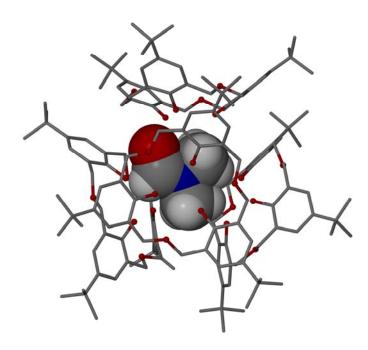
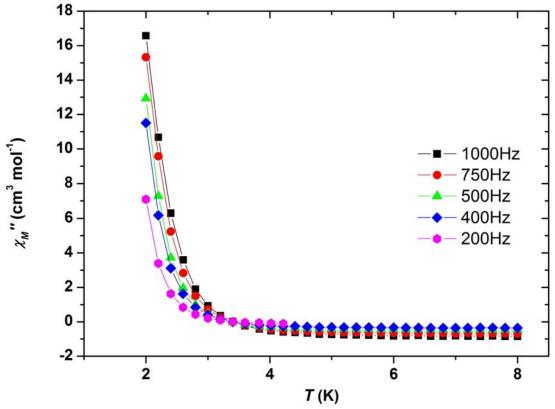
## **Supplementary Information**

1. Figure showing solvent encapsulated by four TBOC[3] molecules.



**Figure S2.** Part of the extended structure of the TBOC[3] DMF solvate showing four calixarenes packing around one DMF molecule (shown in space filling mode).

2. Ac susceptibility studies in the 1.8-10.0 K range in a 3.5 G field oscillating at frequencies up to 1000 Hz.



**Figure S2.** Plot of the out-of-phase  $(\chi_M")$  ac susceptibility versus temperature for 1 at the indicated frequencies.