



# Supplementary material: Stereoselective formation of bismuth complexes by transmetalation of lead with adaptable overhanging carboxylic acid 5,10-strapped porphyrins

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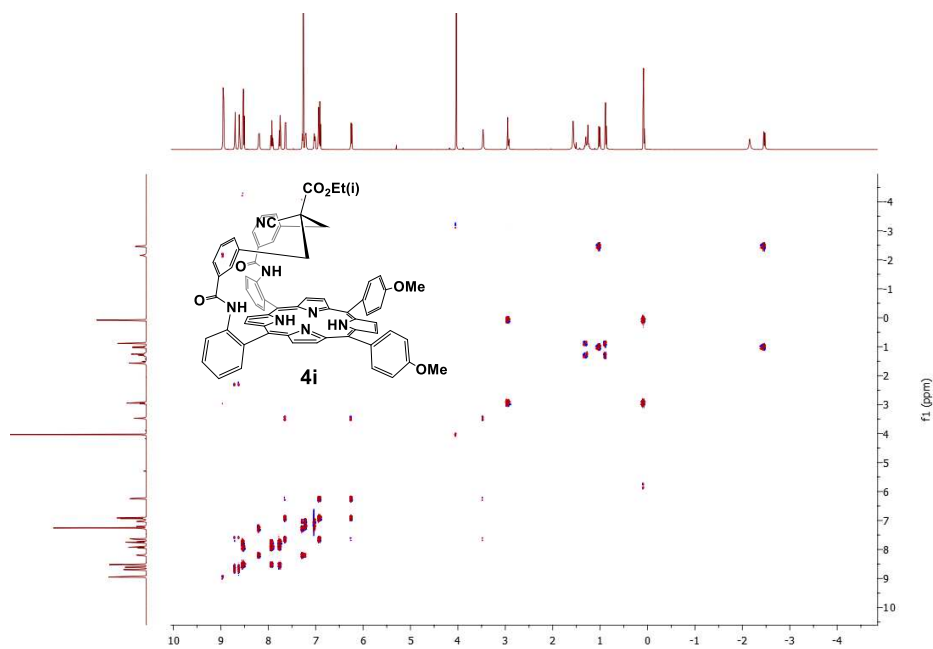
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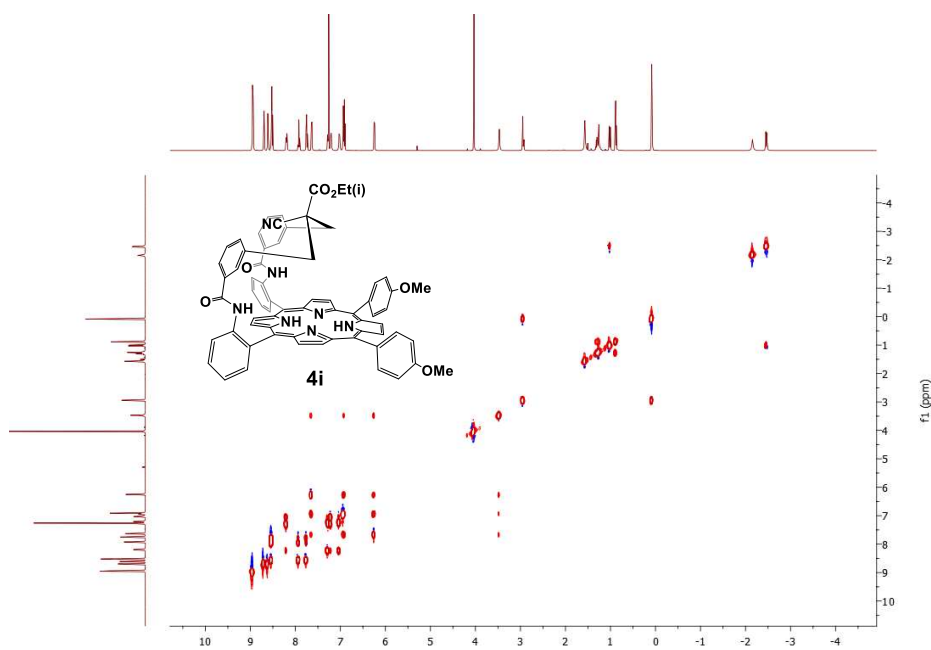
\* Corresponding authors.

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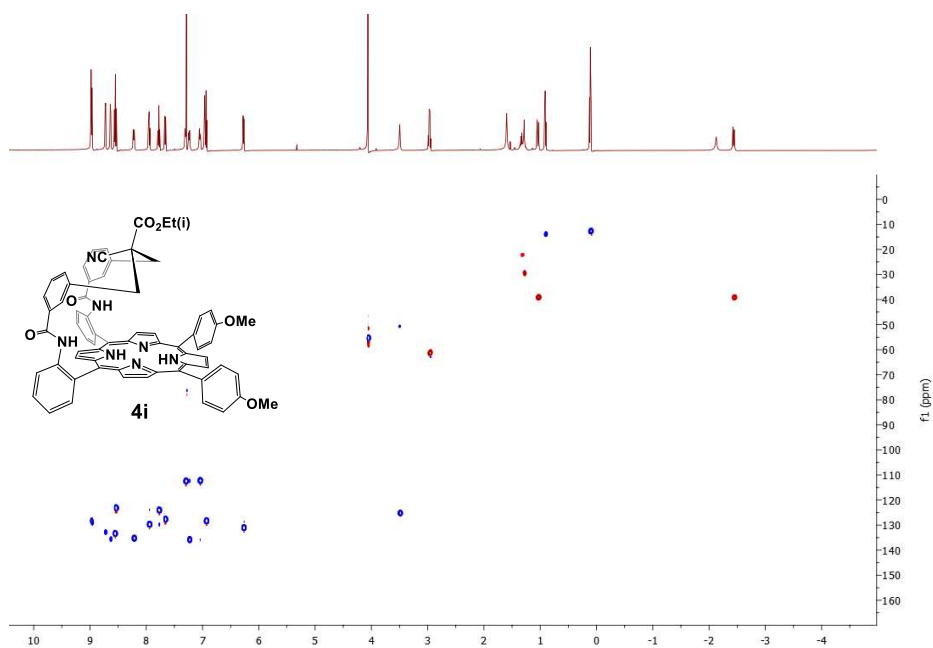
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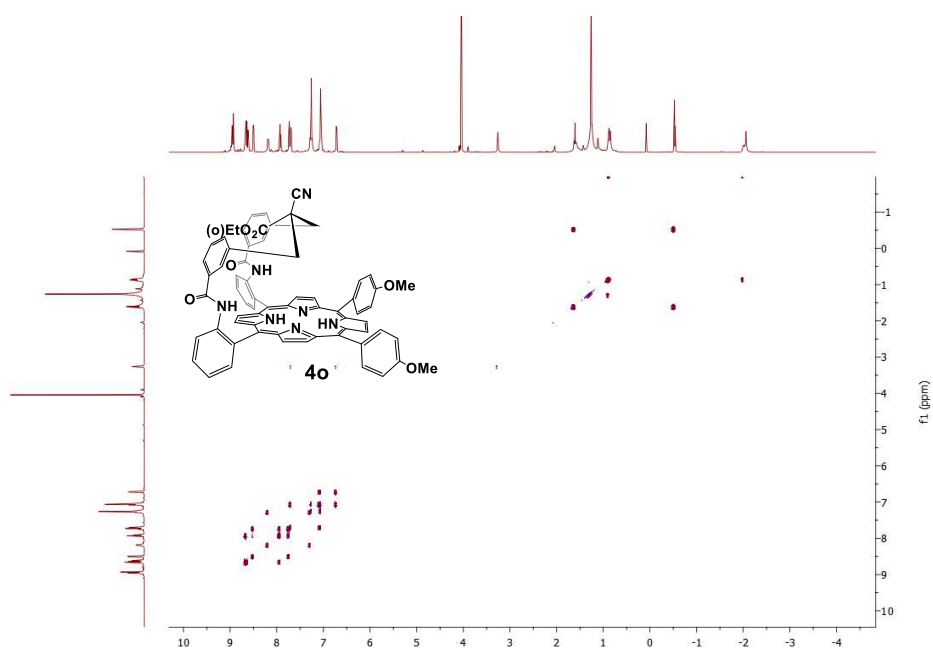
**Figure S1.** COSY NMR spectrum **4i** (DMSO-*d*<sub>6</sub>, 500 MHz, 298 K).



