

*Supporting Information*

En Route to Osmium Analogs of KP1019:  
Synthesis, Structure, Spectroscopic Properties and  
Antiproliferative Activity of *trans*-  
 $[\text{Os}^{\text{IV}}\text{Cl}_4(\text{Hazole})_2]$

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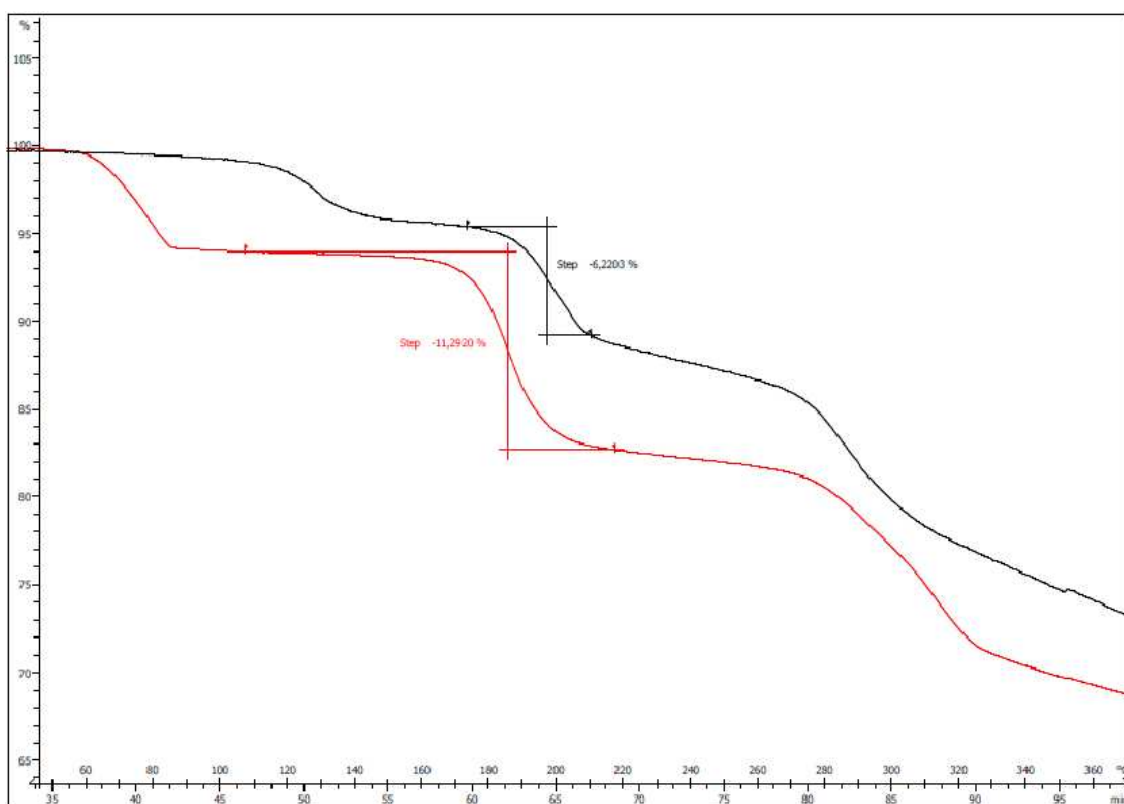
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**RECEIVED DATE (to be automatically inserted after your manuscript is accepted)**

