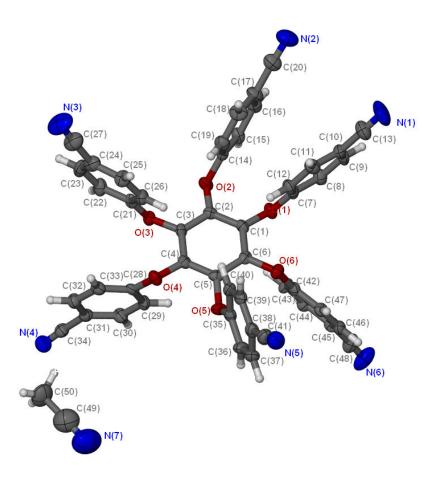
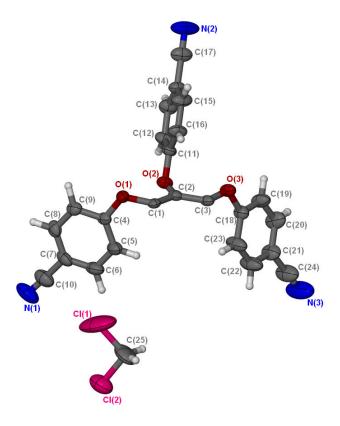
## Unusual Conformations of a Hexa-Host Molecule in Solvate Inclusion Compounds

Dinabandhu Das and Leonard J. Barbour\*

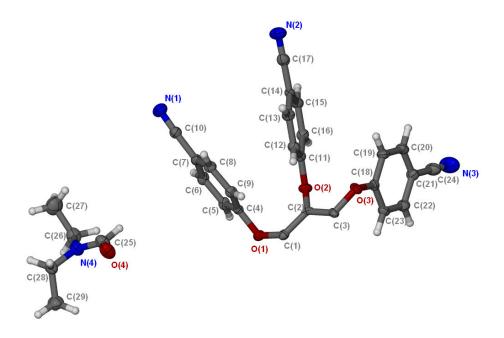
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Africa. Fax: +27-808-21-3335 Tel: +27-808-21-3335



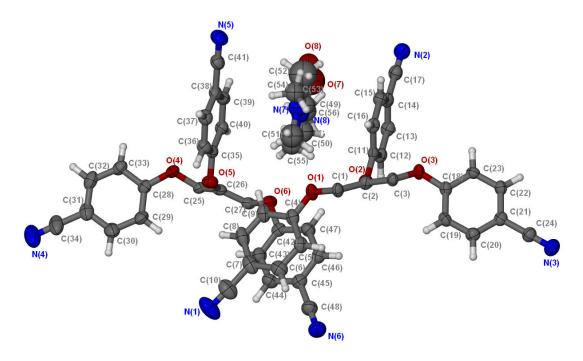
**Figure S1.** Thermal ellipsoid plot of **1a**. Atoms are shown with 70% probability thermal ellipsoids.



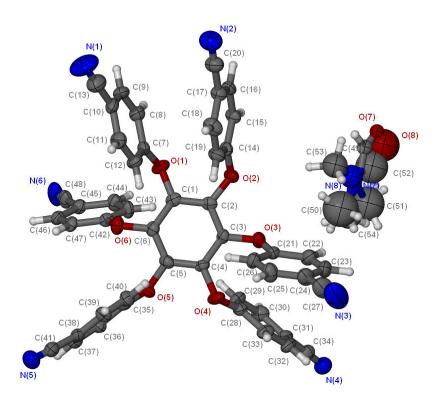
**Figure S2.** Thermal ellipsoid plot of **1b**. Atoms are shown with 70% probability thermal ellipsoids.



