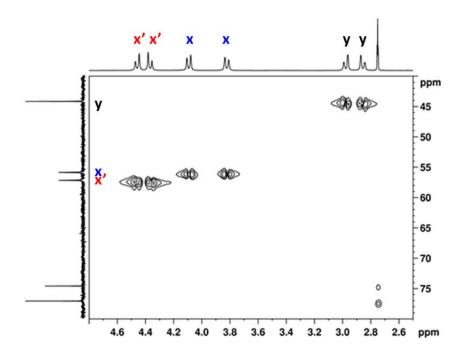
## Bis[N-alkyl-N,N-di(2-pyridylmethyl)amine]zinc(II) perchlorates display *cis-facial* stereochemistry in solid state and solution

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## Supporting Information: Additional NMR Spectra (600 MHz, CD<sub>3</sub>CN).



**Figure S1.** HMQC spectrum of  $[Zn(4)_2](ClO_4)_2$  expanded in the aliphatic region.

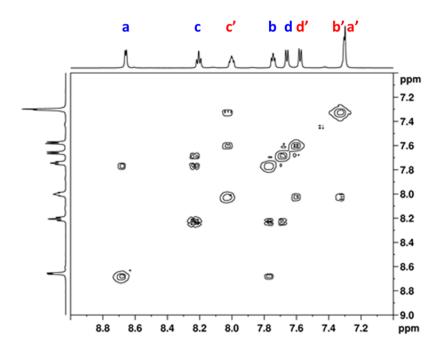
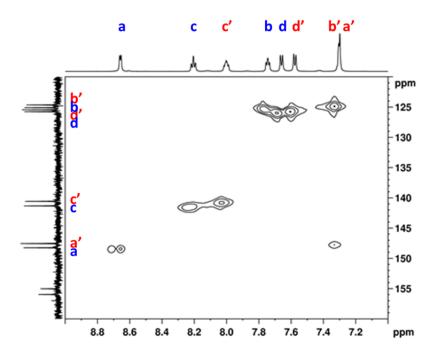


Figure S2. COSY spectrum of [Zn(2)<sub>2</sub>](ClO<sub>4</sub>)<sub>2</sub> expanded in the aromatic region.



**Figure S3.** HMQC spectrum of  $[Zn(2)_2](ClO_4)_2$  expanded in the aromatic region.

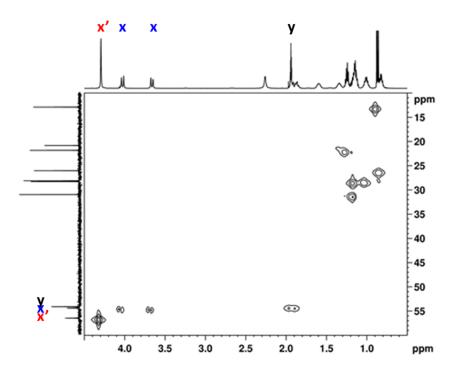
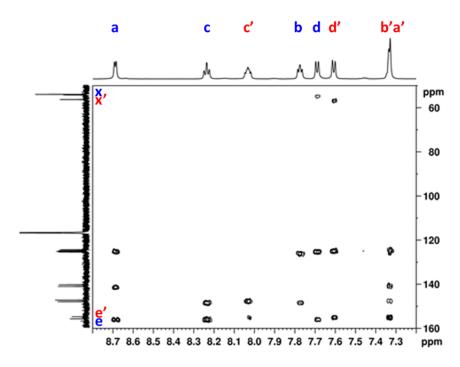
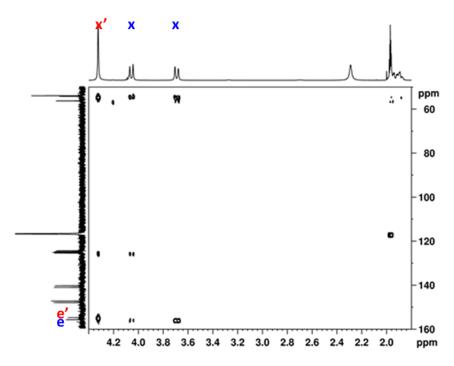


Figure S4. HMQC spectrum of  $[Zn(2)_2](ClO_4)_2$  expanded in the aliphatic region.