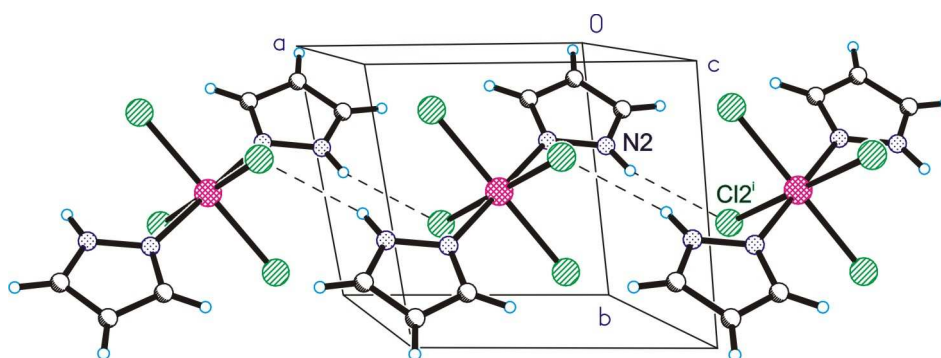
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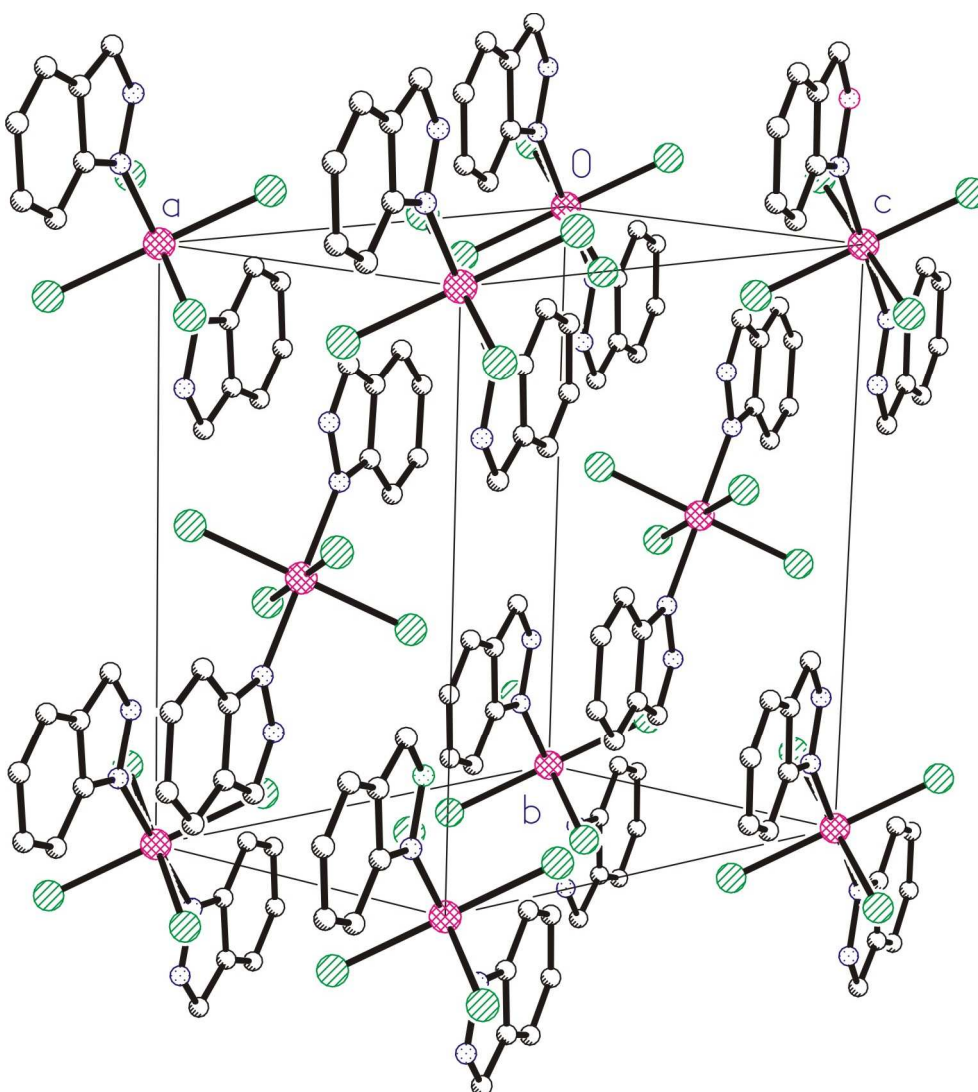
- Figure S1: Thermogravimetric data for  $(\text{H}_2\text{ind})_2[\text{OsCl}_6]$  and  $(\text{H}_2\text{ind})[\text{OsCl}_5(\kappa\text{N}2\text{-Hind})]$
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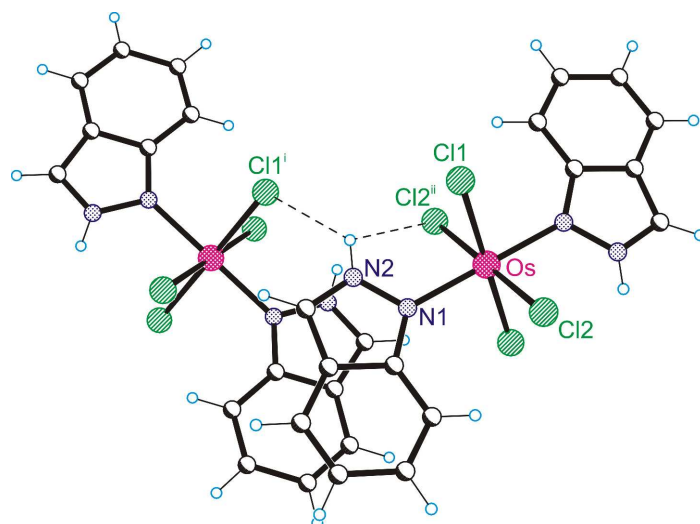
**Figure S1:** Thermogravimetric data for  $(\text{H}_2\text{ind})_2[\text{OsCl}_6]$  (red) and  $(\text{H}_2\text{ind})[\text{OsCl}_5(\kappa\text{N}2\text{-Hind})]$  (black) showing a weight loss of 11.29% and 6.22%, respectively, attributed to the loss of one (calcd. weight loss 6.03%) and two (calcd. weight loss 11.37%) molecules of HCl.



