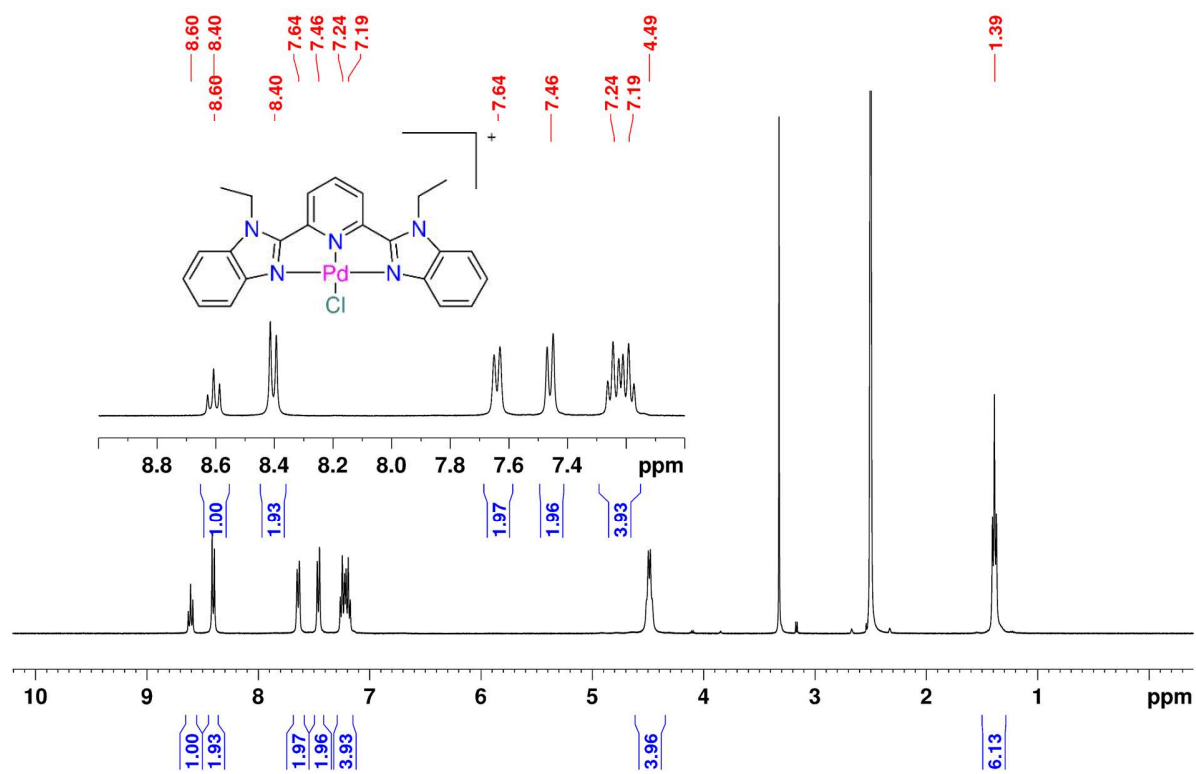


Fig. S4  $^1\text{H}$  NMR spectrum of **1** in  $\text{DMSO-d}_6$ .

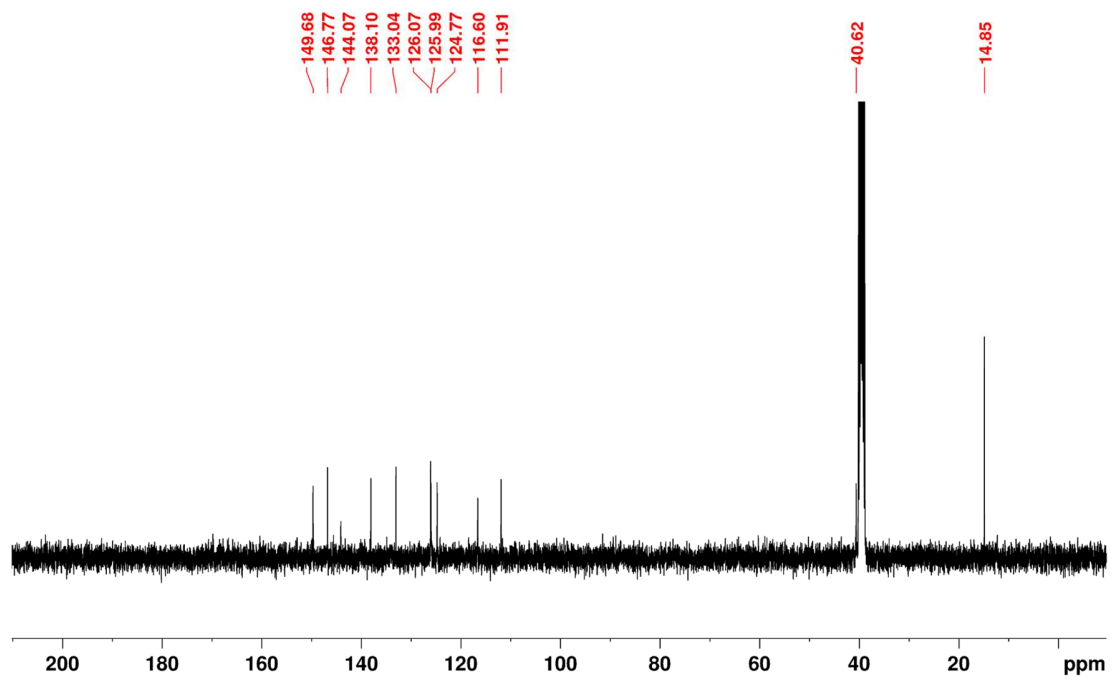


Fig. S5  $^{13}\text{C}$  NMR spectrum of **1** in  $\text{DMSO-d}_6$ .

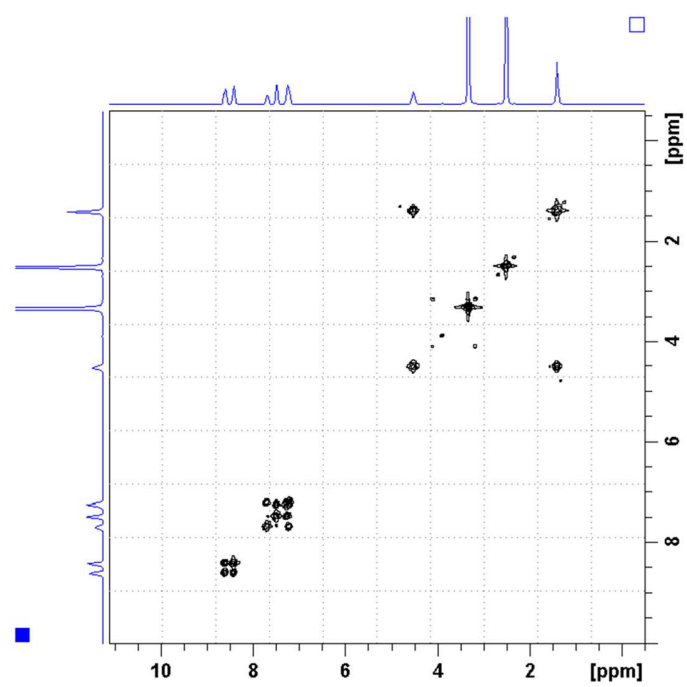
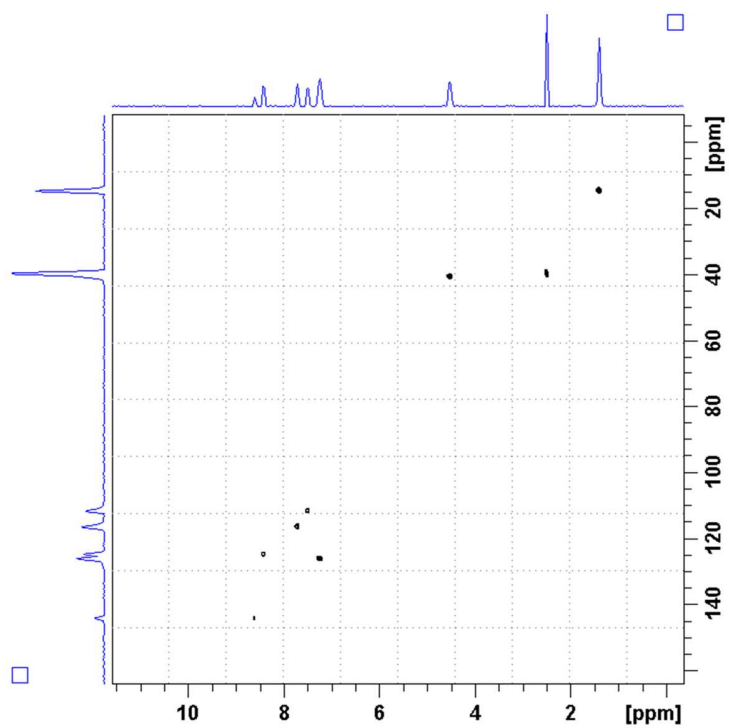


Fig. S6  $\{^1\text{H}, ^1\text{H}\}$  COSY NMR spectrum of **1** in DMSO- $d_6$ .