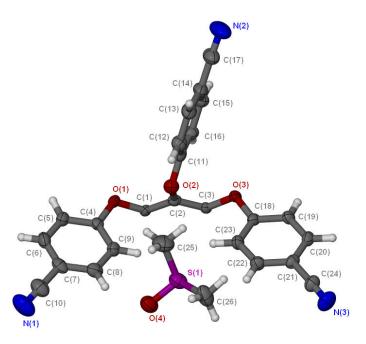
**Figure S3.** Thermal ellipsoid plot of **1c**. Atoms are shown with 70% probability thermal ellipsoids.



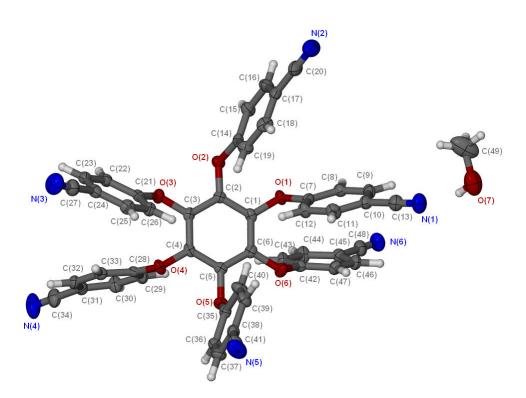
**Figure S4.** Thermal ellipsoid plot of **1d**. Atoms are shown with 70% probability thermal ellipsoids.



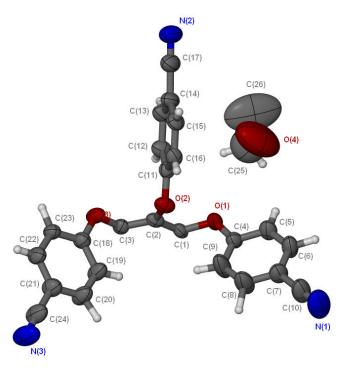
**Figure S5.** Thermal ellipsoid plot of **1e**. Atoms are shown with 70% probability thermal ellipsoids.



**Figure S6.** Thermal ellipsoid plot of **1f**. Atoms are shown with 70% probability thermal ellipsoids.



**Figure S7.** Thermal ellipsoid plot of **1g**. Atoms are shown with 70% probability thermal ellipsoids.



**Figure S8.** Thermal ellipsoid plot of **1h**. Atoms are shown with 70% probability thermal ellipsoids.

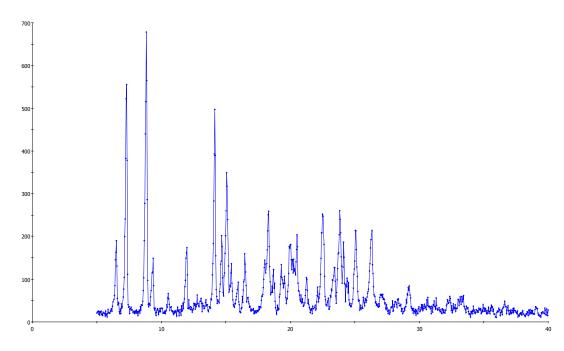


Figure S9. Experimental powder X-ray diffraction pattern of 1a.

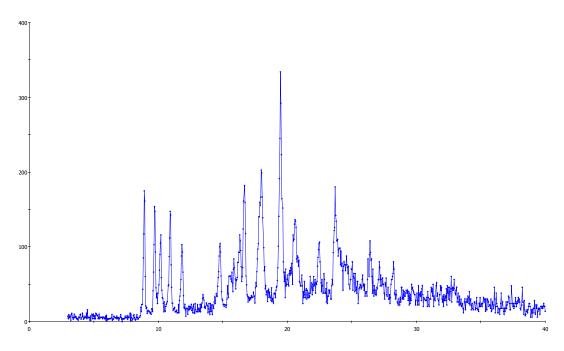


Figure S10. Experimental powder X-ray diffraction pattern of 1b.

