Crystal Engineering with Scorpionate Ligands

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We have synthesized a range of new scorpionate ligands with peripheral coordination sites using pyridyl and benzonitrile substituents. These ligands have led to the formation of discrete

neutral moieties, porous and non-porous coordination polymers and large supramolecules [1,2]. Of particular interest is a 'nanoball' structure shown below which was solved using synchrotron data.



The outer diameter of the nanoball is ca. 29 Å and the inner cavity of this structure is ca. 16 Å in diameter and is decorated with potential reactive sites.

[1] Adams H., Batten S. R., Davies G. M., Duriska M. B., Jeffery J. C., Jensen P., Lu J., Motson G. R., Ward M. D., *manuscript in preparation*. [2] Batten S. R., Duriska M. B., *manuscript in preparation*.

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