**Fig. S7**  $\{^{13}\text{C}, ^1\text{H}\}$  HSQC NMR spectrum of **1** in  $\text{DMSO-d}_6$ .

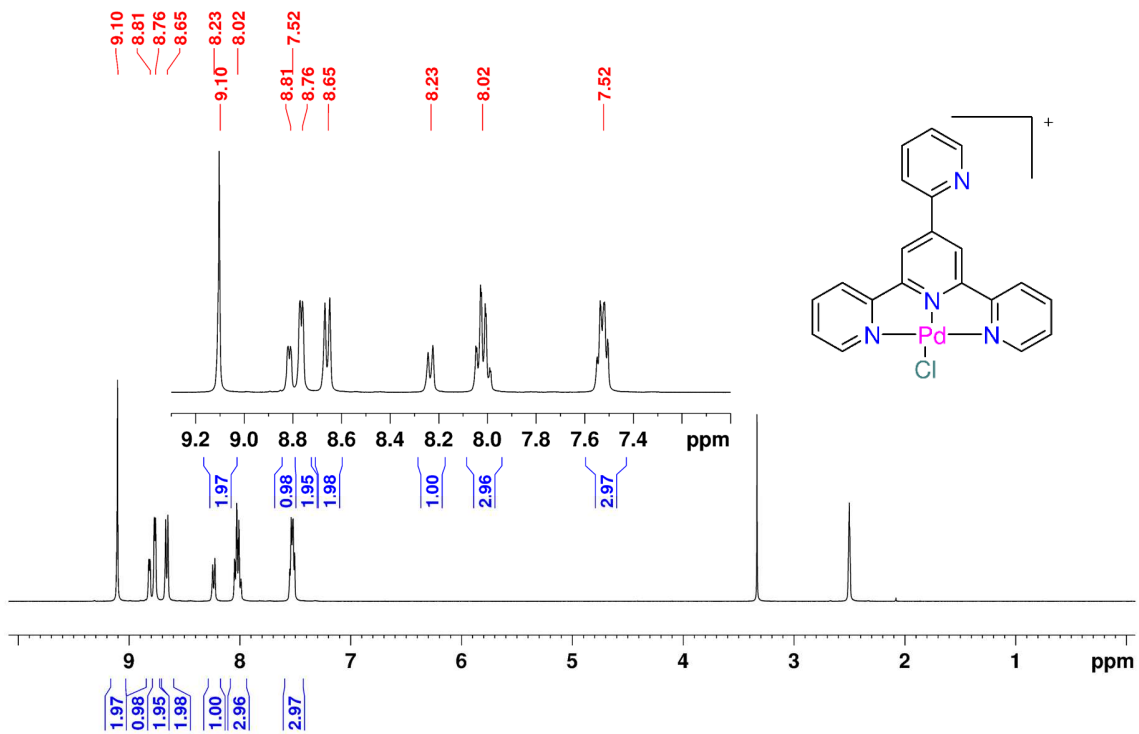


Fig. S8  $^1\text{H}$  NMR spectrum of **3** in  $\text{DMSO-d}_6$ .

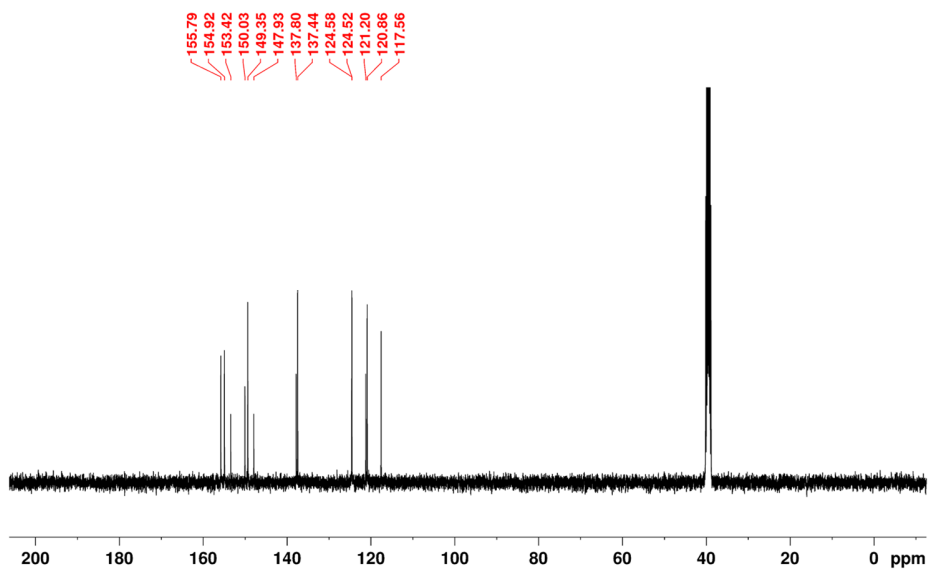
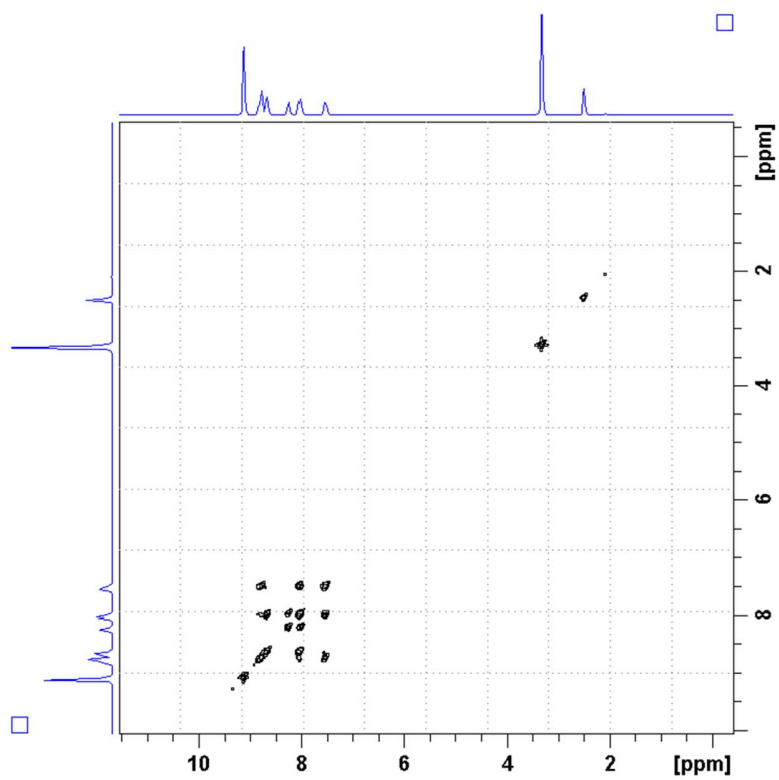
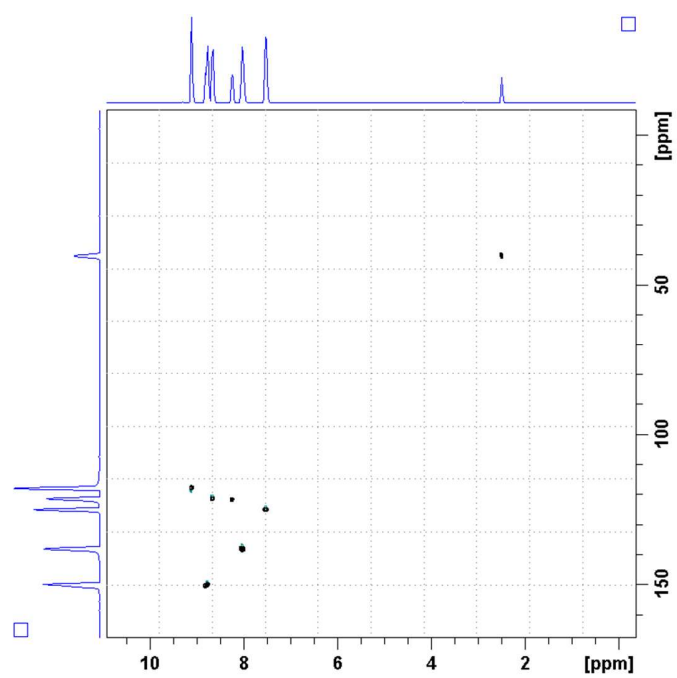