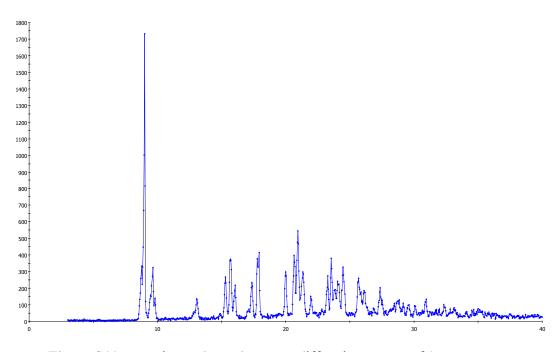


Figure S11. Experimental powder X-ray diffraction pattern of 1c.

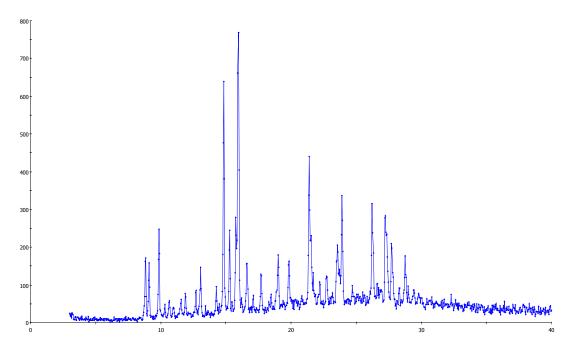


Figure S12. Experimental powder X-ray diffraction pattern of 1d.

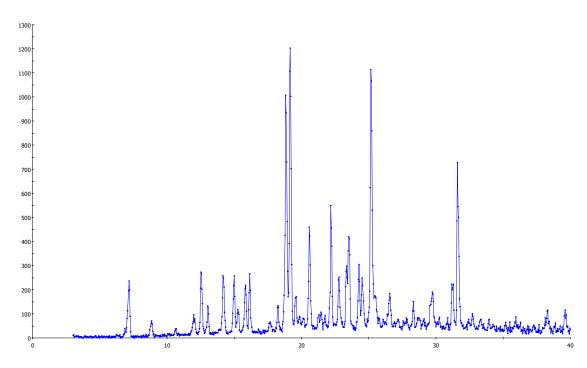


Figure S13. Experimental powder X-ray diffraction pattern of 1e.

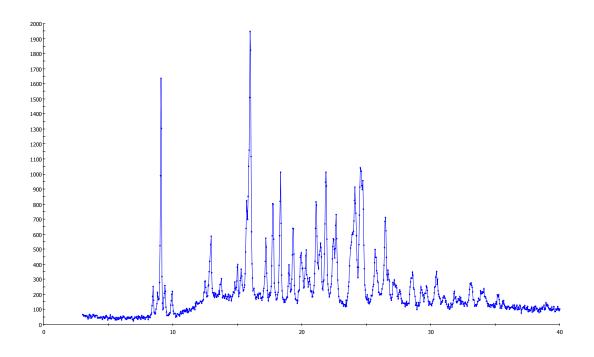


Figure S14. Experimental powder X-ray diffraction pattern of 1f.

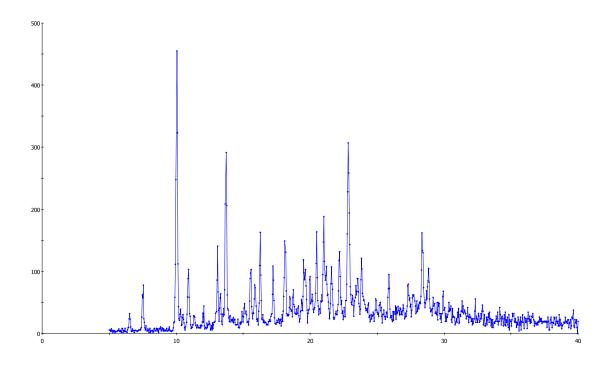


Figure S15. Experimental powder X-ray diffraction pattern of 1g.

