

W0308

Design, Synthesis And Application of N-Based Ligands for Coordination and Hydrogen Bonded Networks.

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The design, synthesis and application of polytopic ligands to crystal engineering using metal coordination and hydrogen bonding will be presented. Ligands incorporating pyridine, pyrimidine, pyrazine and triazine moieties were prepared. A variety of one-, two- and three-dimensional coordination networks were characterized following self-assembly of the ligands with inorganic salts primarily silver and copper salts. In contrast, hydrogen-bonded networks and capsules were formed following self-assembly of the ligands with polyphenols and carboxylic acids.