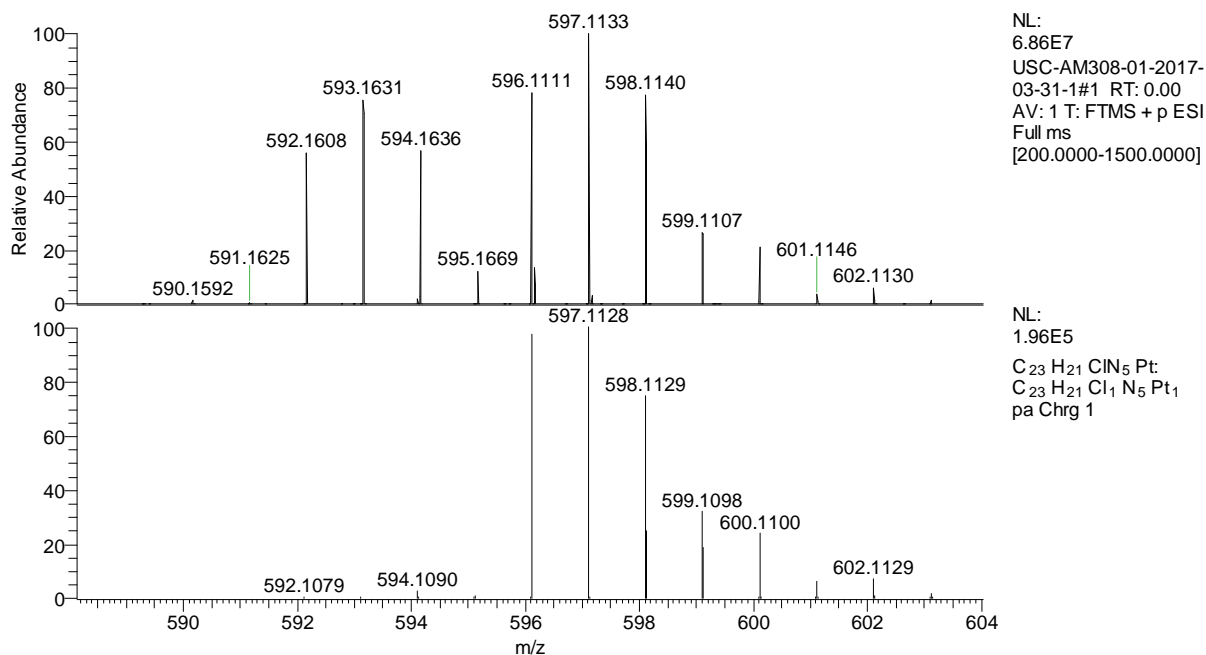
Fig. S9  $^{13}\text{C}$  NMR spectrum of **3** in  $\text{DMSO-d}_6$ .



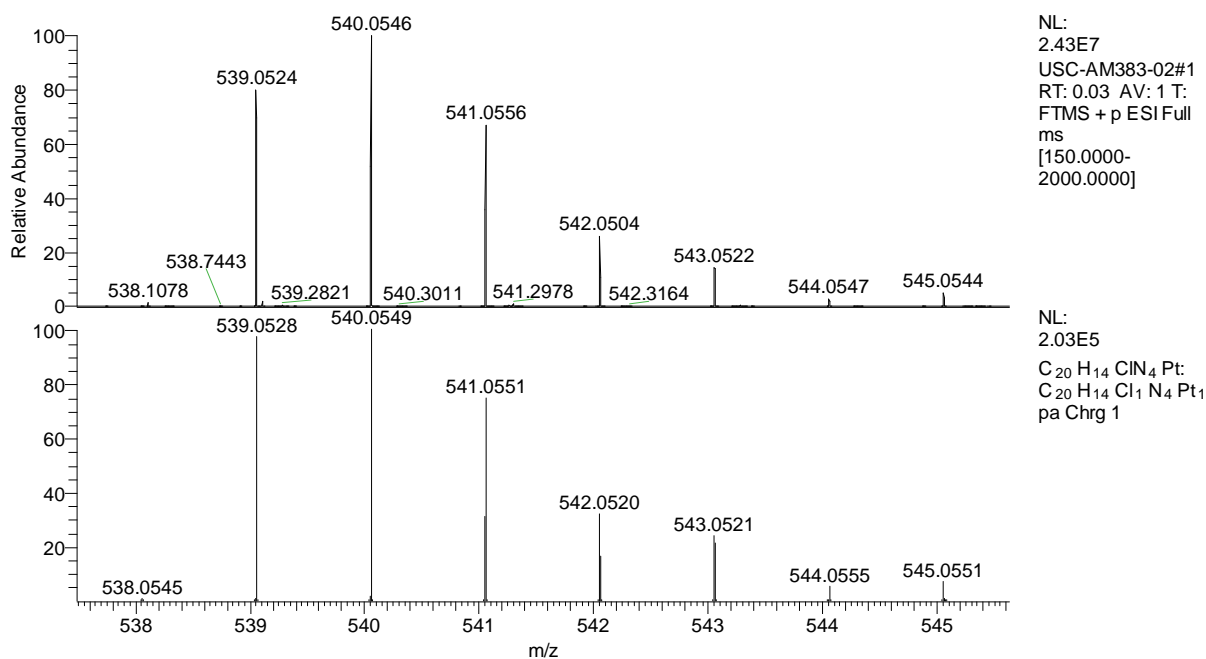
**Fig. S10**  $\{^1\text{H}, ^1\text{H}\}$  COSY NMR spectrum of **3** in DMSO- $d_6$ .



**Fig. S11**  $\{^{13}\text{C}, ^1\text{H}\}$  HSQC NMR spectrum of **3** in DMSO- $d_6$ .



a)



b)

**Fig. S12** Electrospray ionization mass spectra: Experimental (Up) and theoretical (down) ISOTOPIC pattern for {PtClL}<sup>+</sup> (L = L<sup>BZ</sup> and L<sup>PY</sup>) ion of a) compounds **2** and b) **4**.

