

**Supporting Information for the paper titled “Versatile lanthanide coordination assemblies due to the synergistic effect of lanthanide contraction and flexibility of the a novel tripodal ligand” to *CrystEngComm*.**

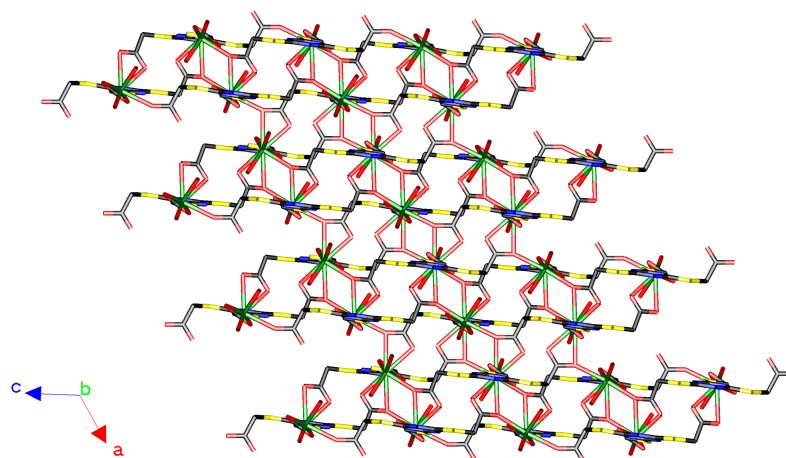
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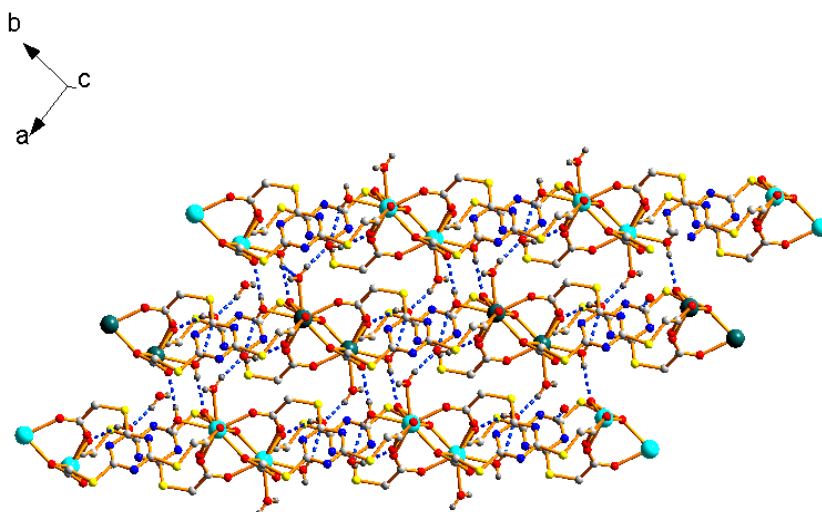
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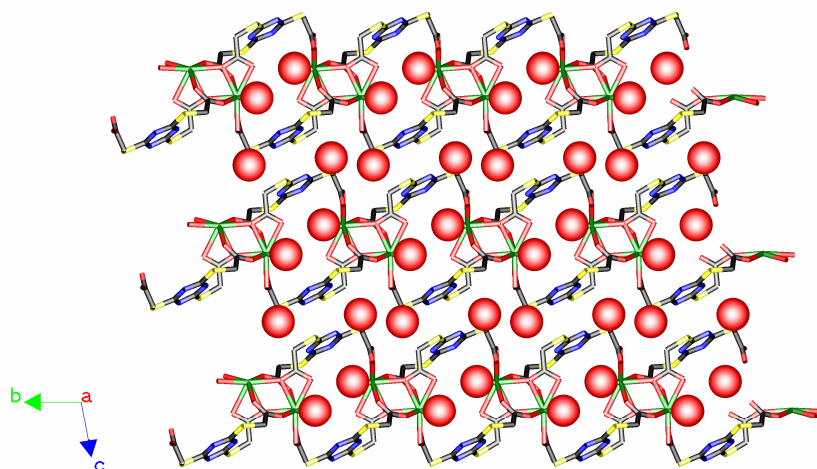
**Figure S1.** Perspective view of **1·Ce** along the *b* axis, showing  $\pi$ --- $\pi$  stacking interactions. The solvent molecules are omitted for clarity.



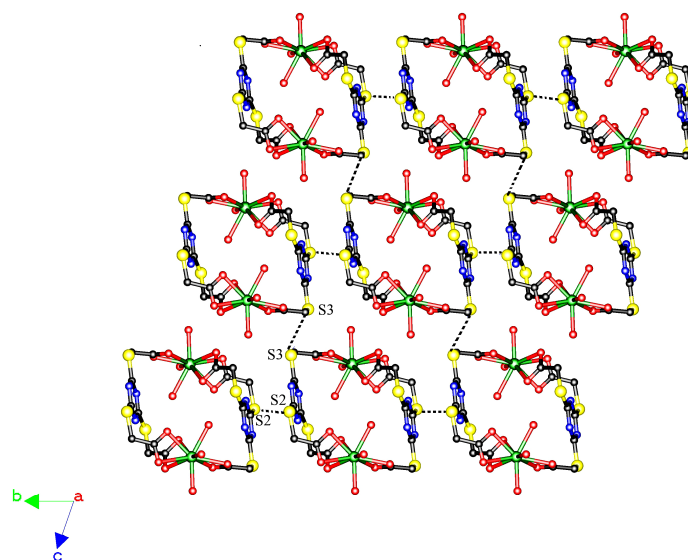
**Figure S2.** Perspective view of **4·Sm** along the *c* axis, showing hydrogen bonding interactions. Except the hydrogen atoms in the hydrogen bonds, other hydrogen atoms are omitted for clarity.