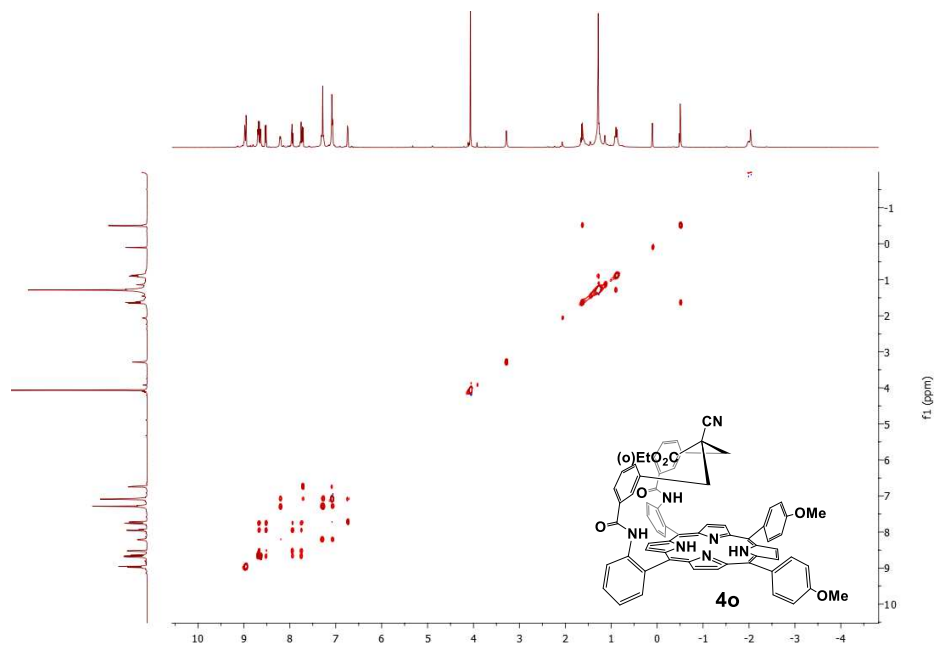
**Figure S2.** TOCSY NMR spectrum **4i** (DMSO-*d*<sub>6</sub>, 500 MHz, 298 K).



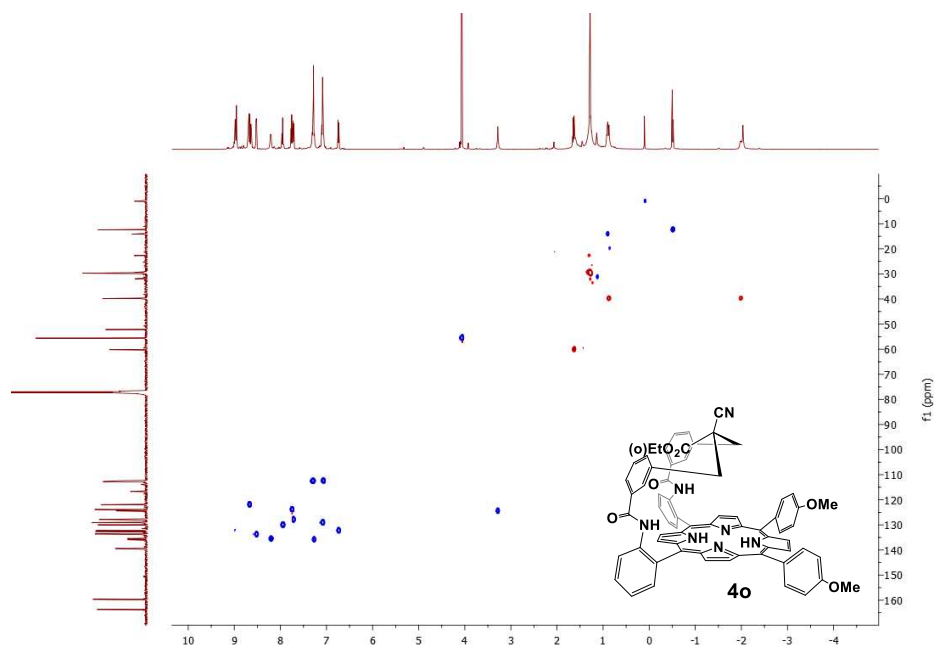
**Figure S3.** HSQC NMR spectrum **4i** (DMSO-*d*<sub>6</sub>, 500 MHz, 298 K).



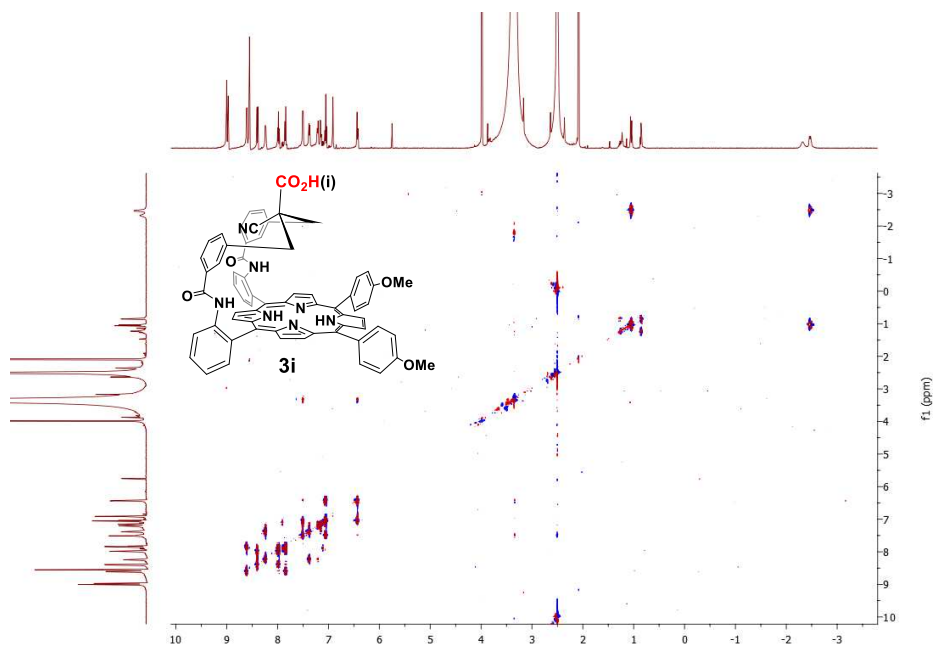
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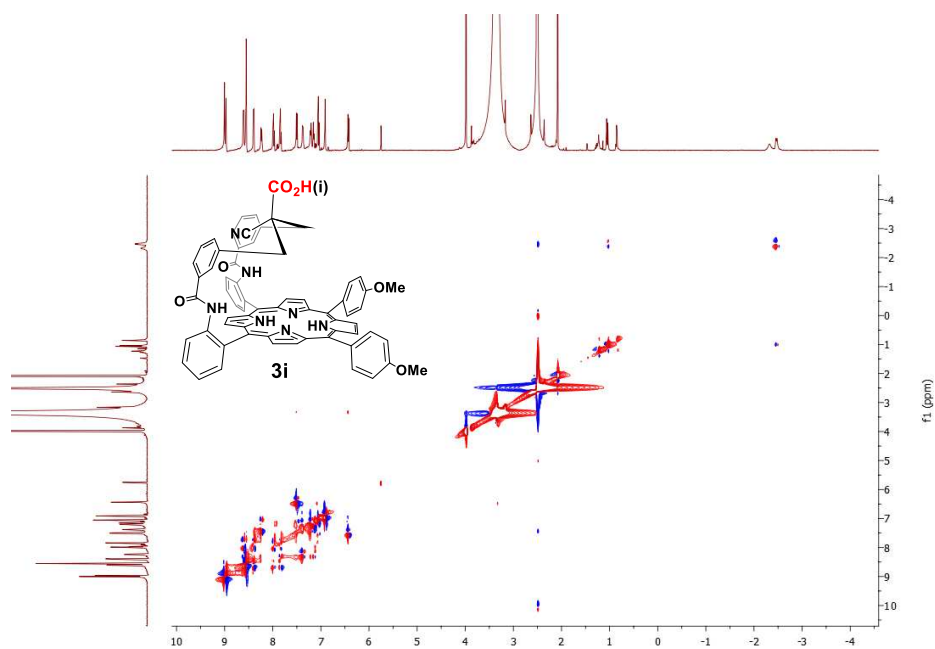
**Figure S5.** TOCSY NMR spectrum **4o** (DMSO- $d_6$ , 500 MHz, 298 K).