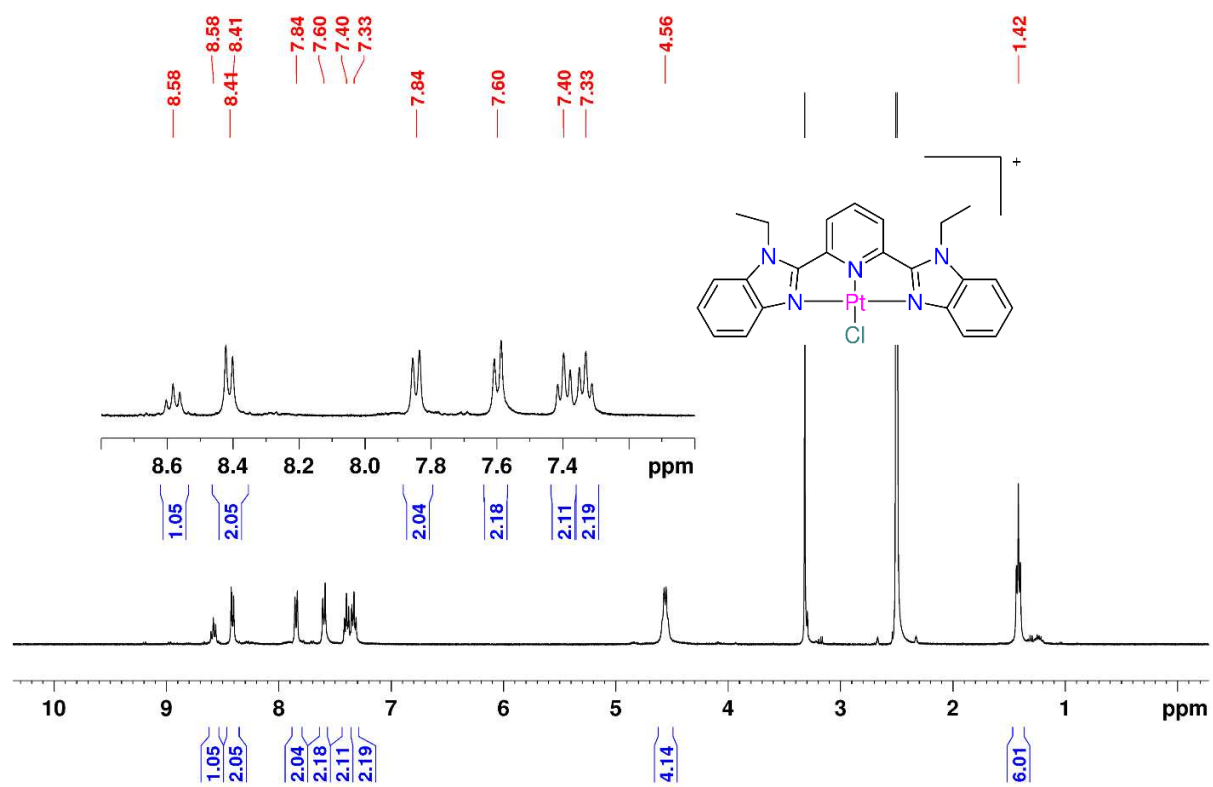
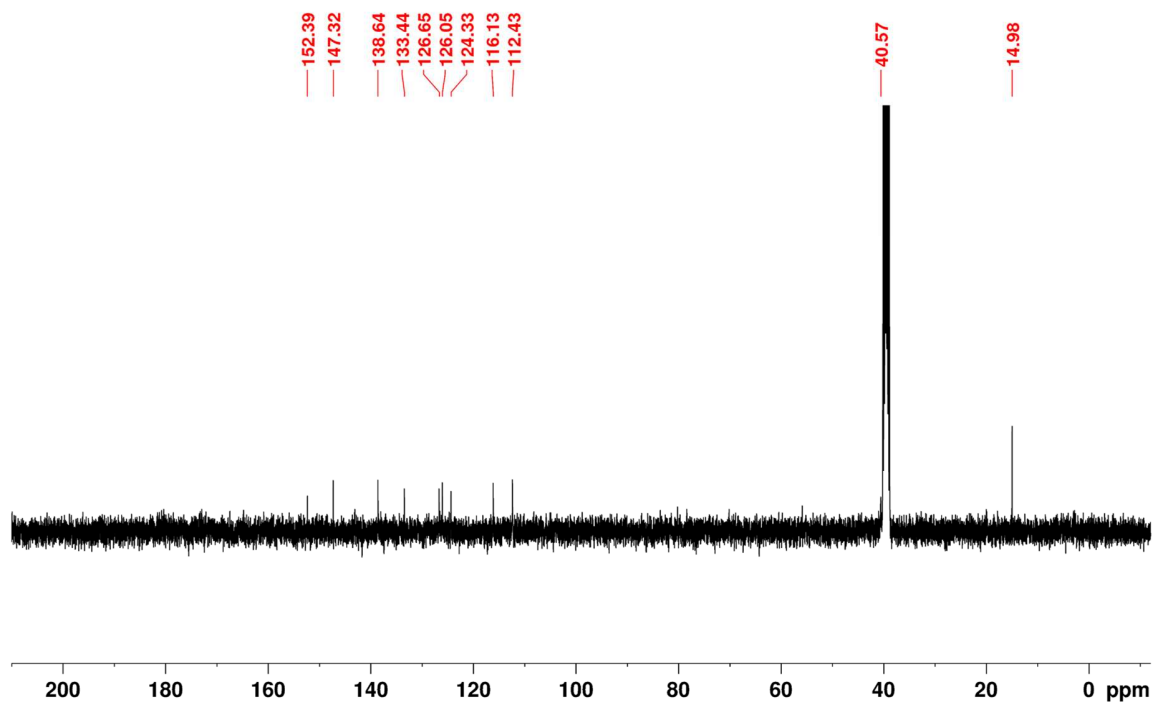


Fig. S13  $^1\text{H}$  NMR spectrum of **2** in  $\text{DMSO-d}_6$ .



**Fig. S14**  $^{13}\text{C}$  NMR spectrum of **2** in  $\text{DMSO-d}_6$ .



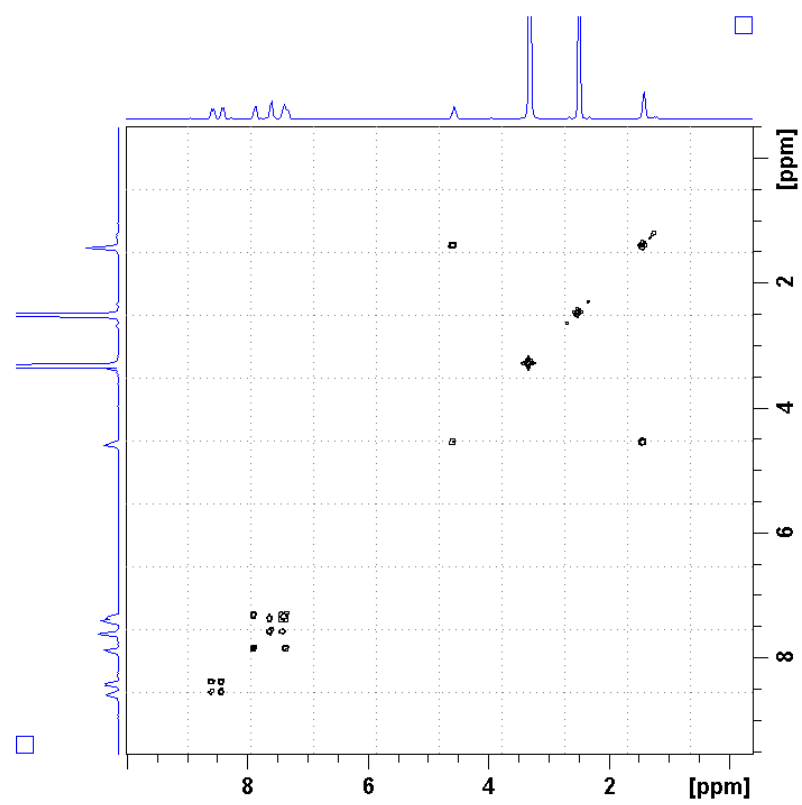
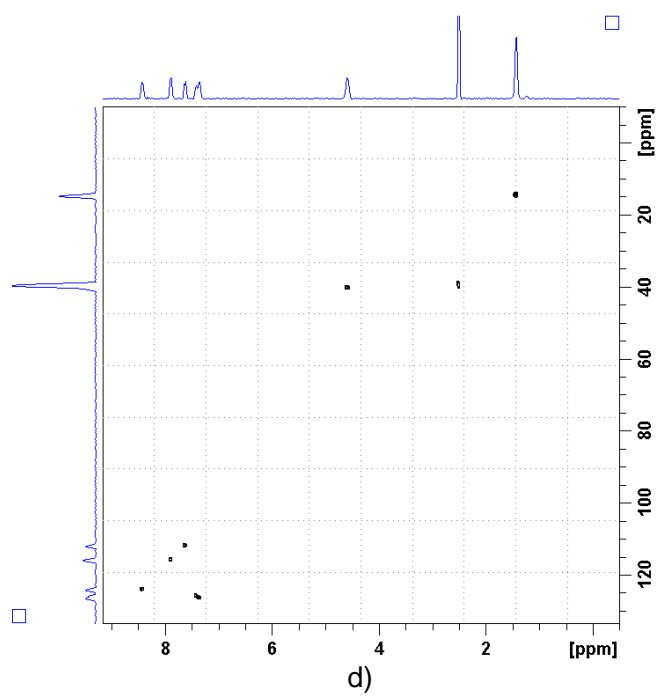
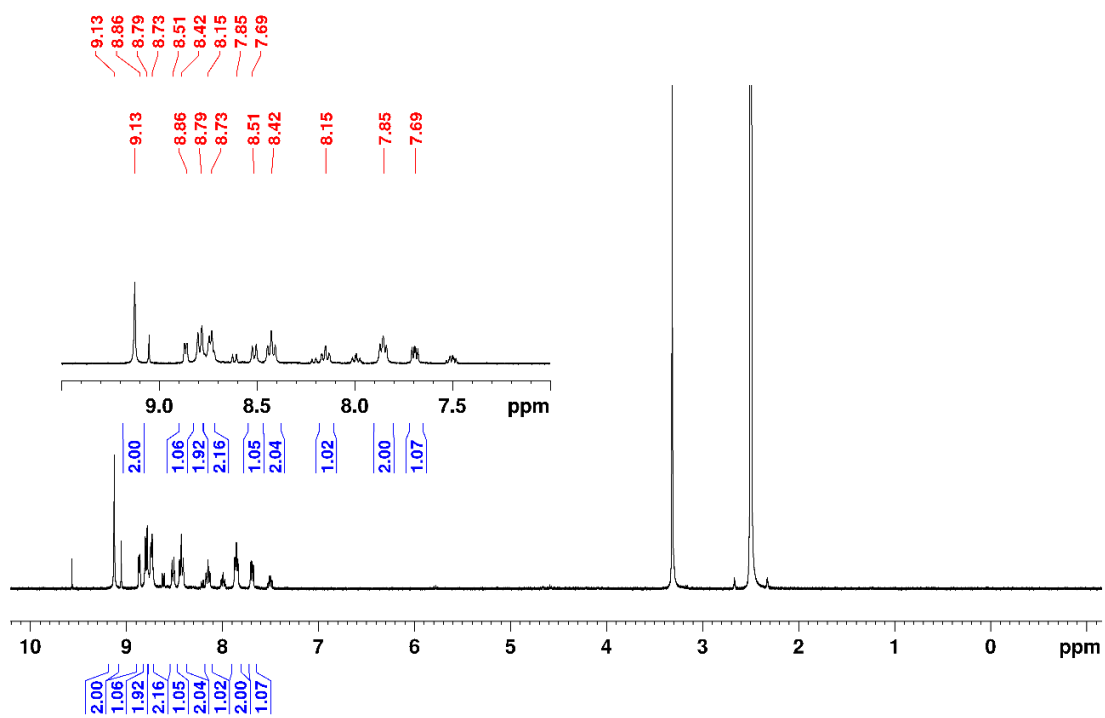