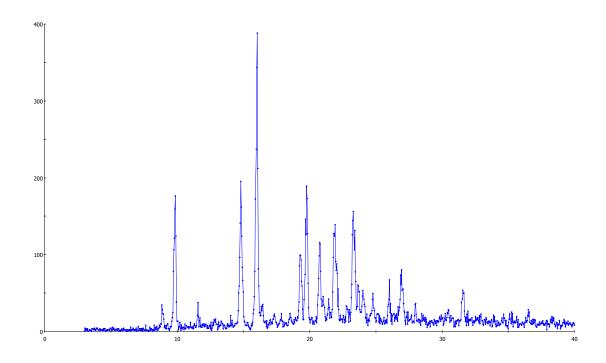
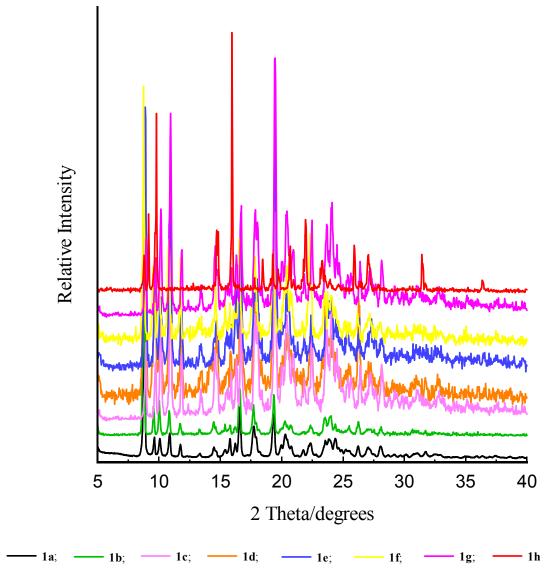


Figure S16. Experimental powder X-ray diffraction pattern of 1h.



**Figure S17.** Experimental powder X-ray diffraction pattern of desolvated materials after heating at ca.  $200^{\circ}$  C.