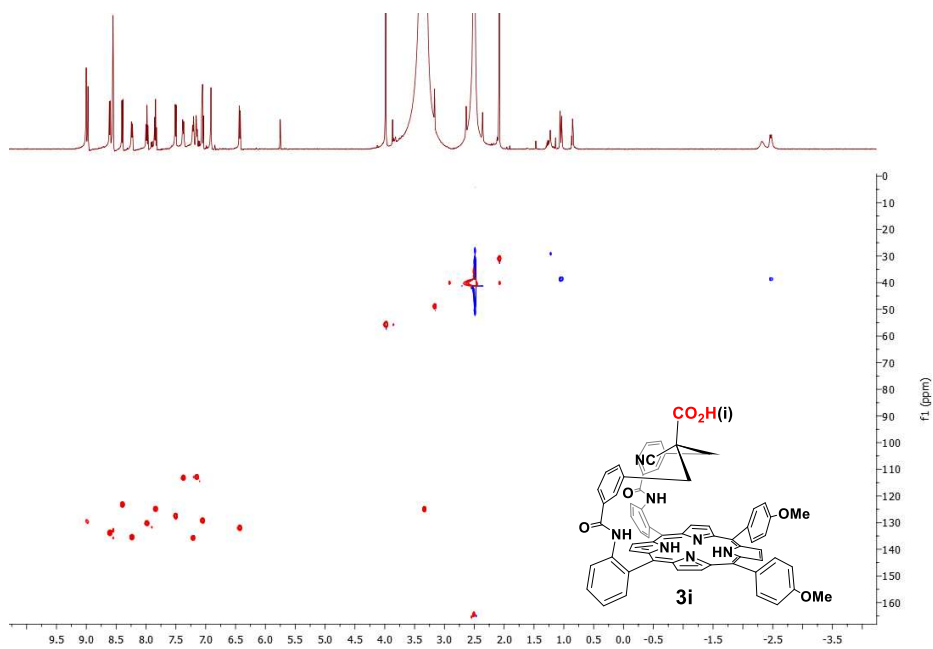
**Figure S6.** HSQC NMR spectrum **4o** (DMSO- $d_6$ , 500 MHz, 298 K).



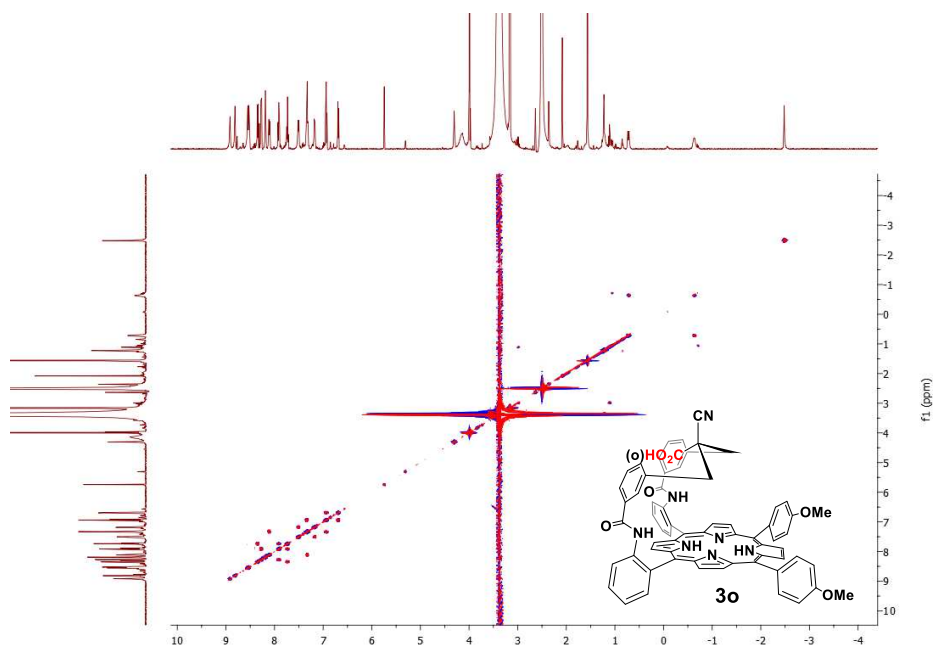
**Figure S7.** COSY NMR spectrum **3i** (DMSO- $d_6$ , 500 MHz, 298 K).



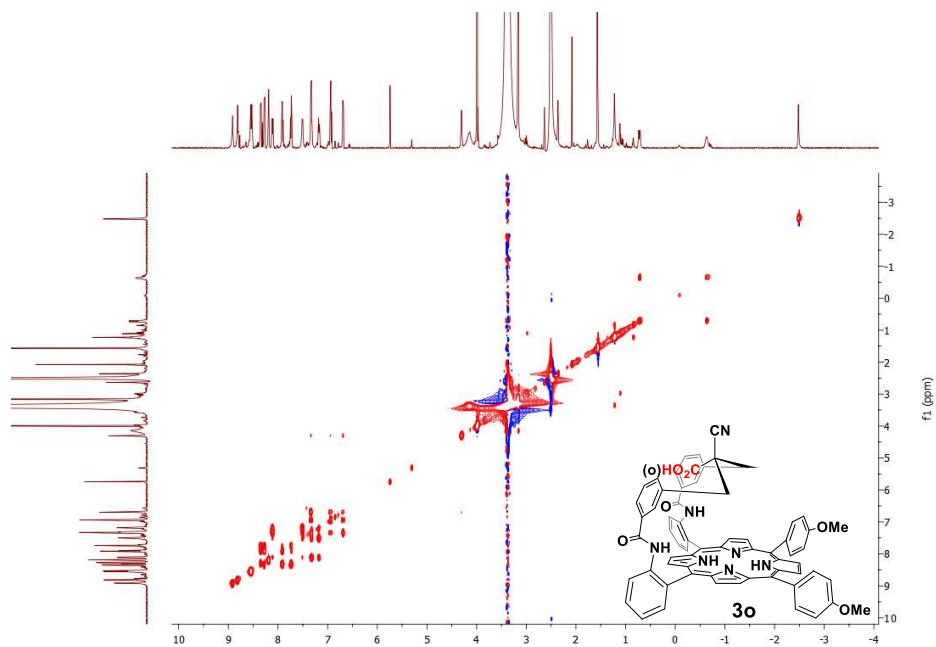
**Figure S8.** TOCSY NMR spectrum **3i** (DMSO- $d_6$ , 500 MHz, 298 K).



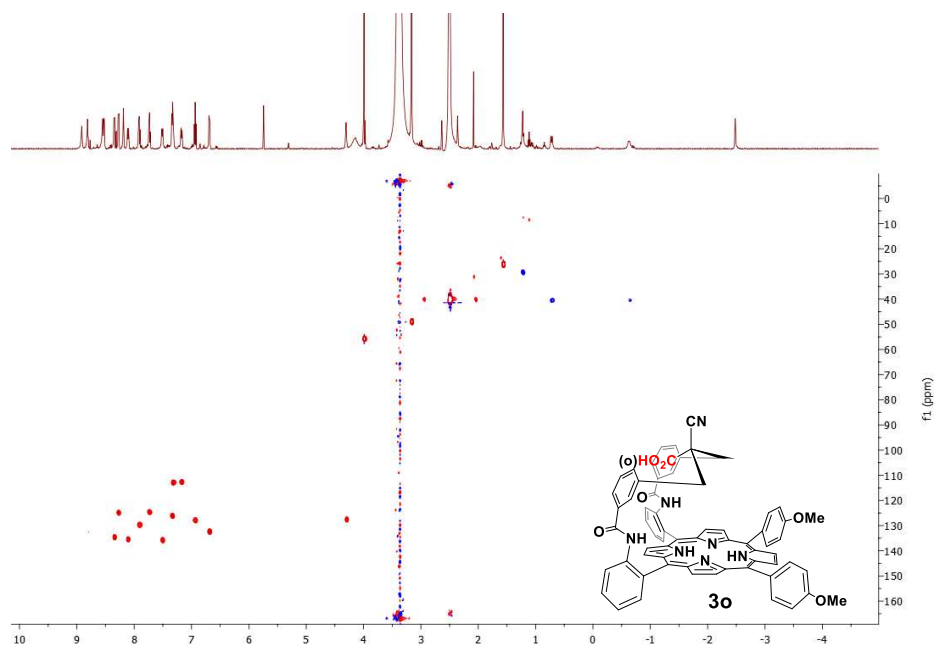
**Figure S9.** HSQC NMR spectrum **3i** (DMSO- $d_6$ , 500 MHz, 298 K).