Fig. S15  $\{^1\text{H}, ^1\text{H}\}$  COS90 NMR spectrum of **2** in DMSO- $d_6$ .



**Fig. S16**  $\{^{13}\text{C}, ^1\text{H}\}$  HSQC NMR spectrum of **2** in DMSO- $d_6$ .



**Fig. S17**  $^1\text{H}$  NMR spectrum of **4** in  $\text{DMSO-d}_6$ .

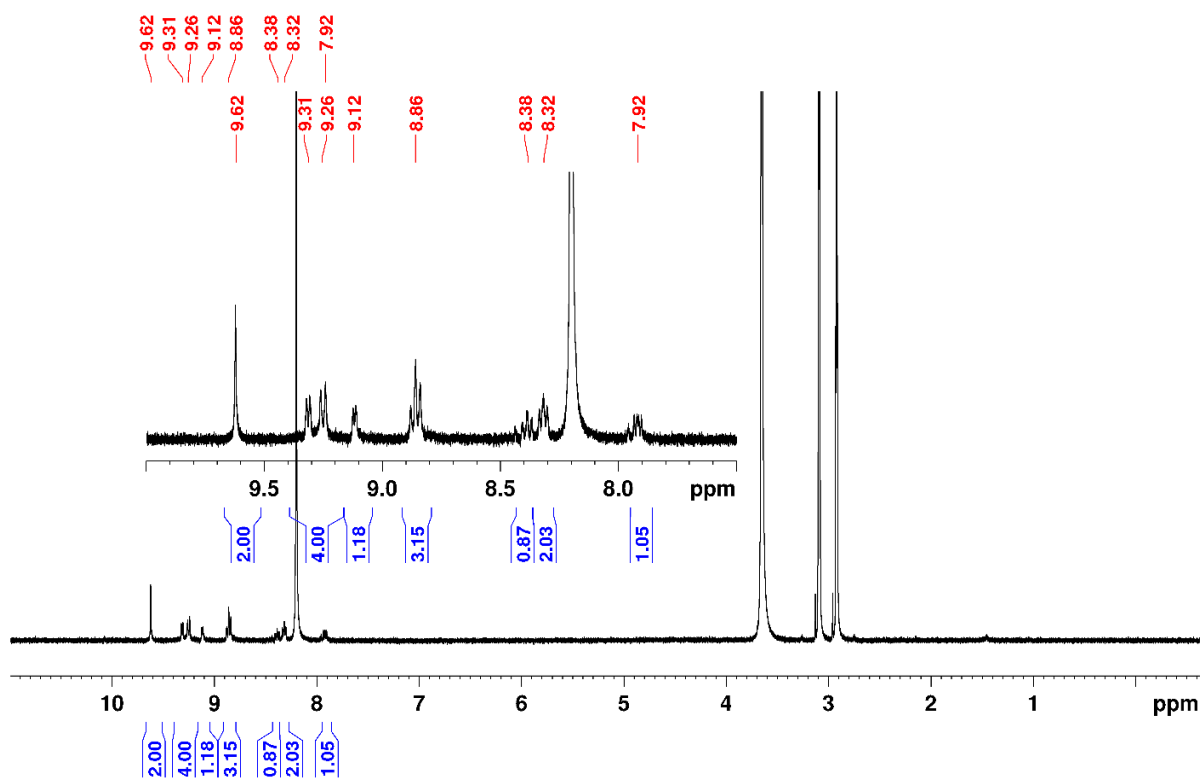
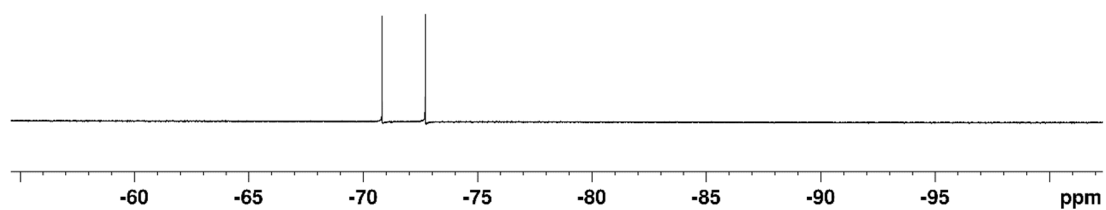
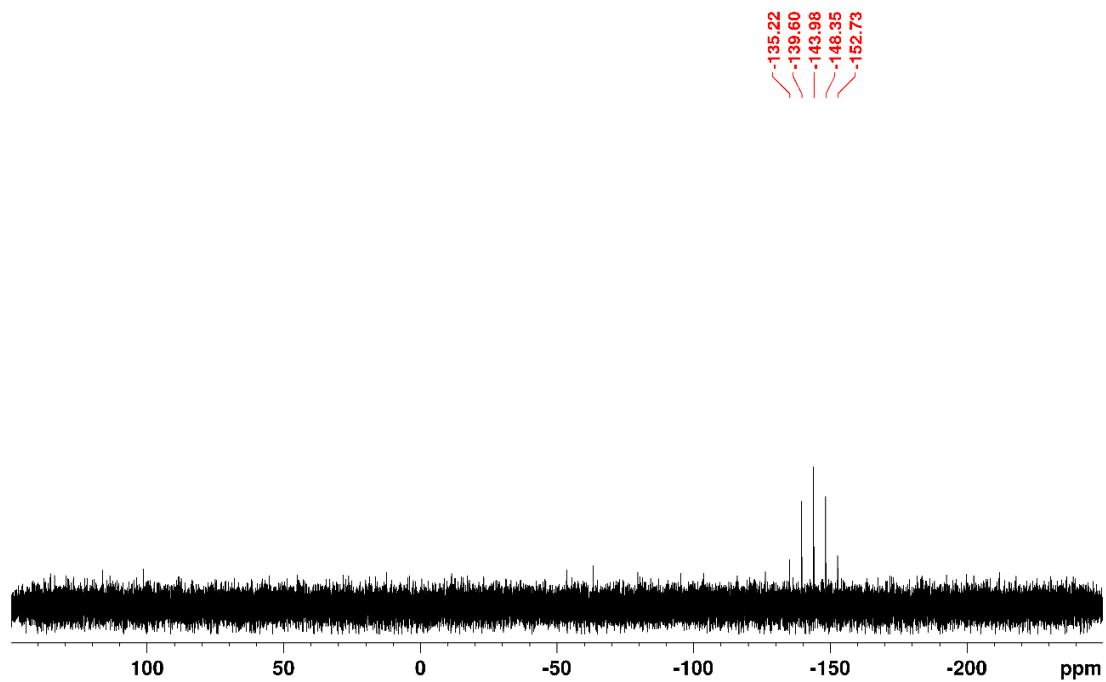


Fig. S18  $^1\text{H}$  NMR spectrum of 4 in  $\text{DMF-d}_7$ .