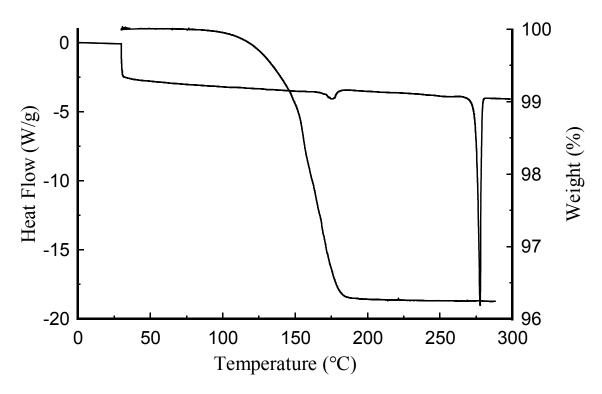


Figure S18.DSC and TGA thermogram of 1a

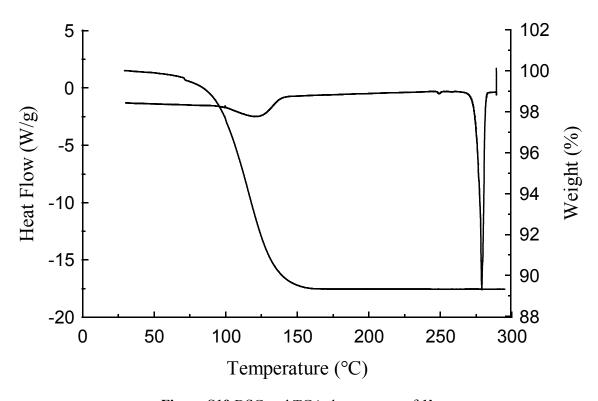


Figure S19.DSC and TGA thermogram of 1b

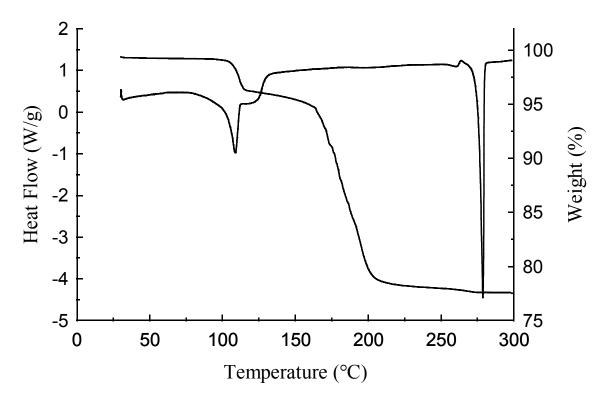


Figure S20.DSC and TGA thermogram of 1c

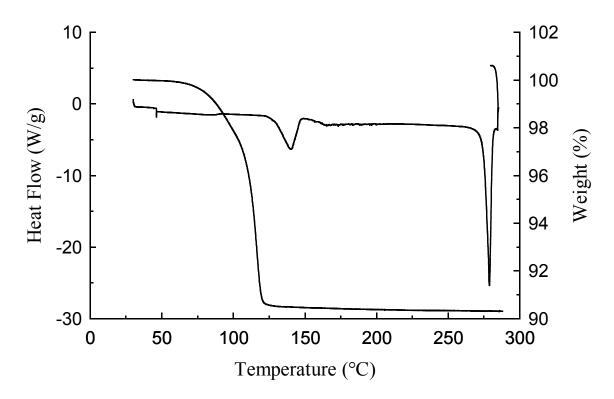


Figure S21.DSC and TGA thermogram of 1d