**Figure S10.** COSY NMR spectrum **3o** (DMSO- $d_6$ , 500 MHz, 298 K).

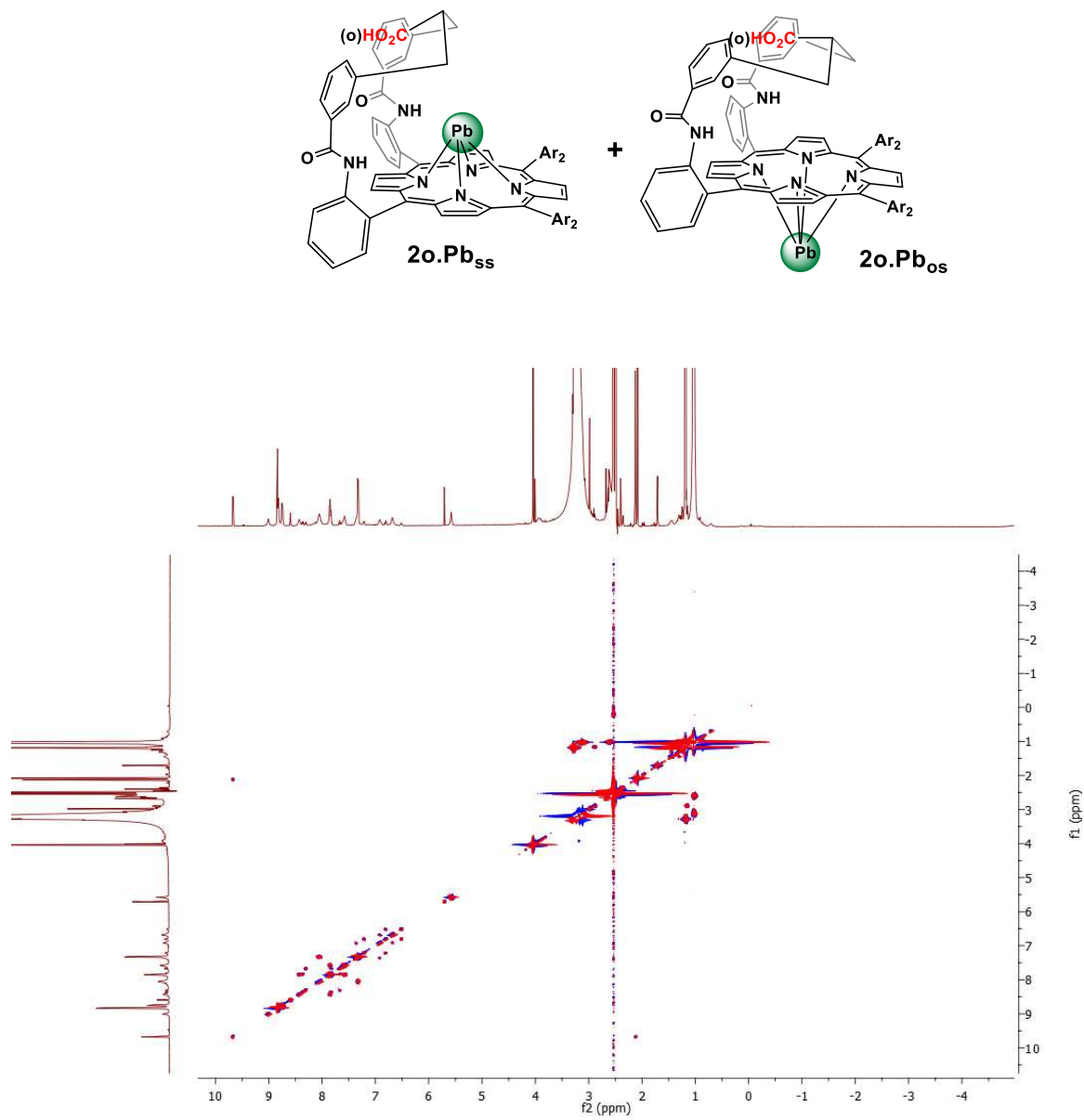


**Figure S11.** TOCSY NMR spectrum **3o** (DMSO- $d_6$ , 500 MHz, 298 K).

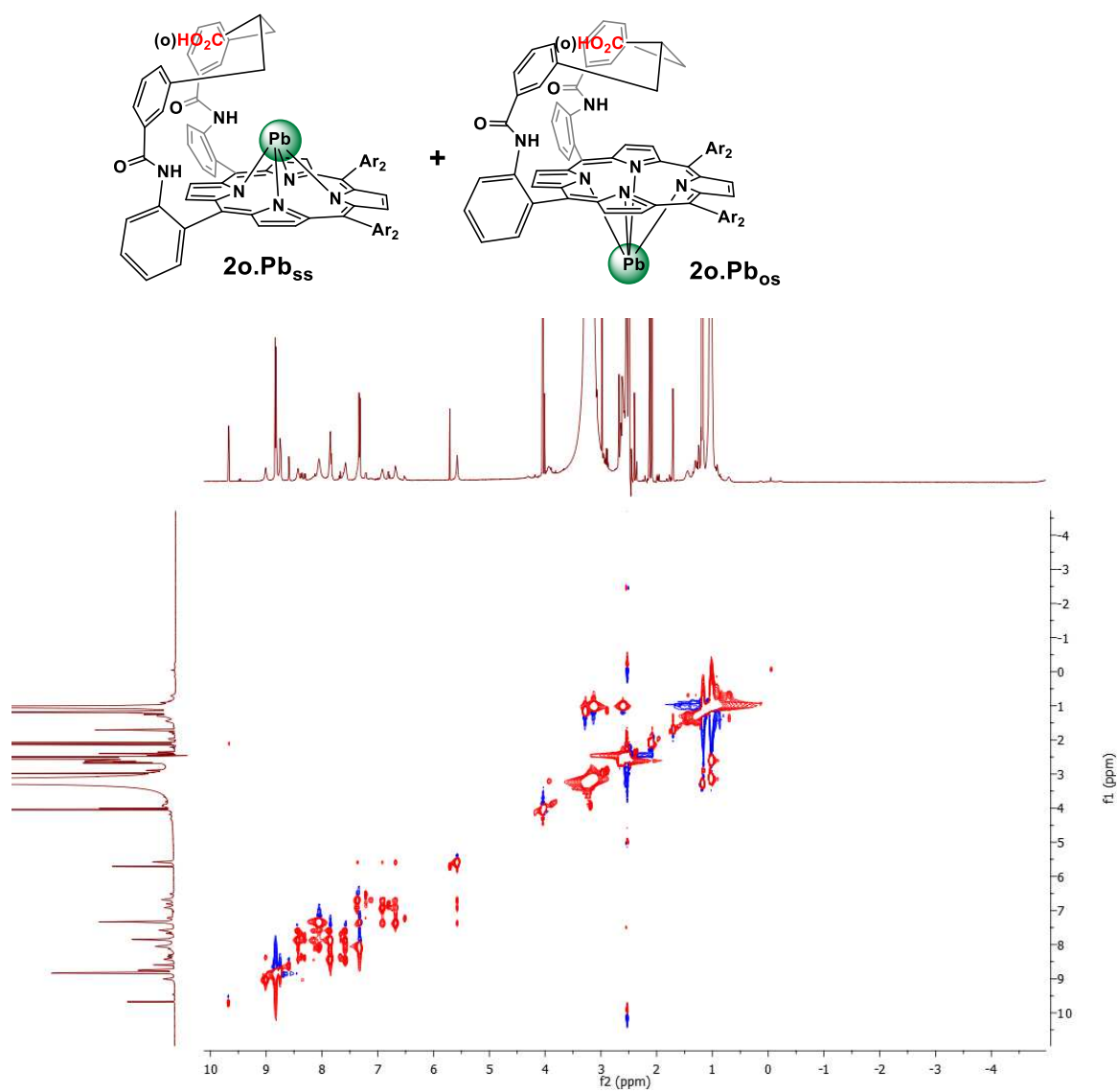