**Fig. S19**  $^{19}\text{F}$  NMR spectrum of **4** in  $\text{DMF-d}_7$ .



c)

**Fig. S20**  $^{31}\text{P}$  NMR spectrum of **4** in  $\text{DMF-d}_7$ .

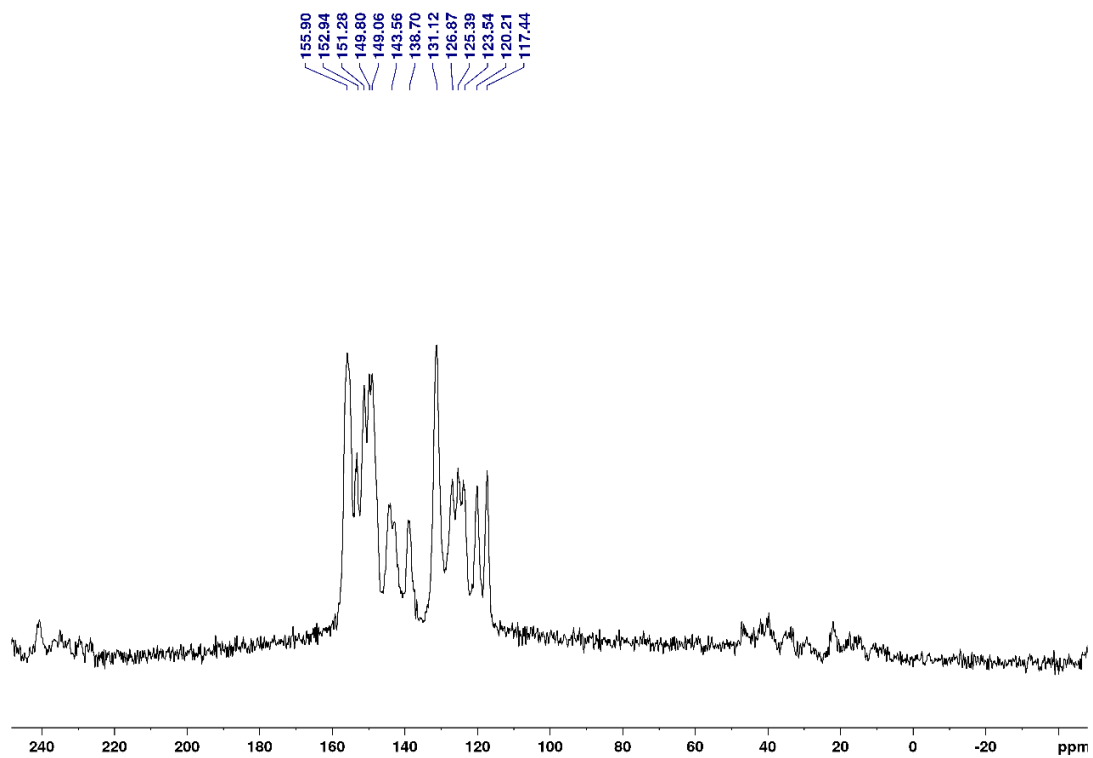
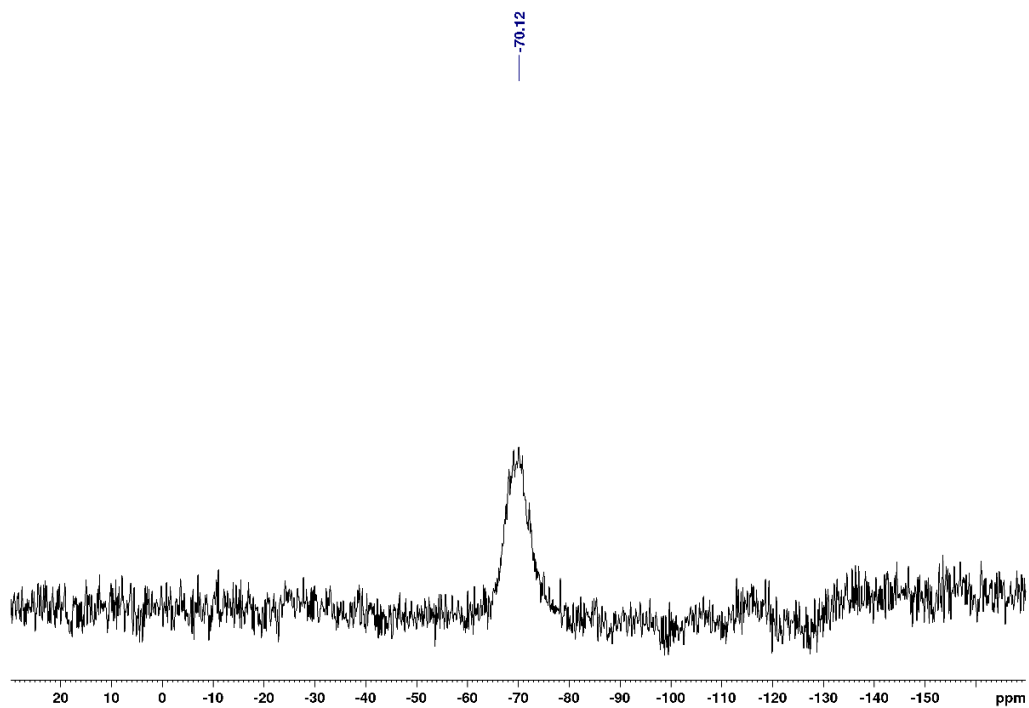
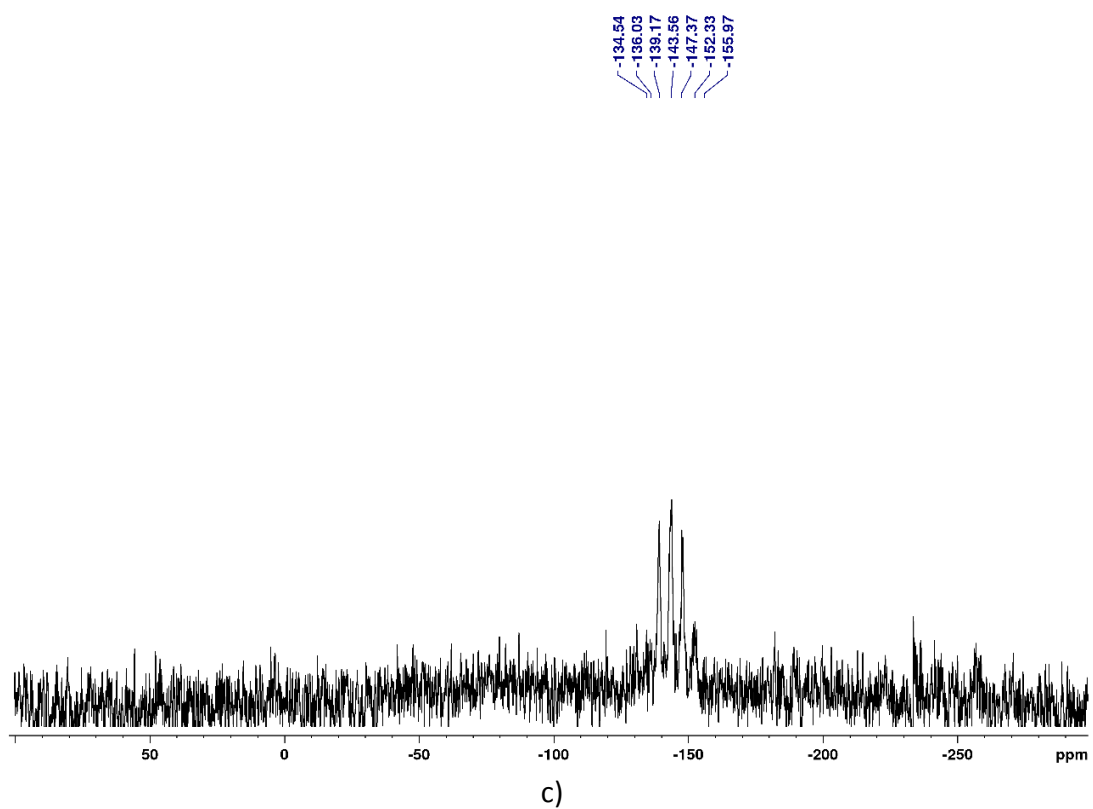


Fig. S21 Solid-state  $^{13}\text{C}$  NMR spectrum of **4**.