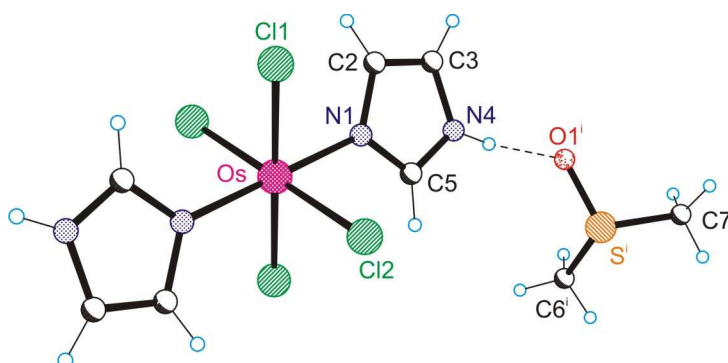
**Figure S2.** The unit cell of **1** showing the formation of a chain along axis *a* via intermolecular hydrogen bonding interaction N2–H $\cdots$ Cl2<sup>i</sup> [N2–H 0.88, H $\cdots$ Cl2<sup>i</sup> 2.511, N2 $\cdots$ Cl2<sup>i</sup> 3.270 Å, N2–H $\cdots$ Cl2<sup>i</sup> 144.9°] (symmetry code *i*: *x*–1, *y*, *z*).



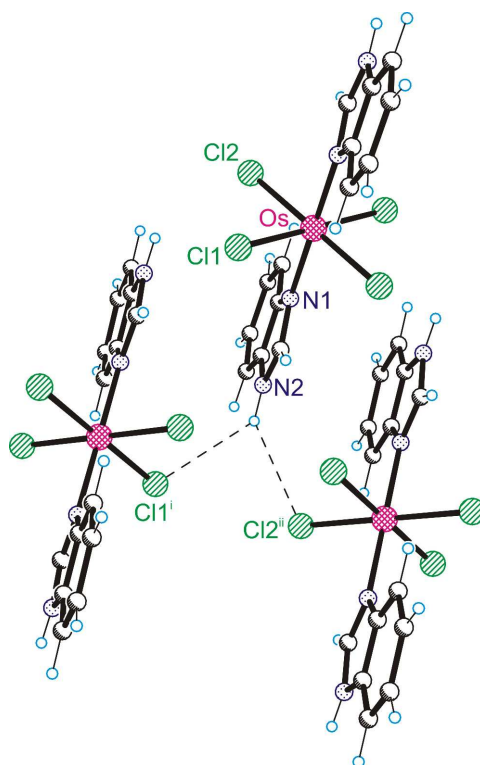
**Figure S3.** The unit cell of **2**; hydrogen atoms were omitted for clarity.