**Figure S5.** HMBC spectrum of  $[Zn(2)_2](ClO_4)_2$  showing <u>the aromatic <sup>1</sup>H</u> to <sup>13</sup>C correlations.



**Figure S6.** HMBC spectrum of  $[Zn(2)_2](ClO_4)_2$  showing <u>the aliphatic <sup>1</sup>H</u> to <sup>13</sup>C correlations.

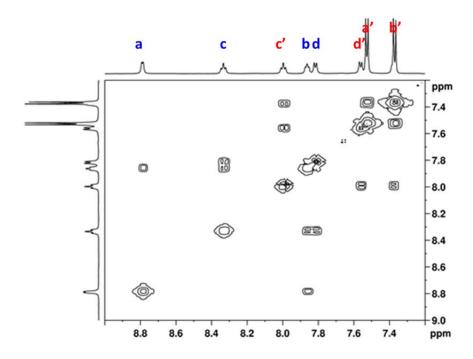
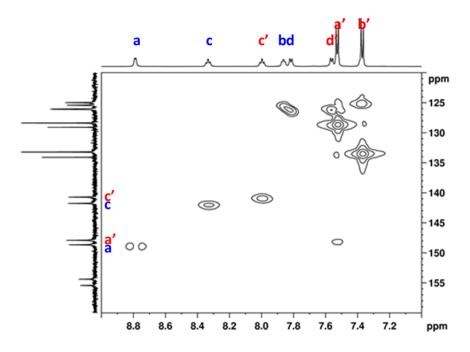
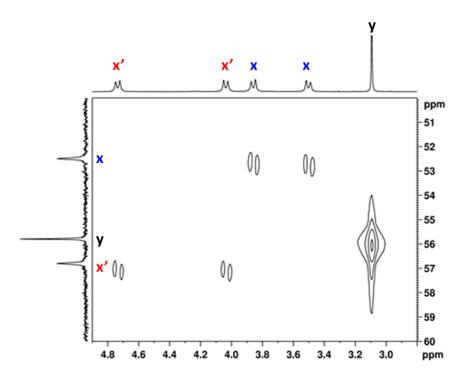


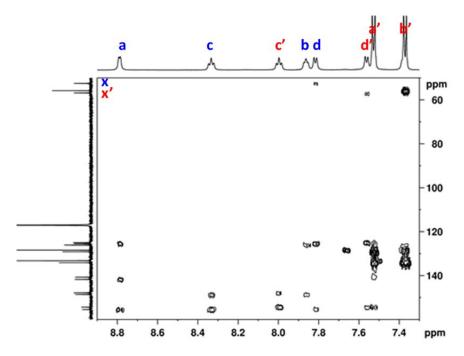
Figure S7. COSY spectrum of [Zn(3)<sub>2</sub>](ClO<sub>4</sub>)<sub>2</sub> expanded in the aromatic region.



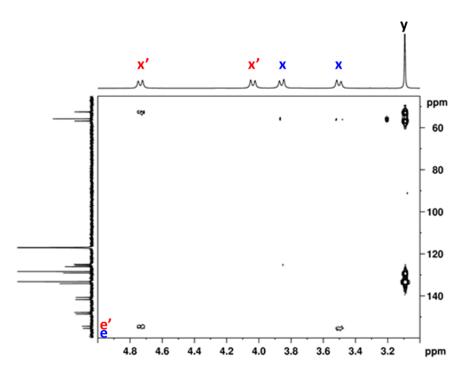
**Figure S8.** HMQC spectrum of  $[Zn(3)_2](ClO_4)_2$  expanded in the aromatic region.



**Figure S9.** HMQC spectrum of  $[Zn(3)_2](ClO_4)_2$  expanded in the aliphatic region.



**Figure S10.** HMBC spectrum of  $[Zn(3)_2](ClO_4)_2$  showing <u>the aromatic <sup>1</sup>H</u> to <sup>13</sup>C correlations.



**Figure S11.** HMBC spectrum of  $[Zn(3)_2](ClO_4)_2$  showing <u>the aliphatic <sup>1</sup>H</u> to <sup>13</sup>C correlations.