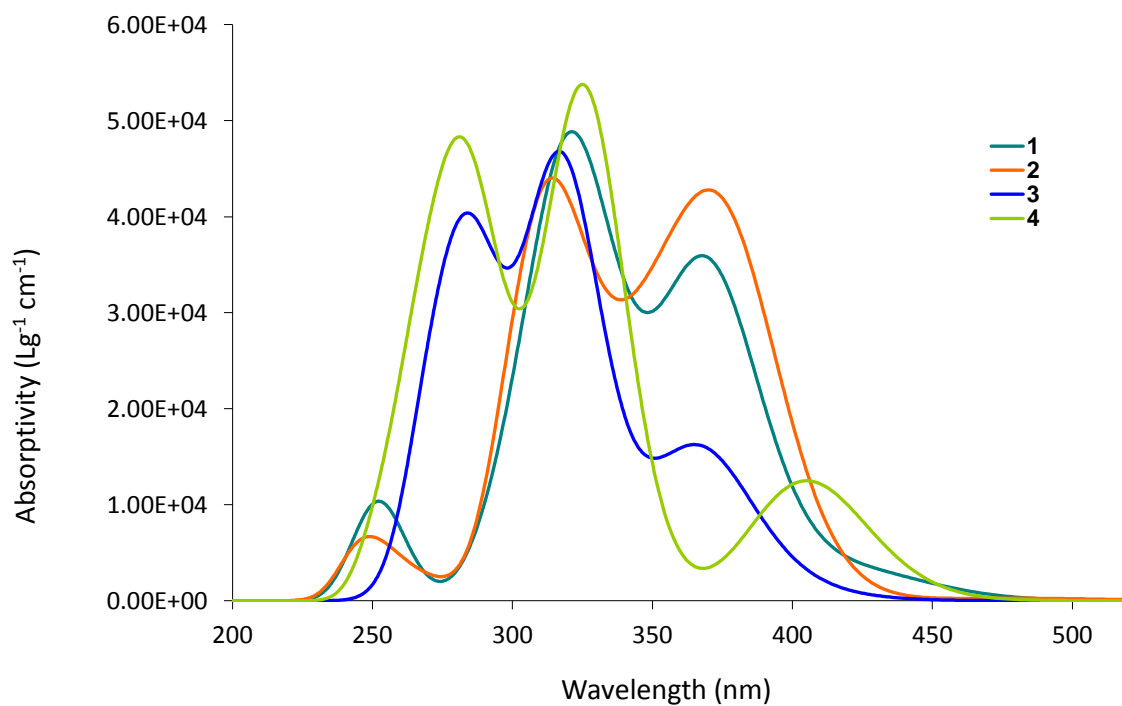


**Fig. S22** Solid-state  $^{19}\text{F}$  NMR spectrum of **4**.

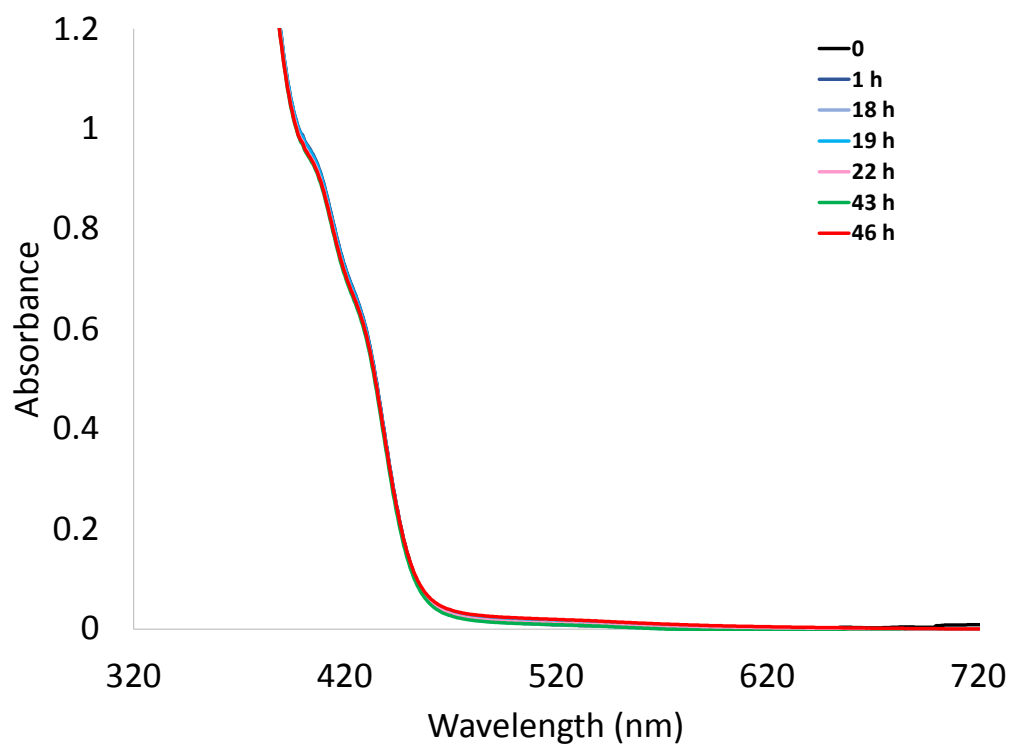




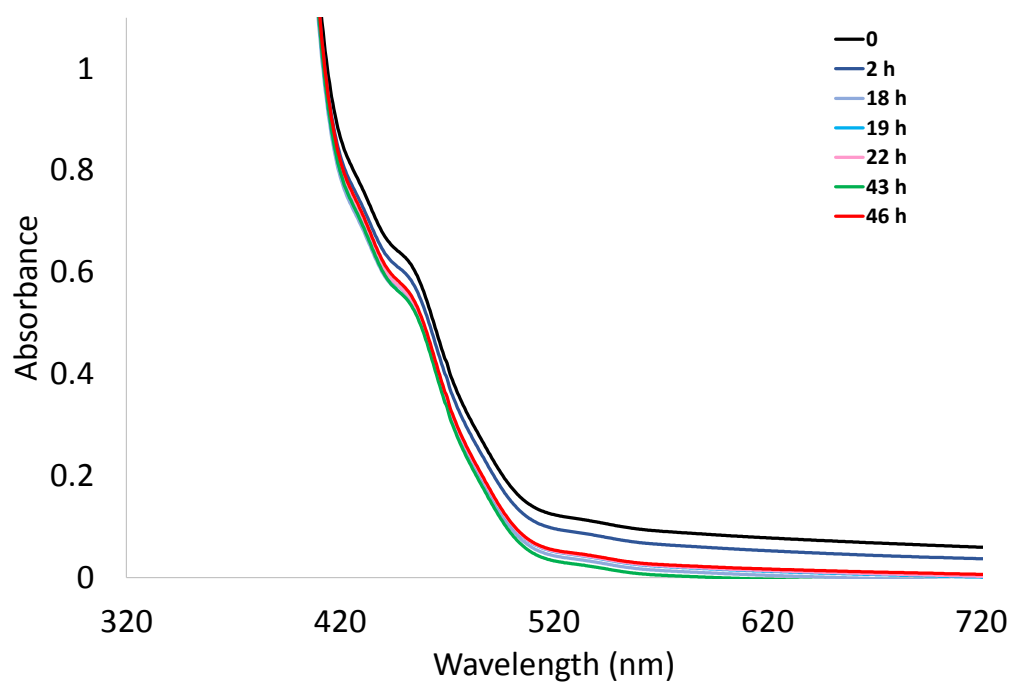
**Fig. S23** Solid-state  $^{31}\text{P}$  NMR spectrum of **4**.



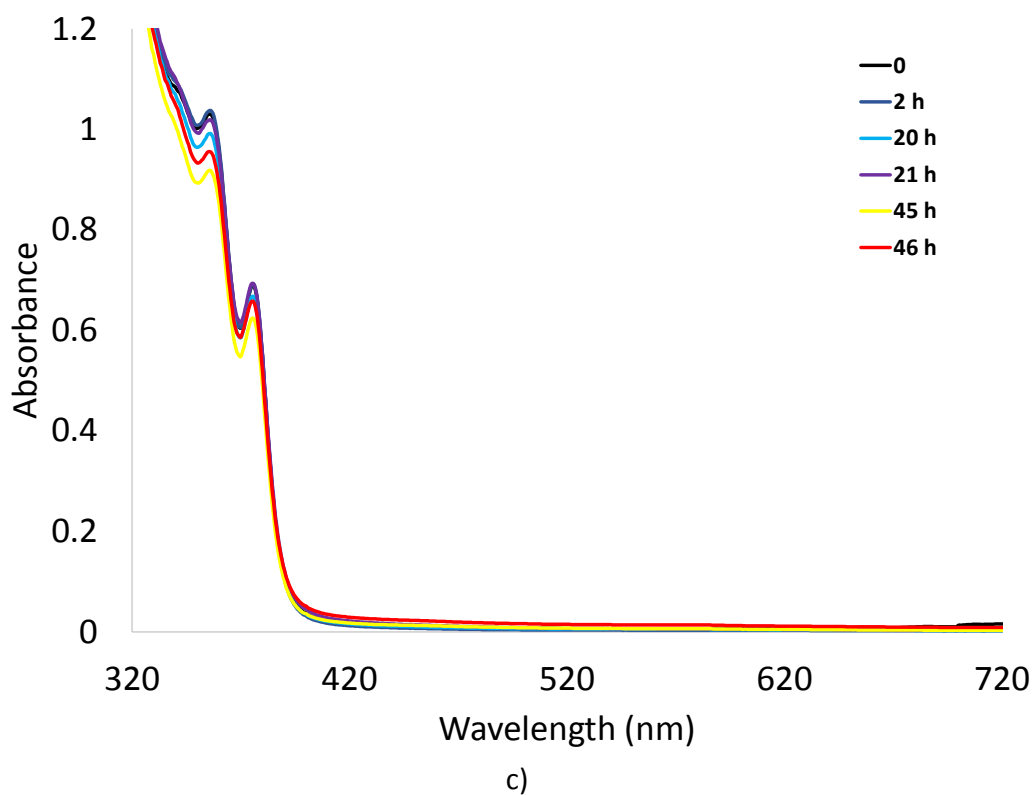
**Fig. S24** Theoretical electronic spectra of **1–4** obtained at CAM-B3LYP/LANL2DZ level of theory.