**Figure S12.** HSQC NMR spectrum **3o** (DMSO- $d_6$ , 500 MHz, 298 K).

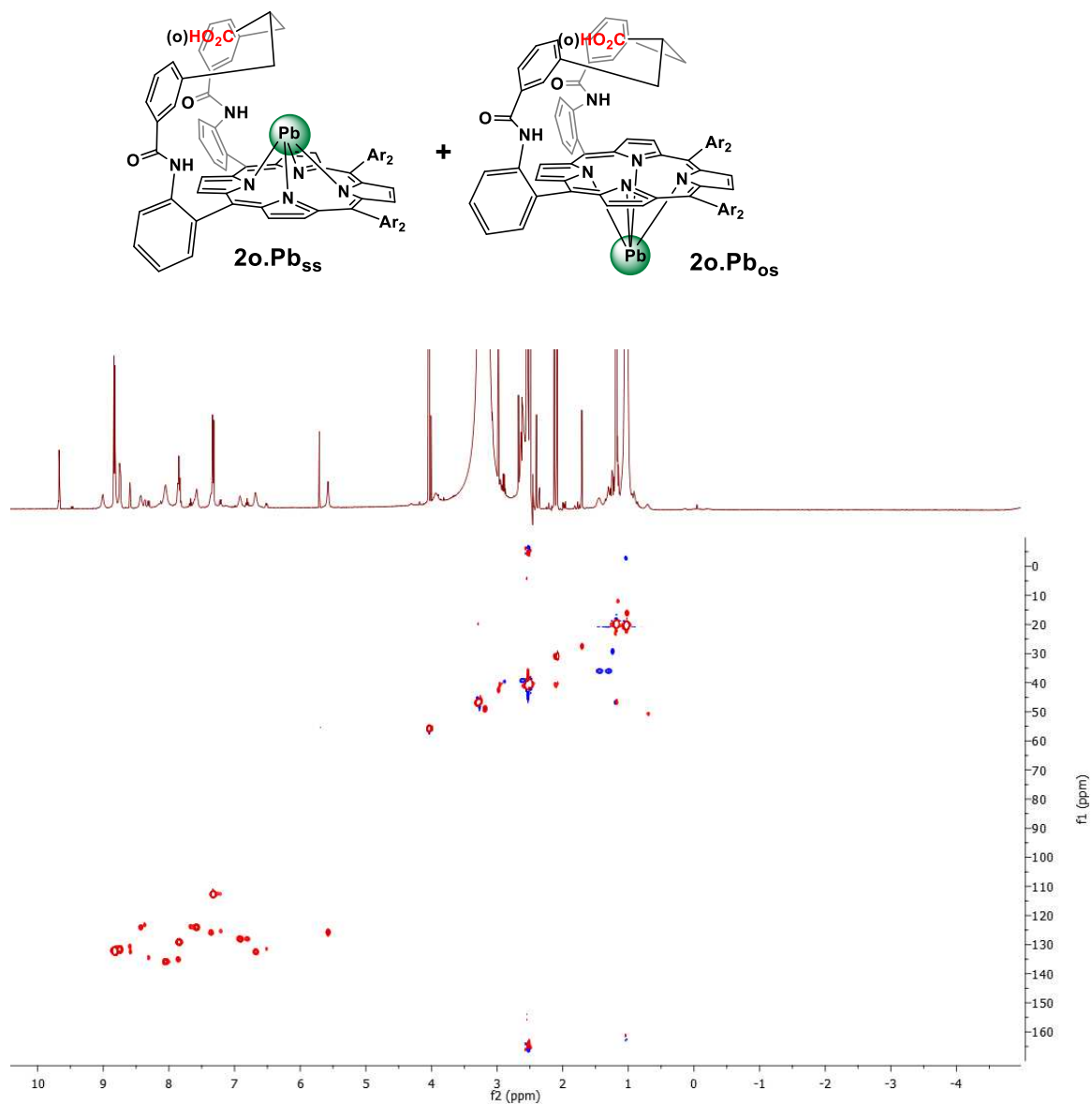




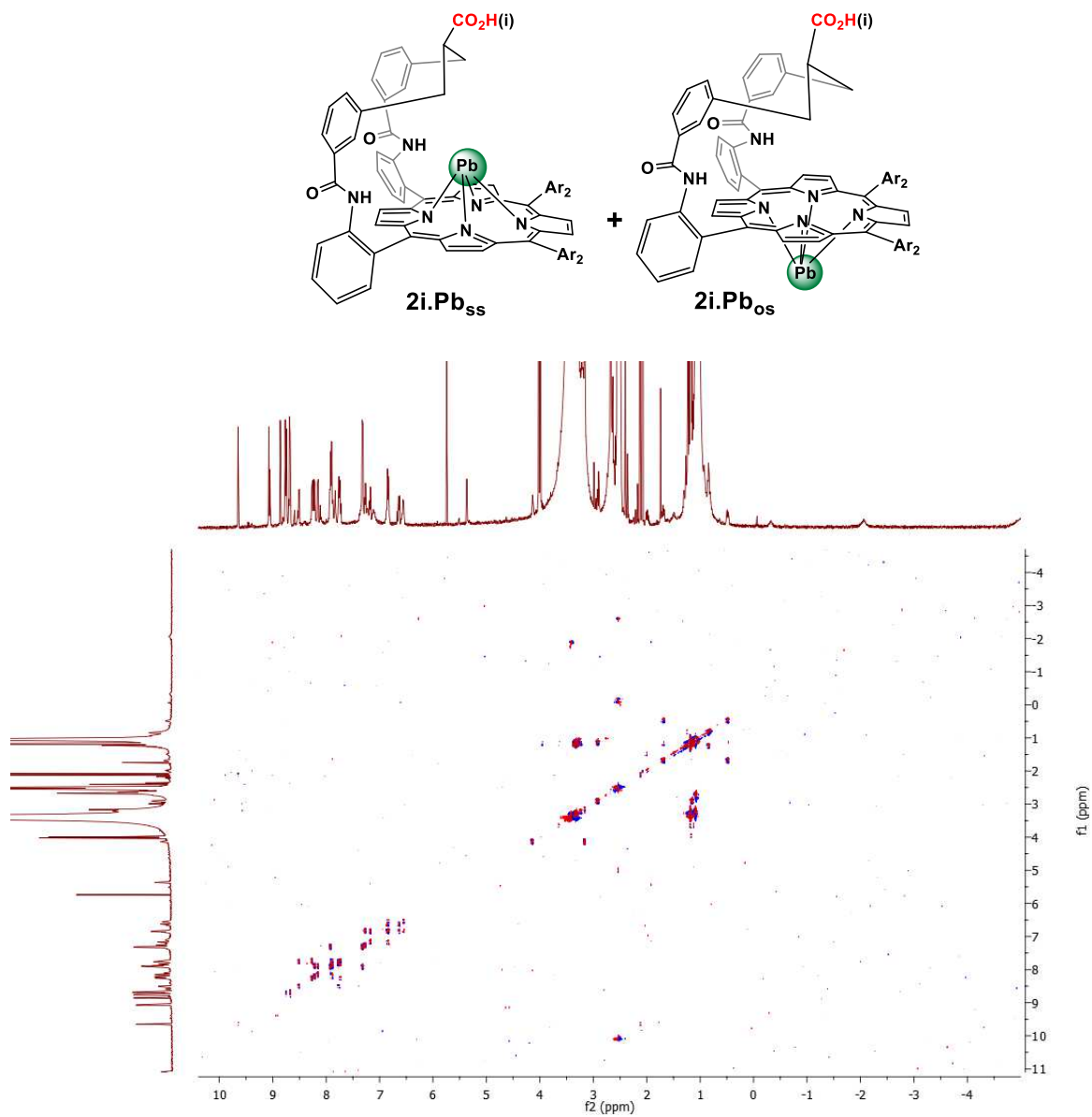
**Figure S13.** COSY NMR spectrum **2o.Pb** (DMSO-d<sub>6</sub>, 500 MHz, 333 K).