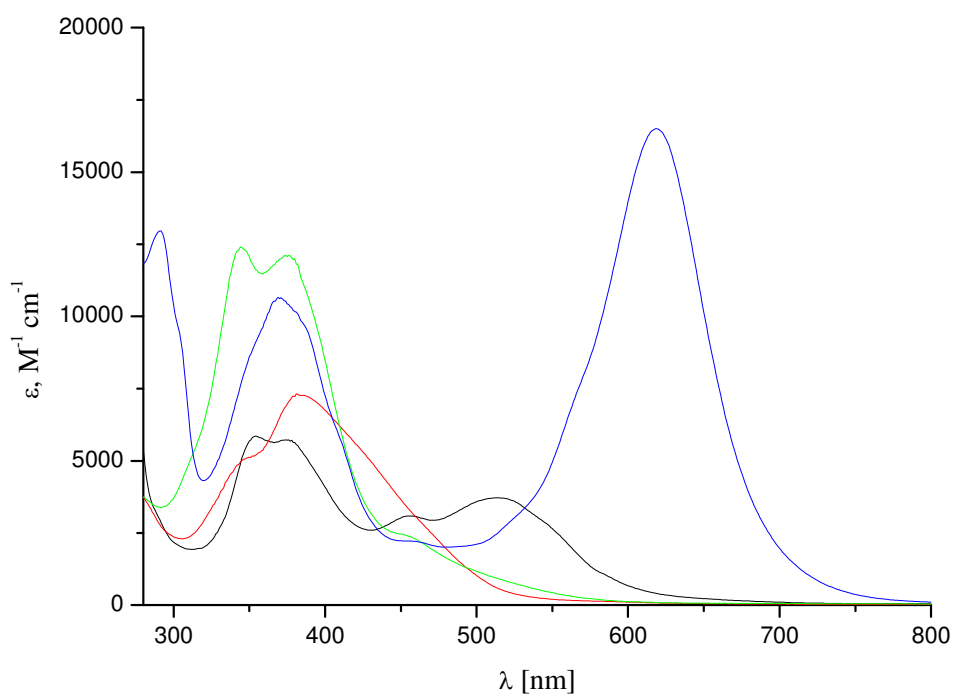
**Figure S4.** Bifurcated hydrogen bonding interactions  $\text{N2-H}\cdots\text{Cl1}^{\text{i}}$  and  $\text{N2-H}\cdots\text{Cl2}^{\text{ii}}$  [ $\text{N2-H}$  0.88,  $\text{H}\cdots\text{Cl1}^{\text{i}}$  2.798,  $\text{N2}\cdots\text{Cl1}^{\text{i}}$  3.444 Å,  $\text{N2-H}\cdots\text{Cl1}^{\text{i}}$  131.5°;  $\text{H}\cdots\text{Cl2}^{\text{ii}}$  2.713,  $\text{N2}\cdots\text{Cl2}^{\text{ii}}$  3.143 Å,  $\text{N2-H}\cdots\text{Cl2}^{\text{ii}}$  111.4°] (symmetry codes i:  $x, -y + 1.5, z - 0.5$ ; ii:  $-x, -y + 2, -z$ ) and  $\pi$ - $\pi$  stacking interaction in the crystal structure of **2**.



**Figure S5.** Strong hydrogen bonding  $\text{N4-H}\cdots\text{O1}^{\text{i}}$  [ $\text{N4-H}$  0.88,  $\text{H}\cdots\text{O1}^{\text{i}}$  1.826,  $\text{N4}\cdots\text{O1}^{\text{i}}$  2.698 Å,  $\text{N4-H}\cdots\text{O1}^{\text{i}}$  170.9°] (symmetry code i:  $x + 1, y, z$ ) between molecule of **3** and DMSO.



**Figure S6.** Bifurcated hydrogen bonding interactions N2–H $\cdots$ Cl1<sup>i</sup> and N2–H $\cdots$ Cl2<sup>ii</sup> [N2–H 0.88, H $\cdots$ Cl1<sup>i</sup> 2.867, N2 $\cdots$ Cl1<sup>i</sup> 3.541 Å, N2–H $\cdots$ Cl1<sup>i</sup> 134.6°; H $\cdots$ Cl2<sup>ii</sup> 2.770, N2 $\cdots$ Cl2<sup>ii</sup> 3.504 Å, N2–H $\cdots$ Cl2<sup>ii</sup> 141.9°] (symmetry codes i:  $-x + 1, y + 0.5, -z + 0.5$ ; ii:  $x, -y + 0.5, z - 0.5$ ) and  $\pi$ – $\pi$  stacking interaction in the crystal structure of **4**.



**Figure S7:** UV–vis spectra of **1** (red), **2** (blue), **3** (green) and **4** (black) in DMSO.