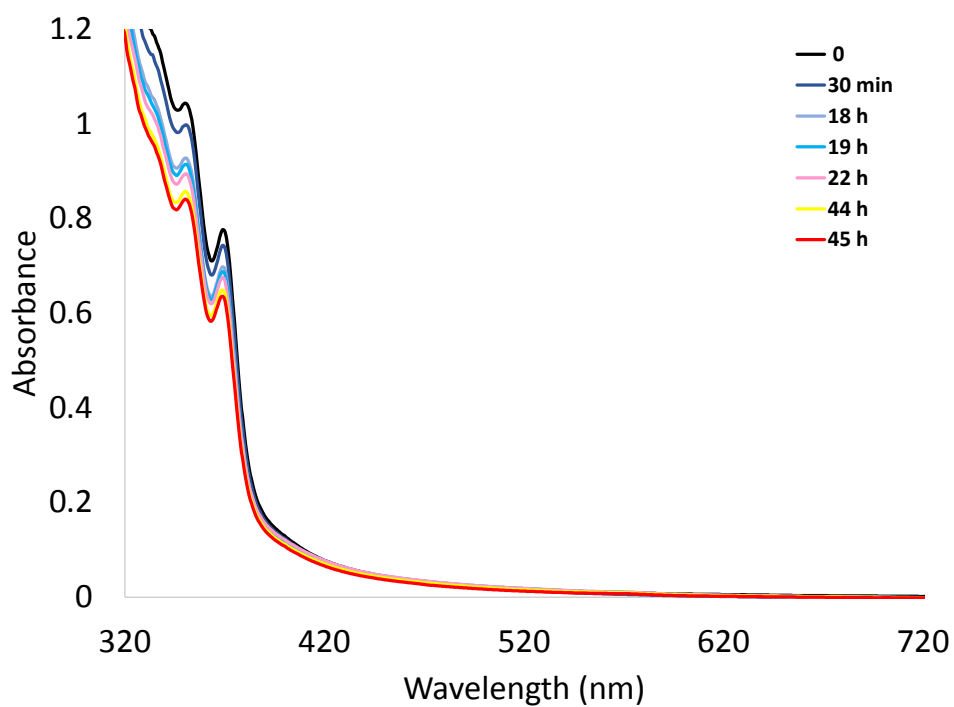
**Fig. S25** UV-Vis spectra of **1** (0.17 mM) in DMSO recorded as a function of time during the incubation for 46 h. (Note: the absolute scale on the left Y-axis)



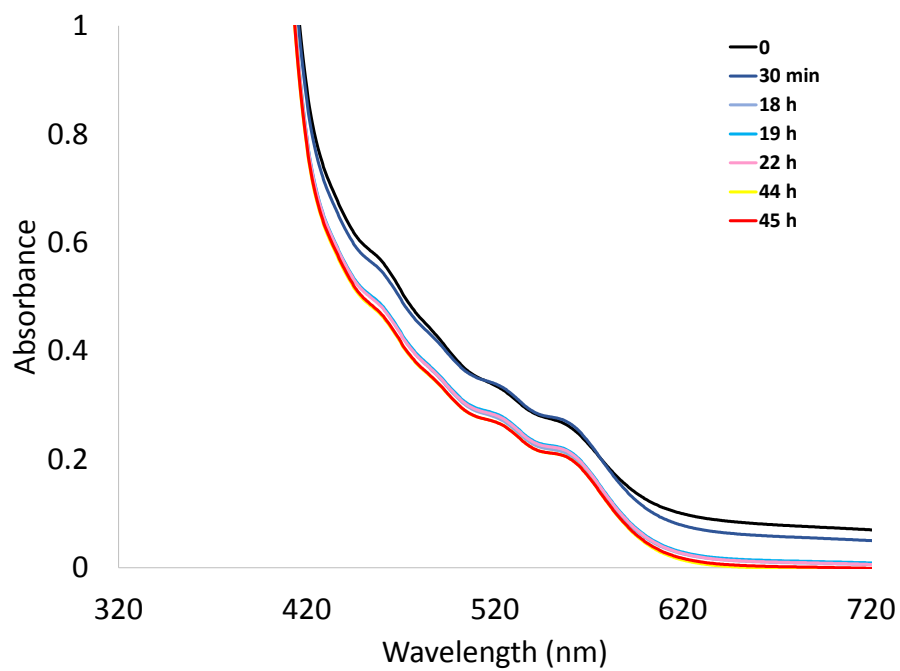
**Fig. S26** UV-Vis spectra of **2** (0.17 mM) in DMSO recorded as a function of time during the incubation for 46 h. (Note: the absolute scale on the left Y-axis)



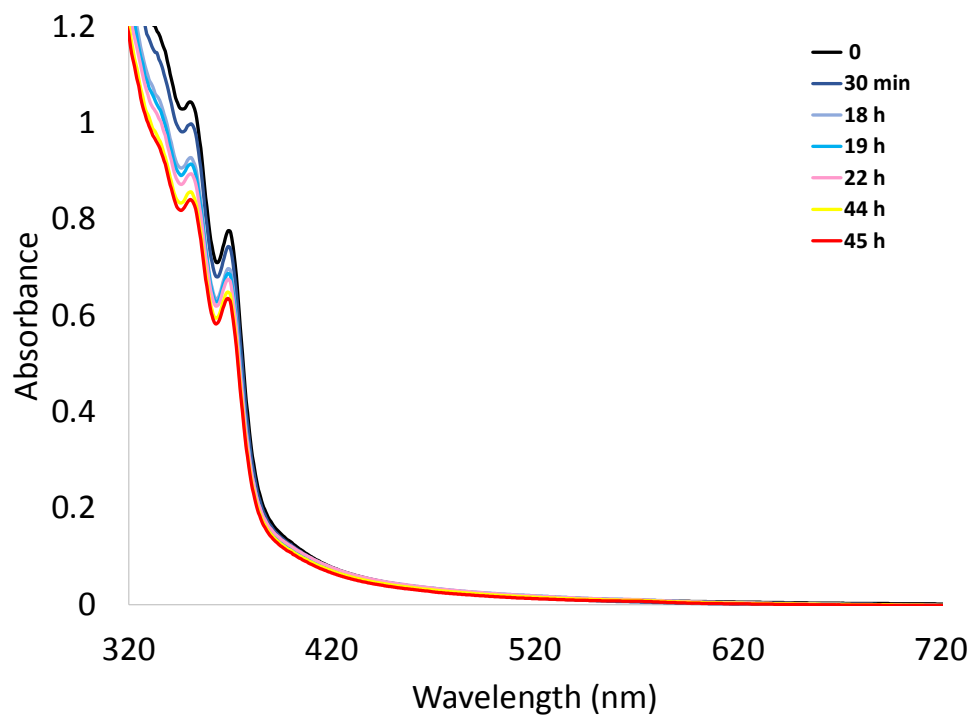
**Fig. S27** UV-Vis spectra of **3** (0.17 mM) in DMSO recorded as a function of time during the incubation for 46 h. (Note: the absolute scale on the left Y-axis)



**Fig. S28** UV-Vis spectra of **1** (0.17 mM) in 2% (v/v) DMSO/H<sub>2</sub>O mixture recorded as a function of time during the incubation for 45 h. (Note: the absolute scale on the left Y-axis)



**Fig. S29** UV-Vis spectra of **2** (0.17 mM) in 2% (v/v) DMSO/H<sub>2</sub>O mixture recorded as a function of time during the incubation for 45 h. (Note: the absolute scale on the left Y-axis)



**Fig. S30** UV-Vis spectra of **3** (0.17 mM) in 2% (v/v) DMSO/H<sub>2</sub>O mixture recorded as a function of time during the incubation for 45 h. (Note: the absolute scale on the left Y-axis)