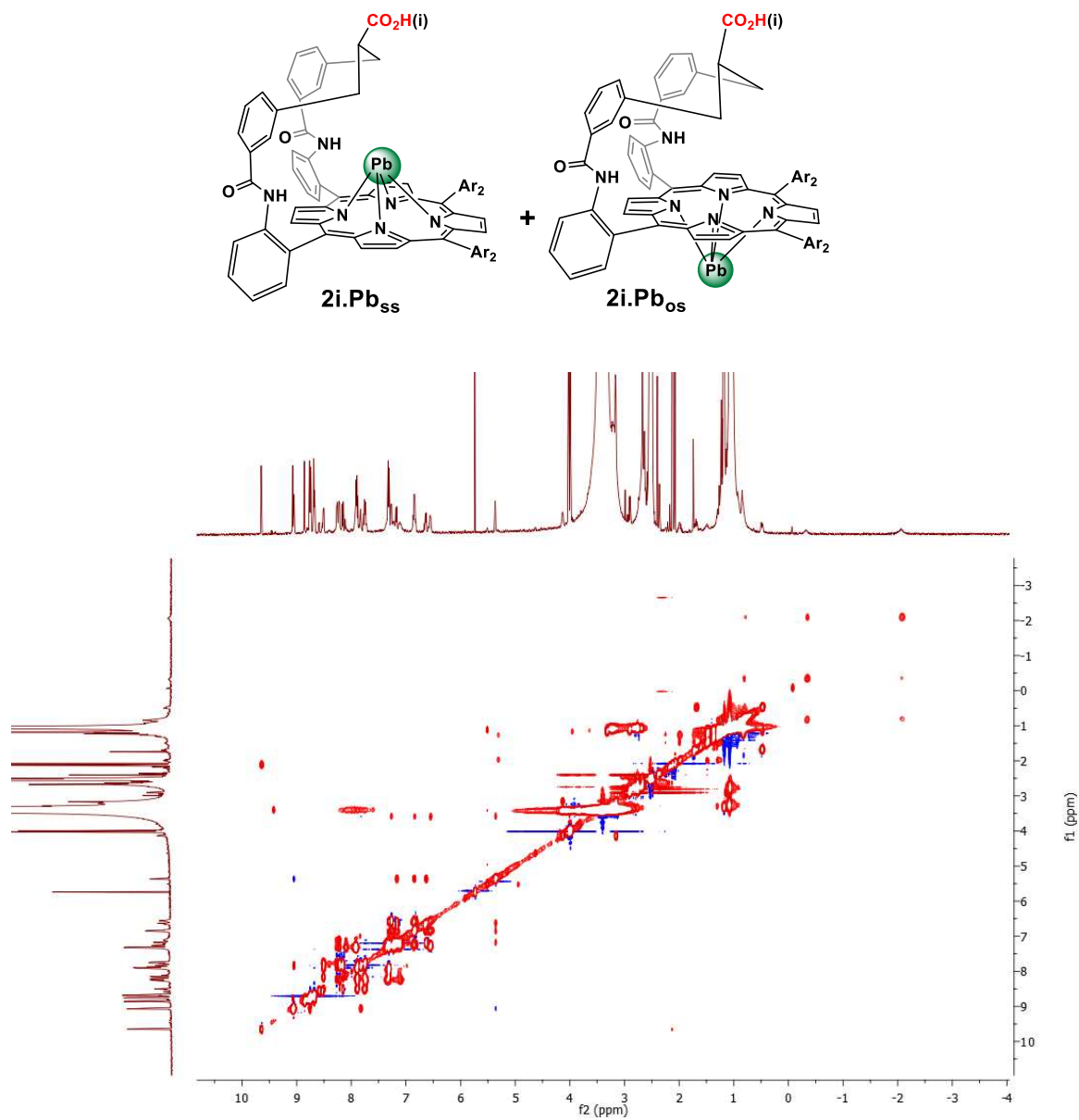
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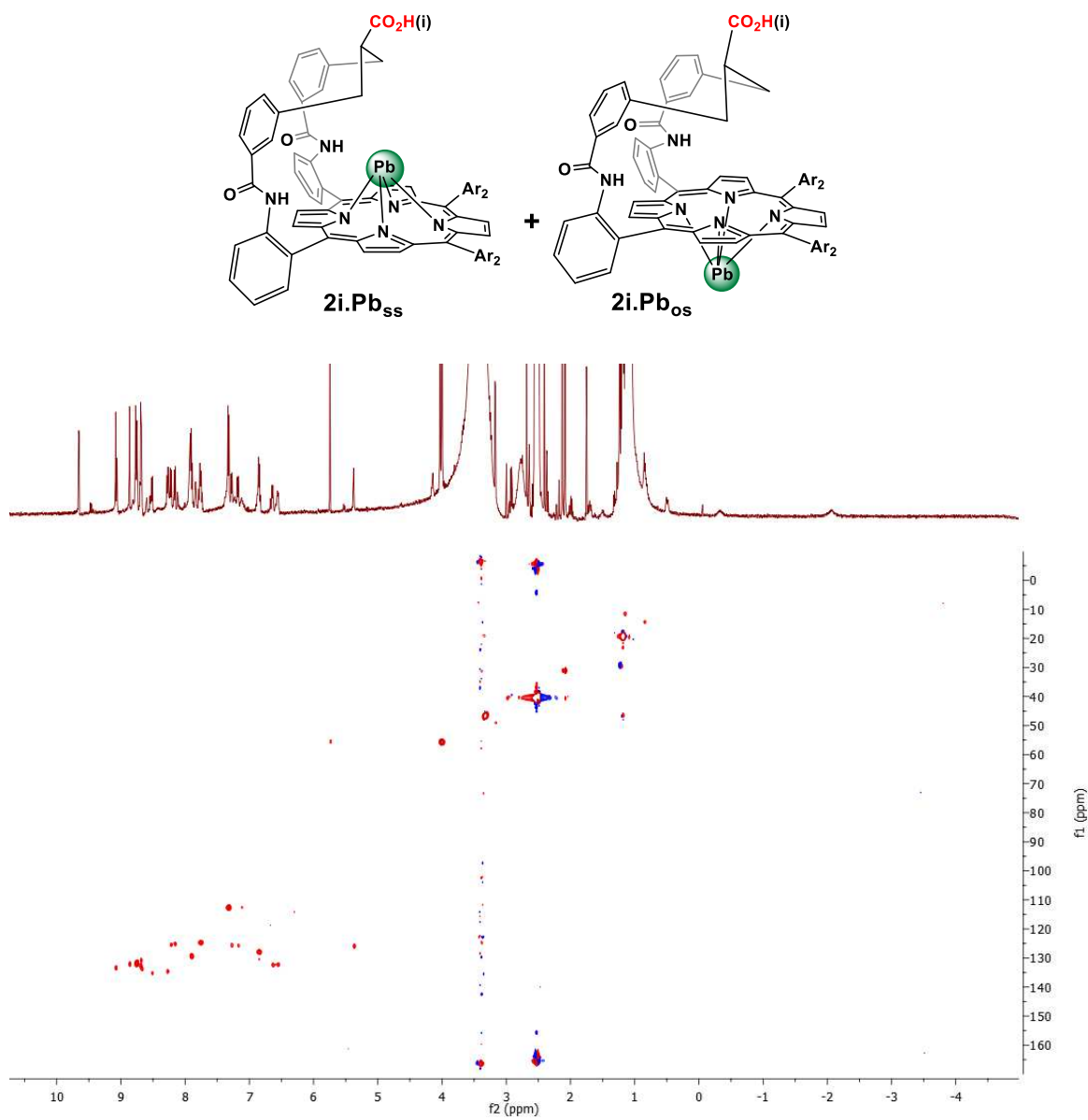
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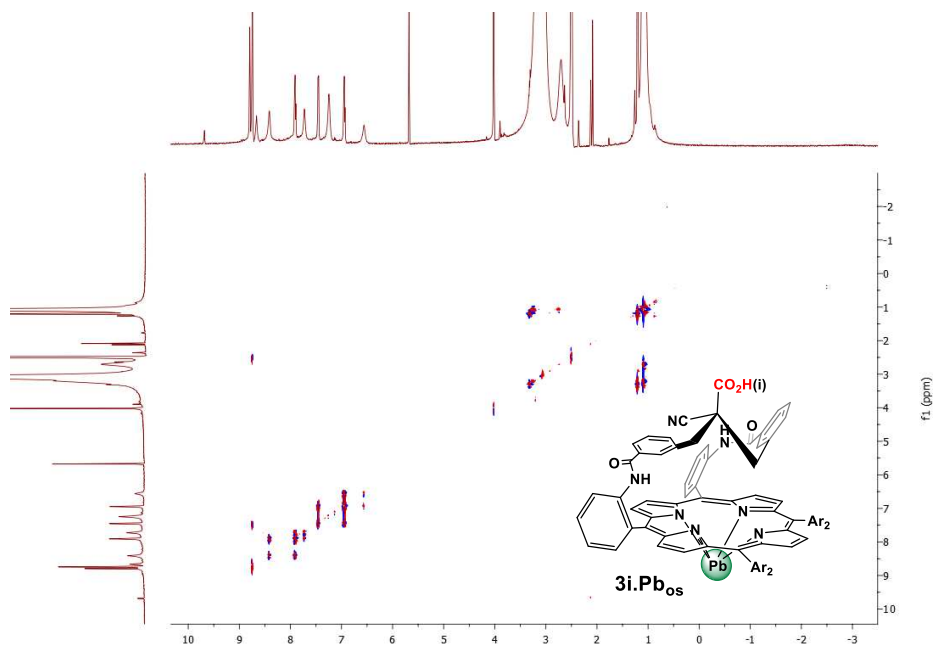
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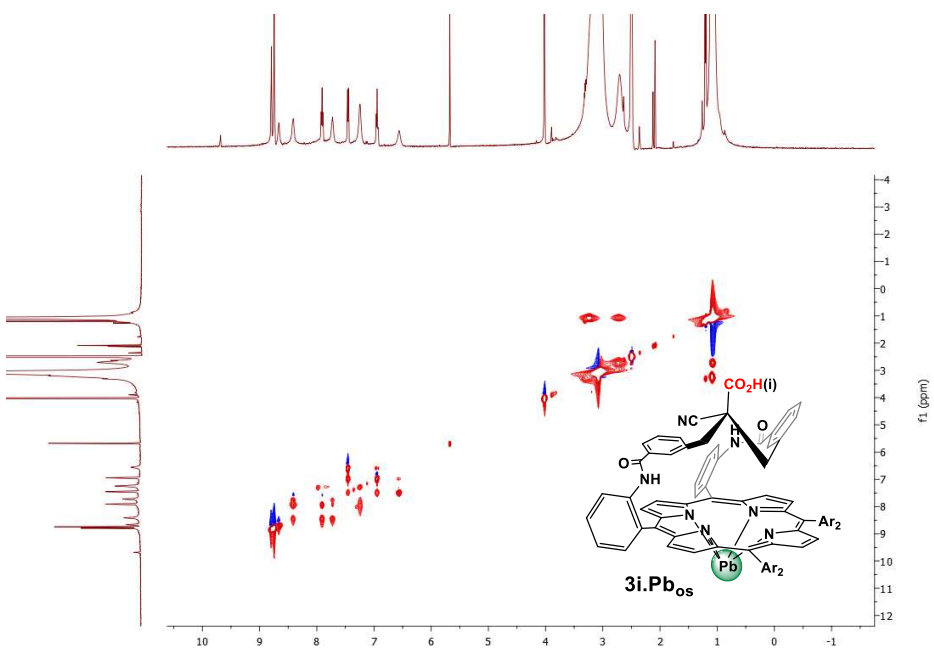
**Figure S17.** TOCSY NMR spectrum **2i.Pb** (DMSO-d<sub>6</sub>, 500 MHz, 298 K).