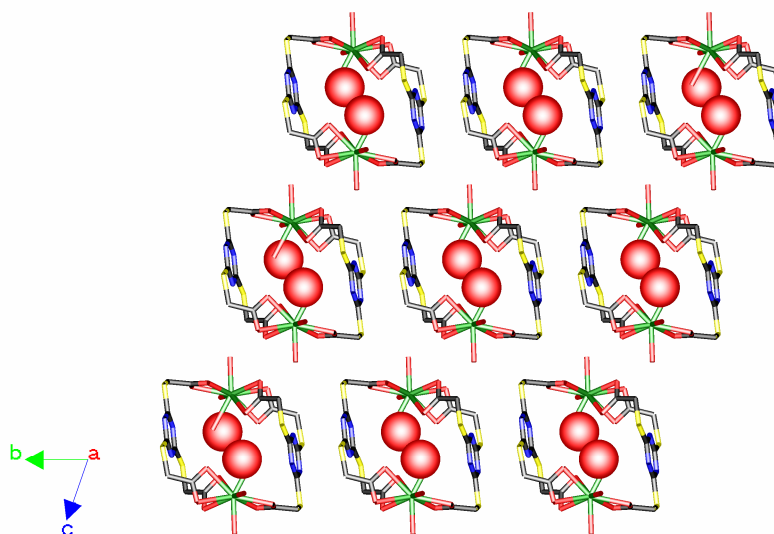
**Figure S3.** Perspective of **4·Sm**, showing the space filling of solvent molecules in one-dimensional channels along the *a* axis.



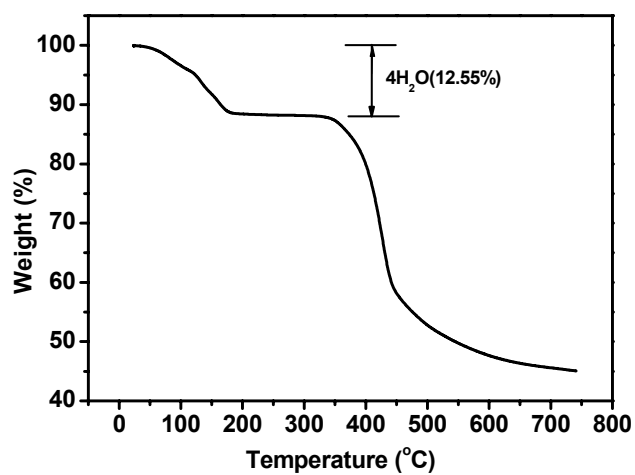
**Figure S4.** Perspective of **7·Dy**, showing S...S interactions between the dimers.



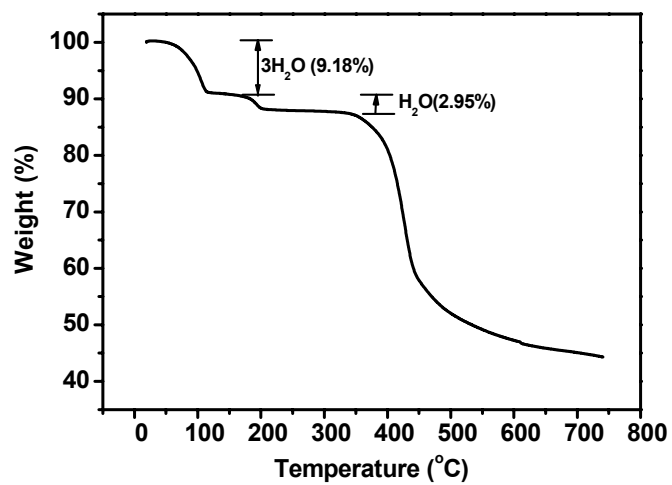
**Figure S5.** Perspective of **7·Dy**, showing the space filling of solvent molecules in one-dimensional channels along the *a* axis.



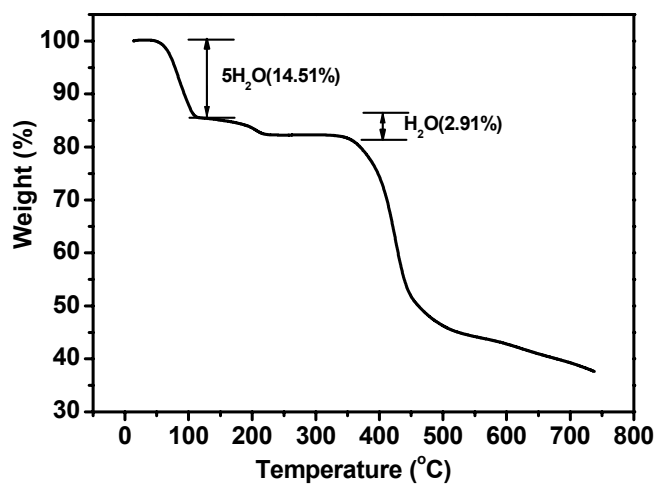
**Figure S6.** TGA curve of **2·Pr** (a), **4·Sm** (b), **7·Dy** (c).



(a)



(b)



(c)