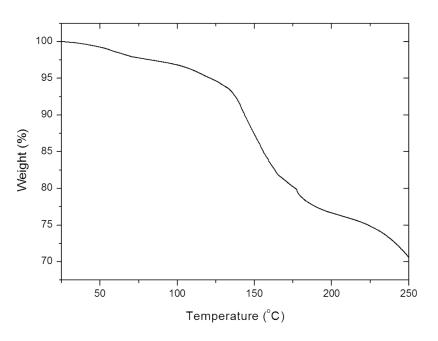
## Modulating the Hydration Behaviour of Calcium Chloride by Lactam Complexation

Andrea Perrin,<sup>a</sup> Osama M. Musa<sup>b</sup> and Jonathan W. Steed<sup>a\*</sup>

- a) Department of Chemistry, Durham University, South Road, Durham DH1 3LE, UK. Email: jon.steed@durham.ac.uk
- b) Ashland Inc., 1005 Route 202/206, Bridgewater, NJ 08807, USA. E-mail: omusa@ashland.com



## SUPPLEMENTARY INFORMATION

Figure S1. Thermogravimetric trace for  $\{[Ca(\mu-L1)(H_2O)_5]Cl_2 \cdot H_2O\}_n$  (2).

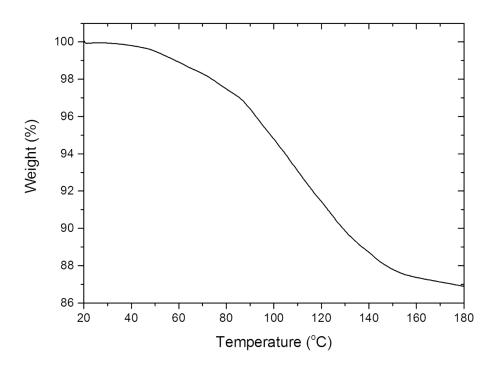


Figure S2. Thermogravimetric trace for the mechanochemically prepared product of reaction of  $CaCl_2$  with ligand L1. Product was previously dried at 70 °C for 3 hours.

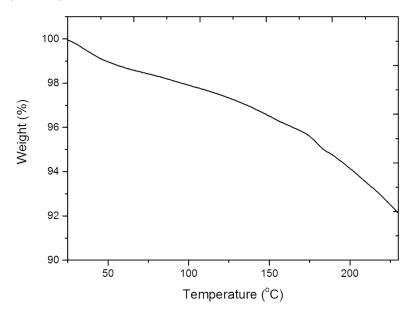


Figure S3. Thermogravimetric trace for the ethanol solvate  ${[CaCl_2(L2)(EtOH)]}_n$  (4).

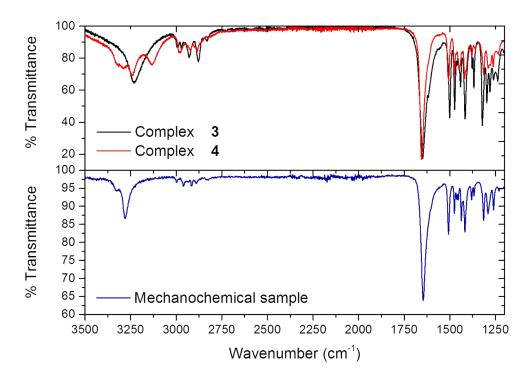


Figure S4. IR spectra for complexes **3** and **4** in comparison to the mechanochemically prepared sample.

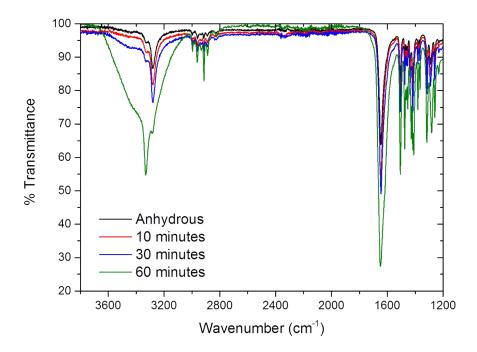


Figure S5. Overlaid IR spectra for the anhydrous mechanochemically prepared complex of CaCl<sub>2</sub> and ligand **L2** following removal from the oven (110 °C).