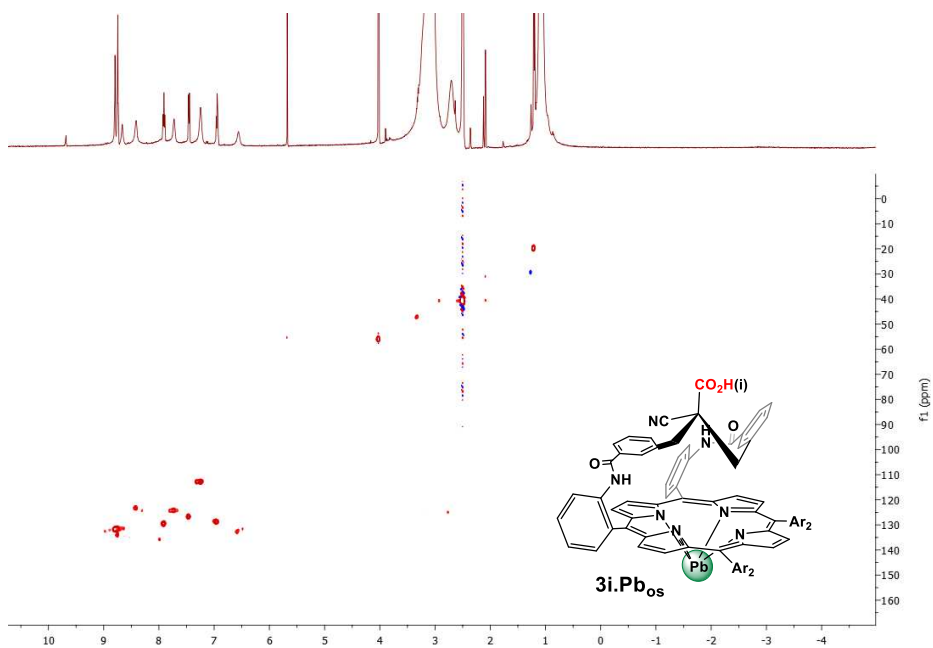
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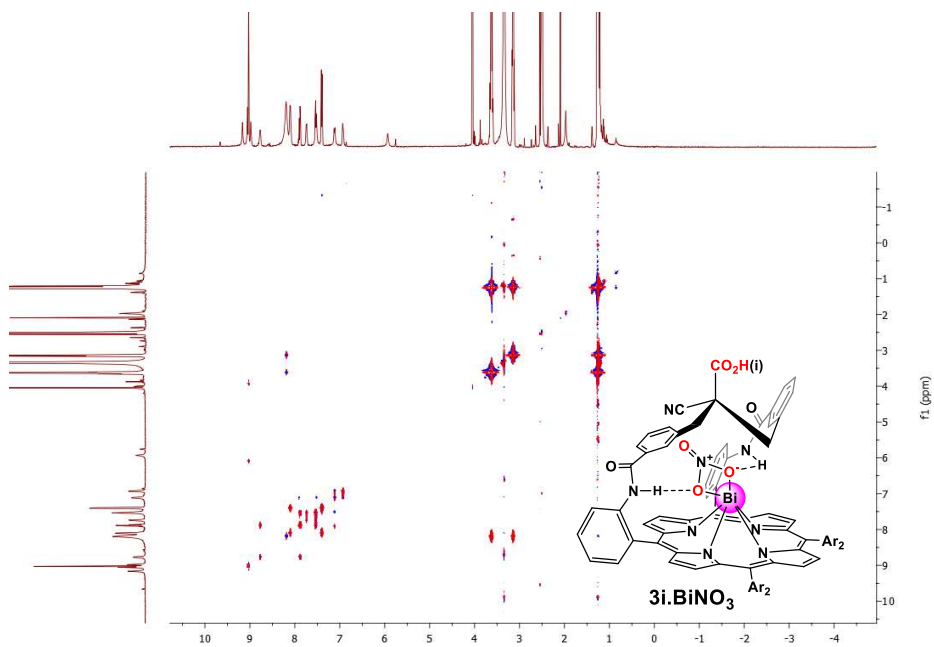
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**Figure S20.** TOCSY NMR spectrum **3i.Pb<sub>Os</sub>** (DMSO-*d*<sub>6</sub>, 500 MHz, 353 K).