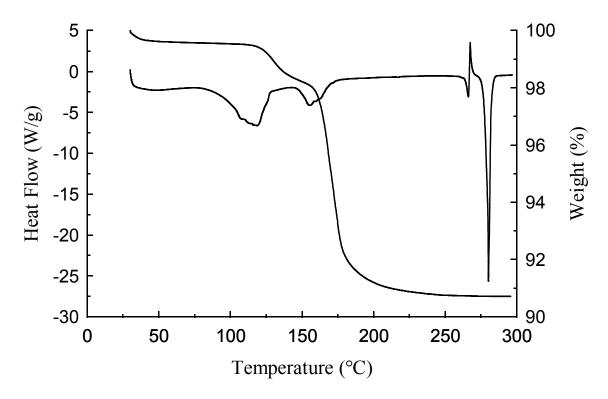


Figure S22.DSC and TGA thermogram of 1e

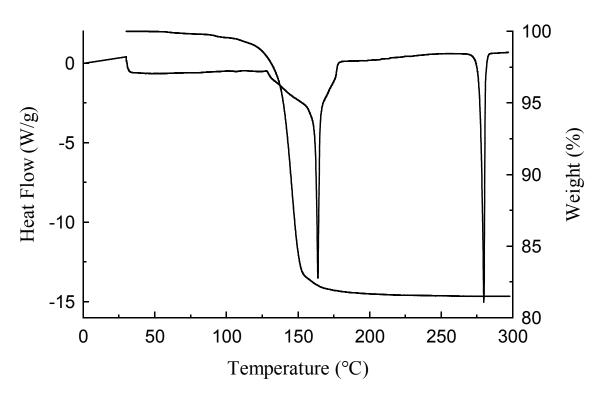


Figure S23.DSC and TGA thermogram of 1f

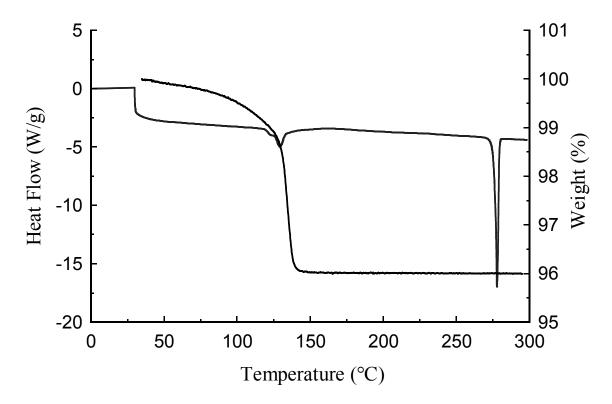


Figure S24.DSC and TGA thermogram of 1g

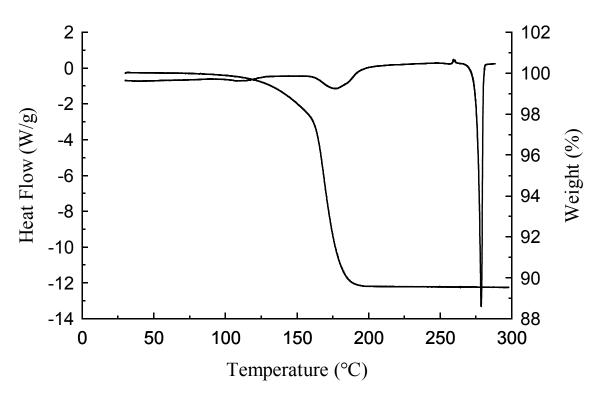
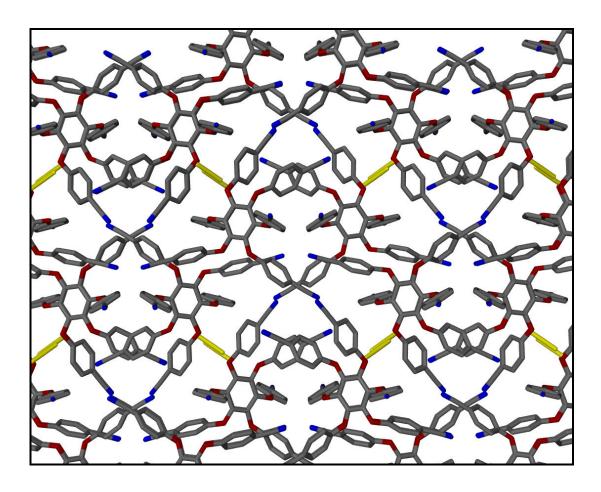
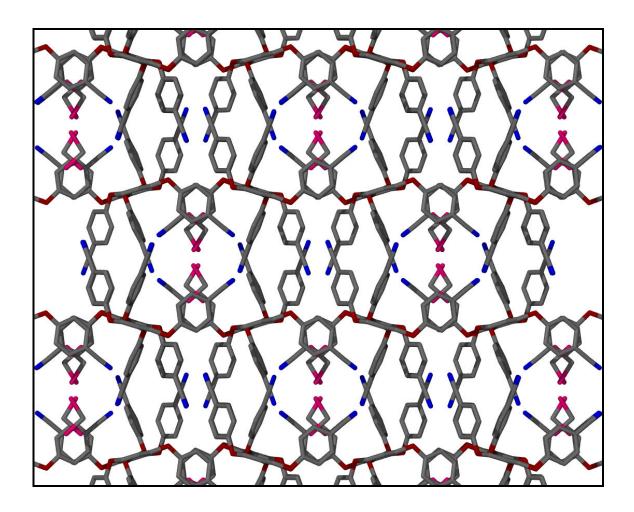