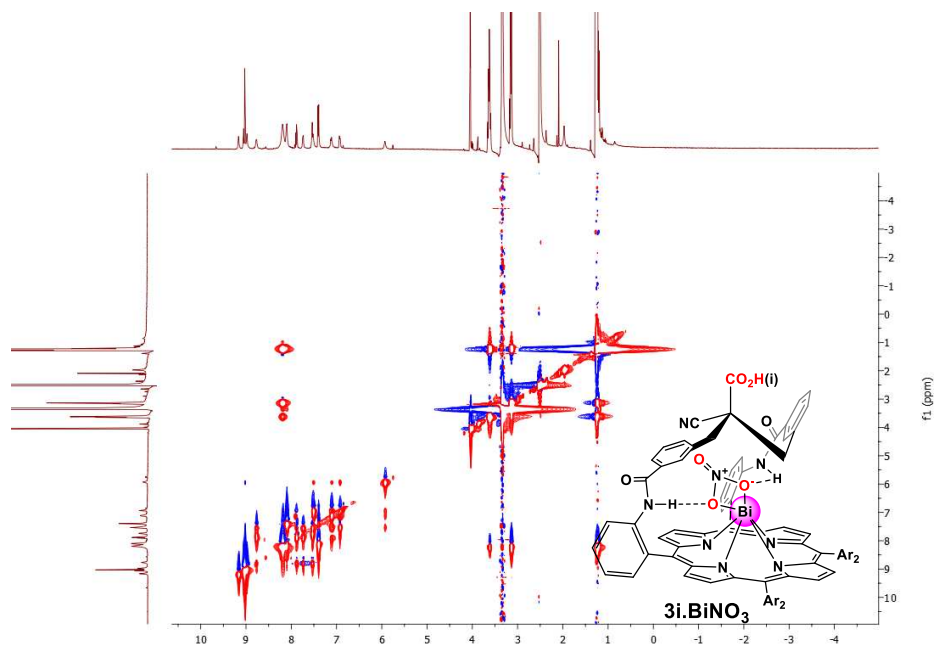


**Figure S21.** HSQC NMR spectrum **3i.PbOs** (DMSO-*d*<sub>6</sub>, 500 MHz, 353 K).

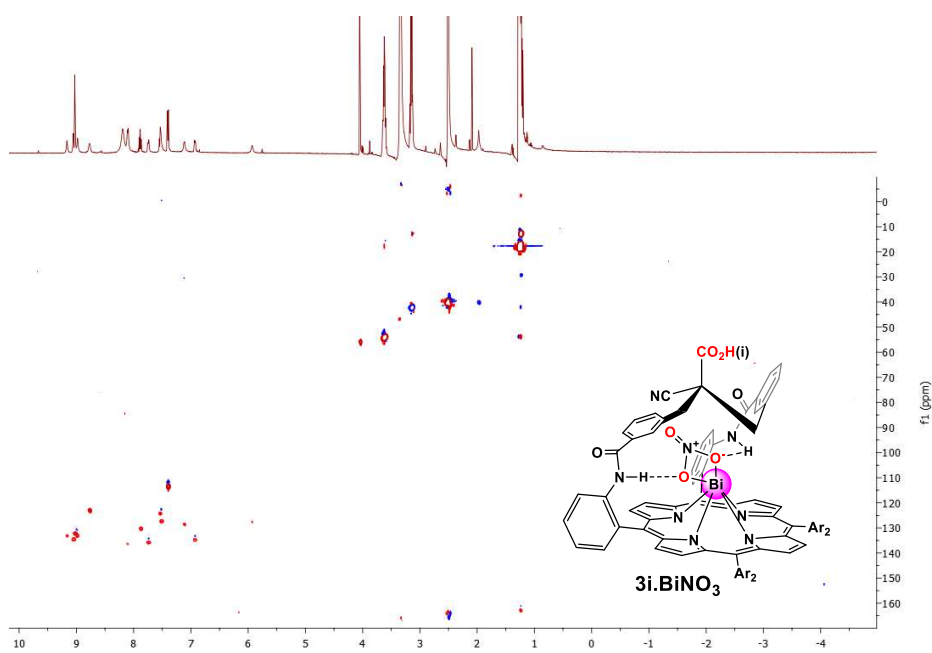


**Figure S22.** COSY NMR spectrum **3i.BiNO<sub>3</sub>** (DMSO-*d*<sub>6</sub>, 500 MHz, 298 K)

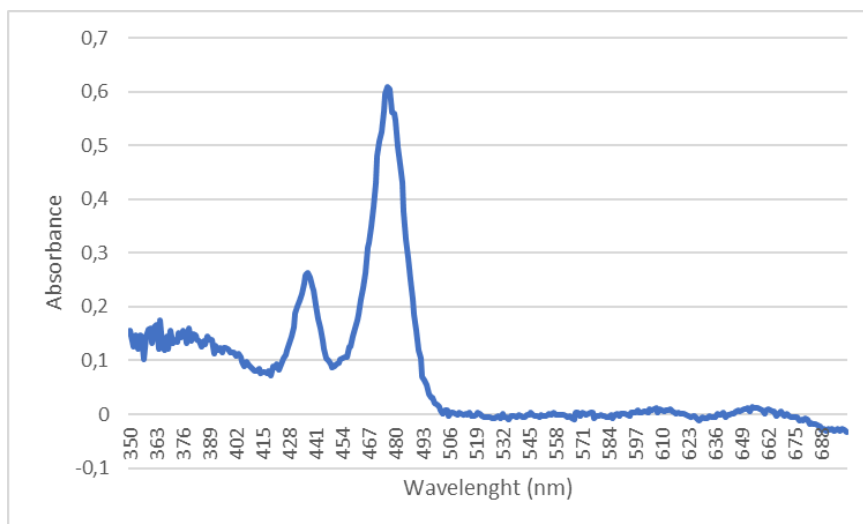




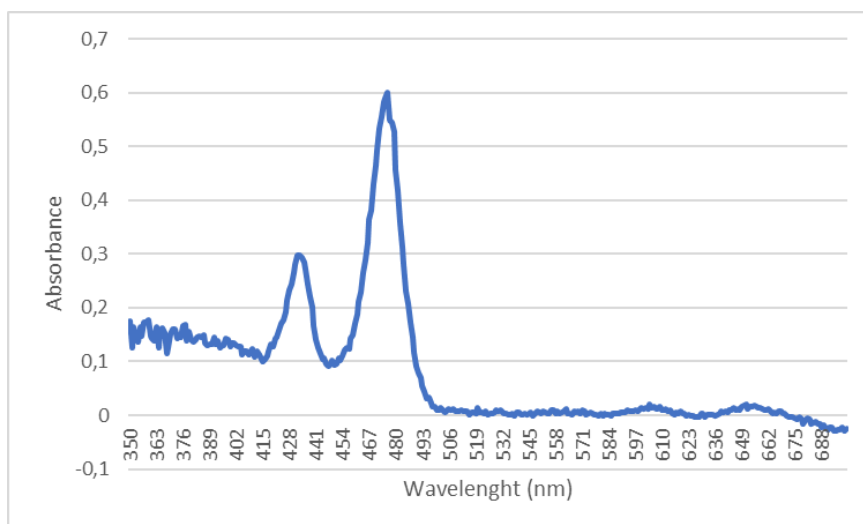
**Figure S23.** TOCSY NMR spectrum **3i.BiNO<sub>3</sub>** (DMSO-d<sub>6</sub>, 500 MHz, 298 K).



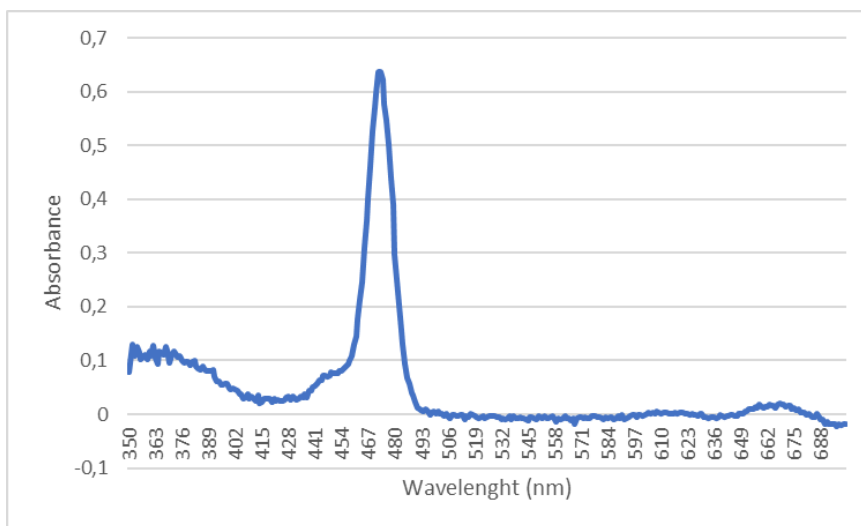
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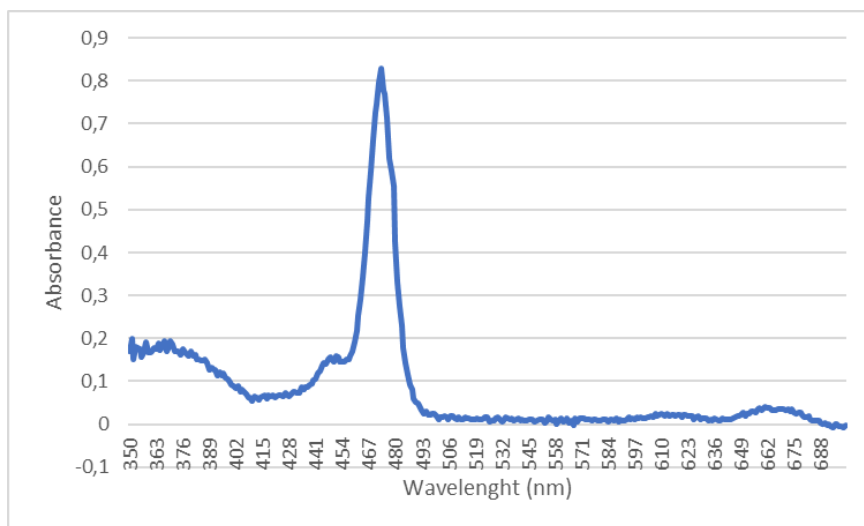
**Figure S25.** UV-vis. spectrum of **2o.Pb<sub>Os</sub>** (DMSO).



**Figure S26.** UV-vis. spectrum of **2i.Pb<sub>Os</sub>** (DMSO).



**Figure S27.** UV-vis. spectrum of 3i.PbOs (DMSO).



**Figure S28.** UV-vis. spectrum of 3i.BiNO<sub>3</sub> (DMSO).