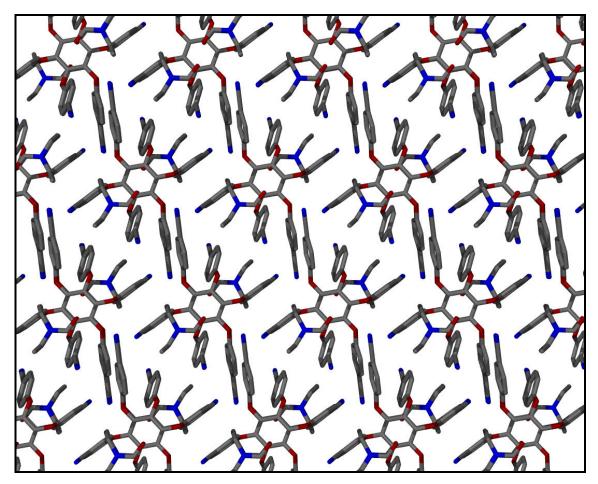
Figure S25.DSC and TGA thermogram of 1h



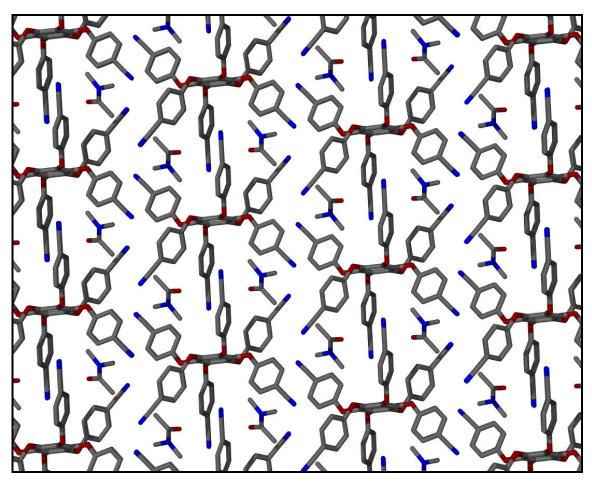
**Figure S26.** Packing diagram of **1a**, viewed along the *b* axis. Hydrogen atoms are omitted for clarity. Acetonitrile molecules are shown in yellow.



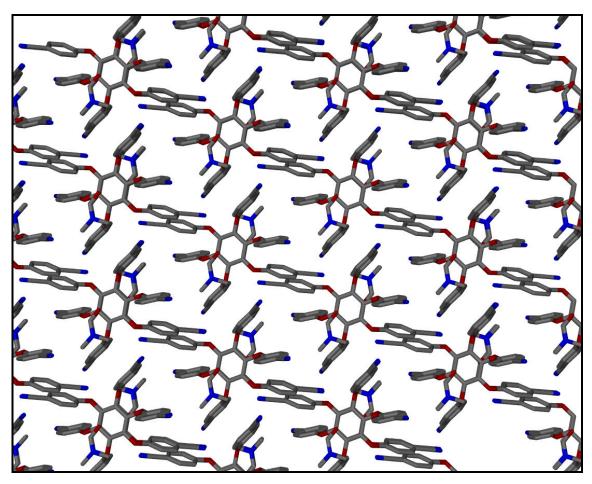
**Figure S27.** Packing diagram of 1b, viewed along the c axis. Hydrogen atoms are omitted for clarity.



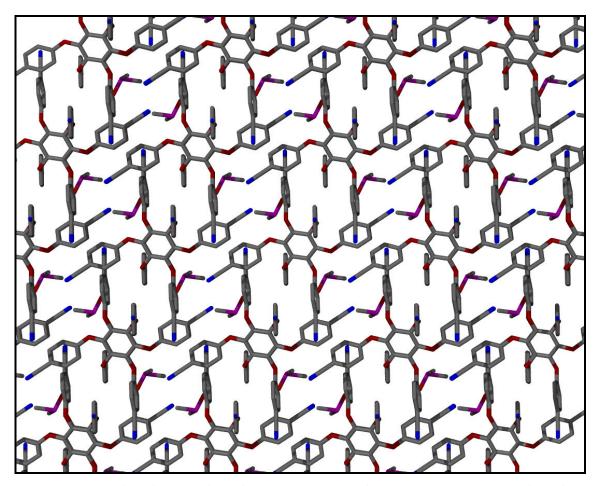
**Figure S28.** Packing diagram of 1c, viewed along the c axis. Hydrogen atoms are omitted for clarity.



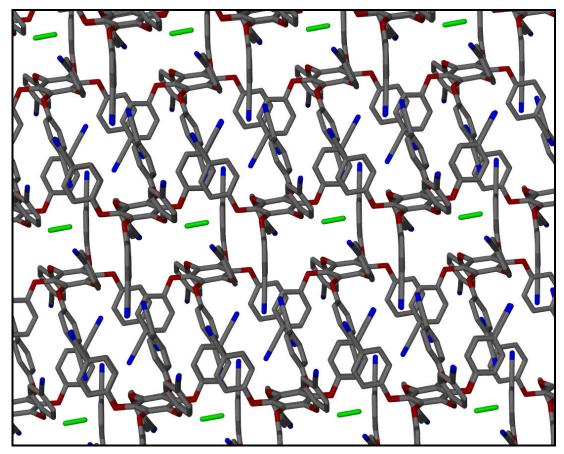
**Figure S29.** Packing diagram of **1d**, viewed along the *a* axis. Hydrogen atoms are omitted for clarity.



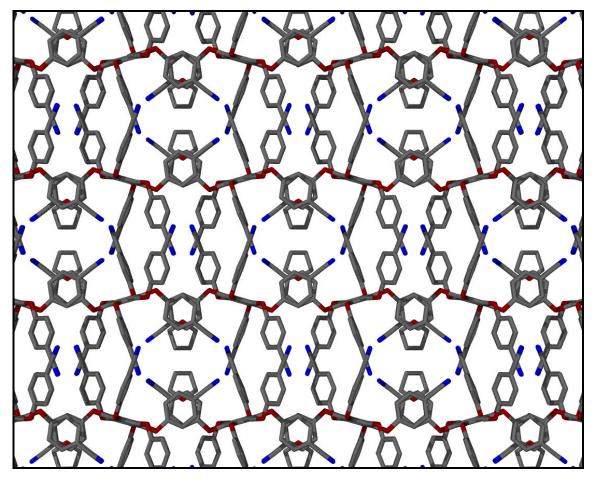
**Figure S30.** Packing diagram of **1e**, viewed along the *b* axis. Hydrogen atoms are omitted for clarity.



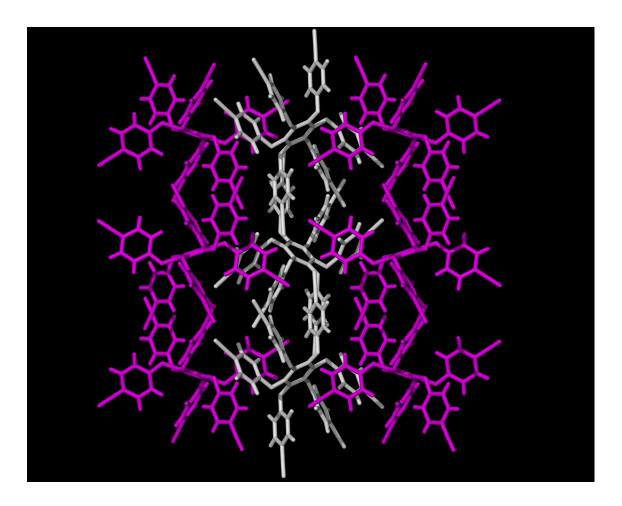
**Figure S31.** Packing diagram of 1f, viewed along the b axis. Hydrogen atoms are omitted for clarity.



**Figure S32.** Packing diagram of  $\mathbf{1g}$  viewed along the c axis. Hydrogen atoms are omitted for clarity. Methanol molecules are shown in green.



**Figure S33.** Packing diagram of 1h, viewed along the c axis. Hydrogen atoms are omitted for clarity.



**Figure S34.** Packing diagram of **M1** viewed along [001]. This structure was obtained by melt-crystallization (described in ref 12 in the main text). Desolvation of all the solvates gives this crystal structures. The crystal structure contains two different conformations of molecule **1**. The purple molecules have the *ababab* conformation and the white molecules have the *aaabbb* conformation.