Shaping and Enforcing Coordination Spheres: Probing the ability of Tripodal ligands to Favour Trigonal Prismatic Geometry

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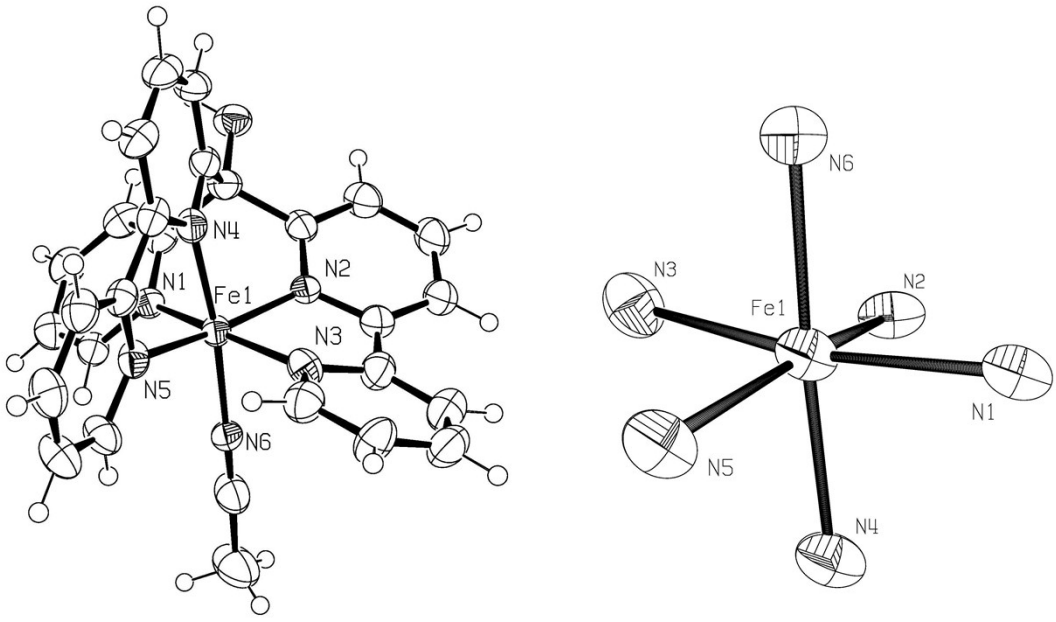
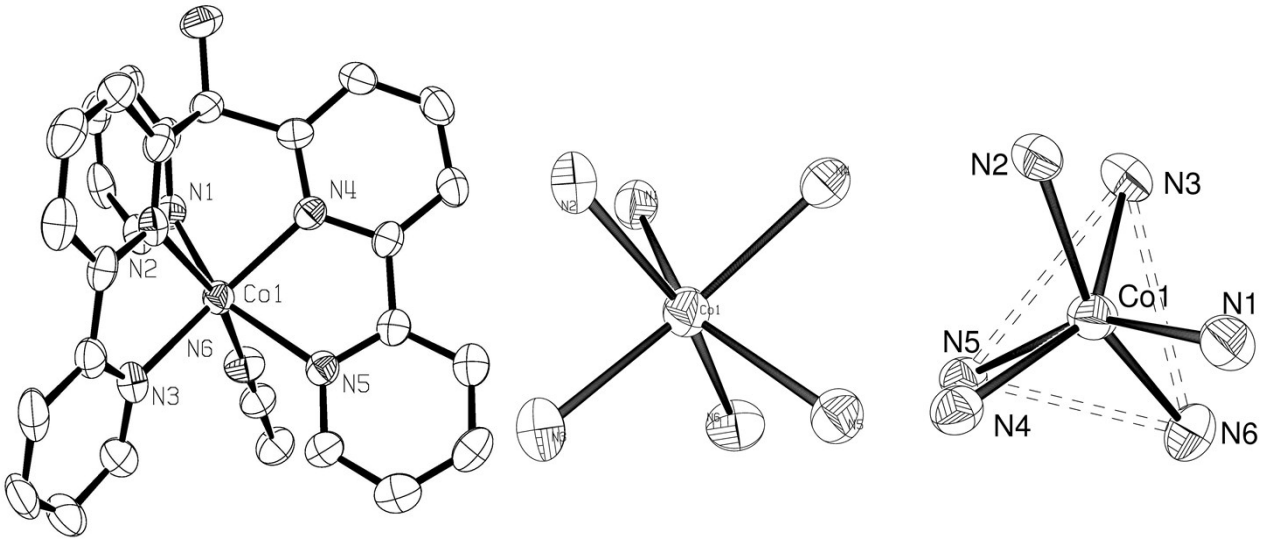


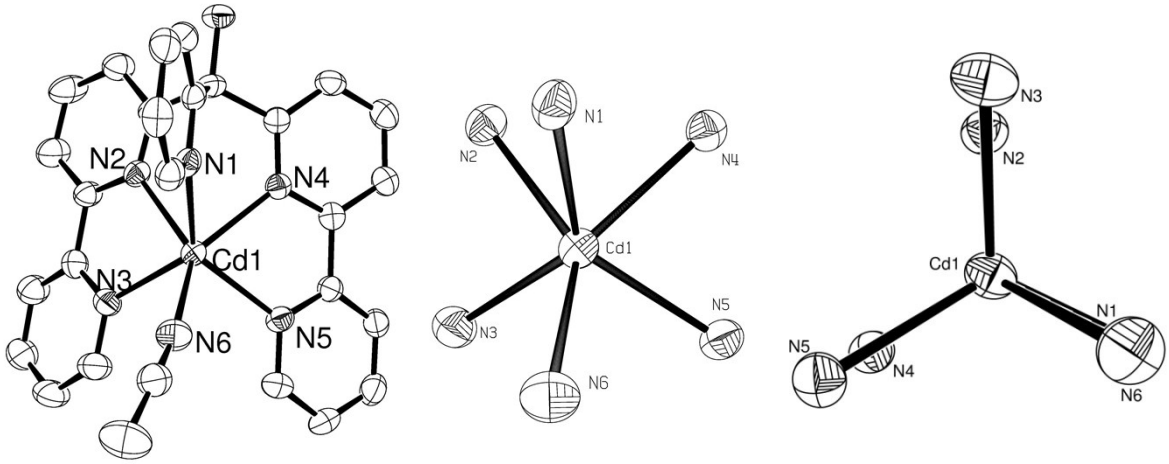
(a) **(b)**

Figure 1 a) Perspective view of the asymmetric unit of **9** showing the atom numbering. Displacement ellipsoids are shown at the 50% probability level. H atoms are represented by circles of arbitrary size. b) The core Fe geometry.



(a) **(b)** **(c)**

Figure 2 a) Perspective view of the asymmetric unit of **10** showing the atom numbering. Displacement ellipsoids are shown at the 50% probability level. b) Core geometry about the Co centre; c) alternative perspective illustrating the distortion from octahedral geometry. The dotted lines define one deltahedral face.



(a) **(b)** **(c)**

Figure 3 a) Perspective view of the asymmetric unit of **14** showing the atom numbering. Displacement ellipsoids are shown at the 50% probability level; b) Core geometry of the Cd centre; c) alternative perspective demonatrating the trigonal prismatic arrangement.

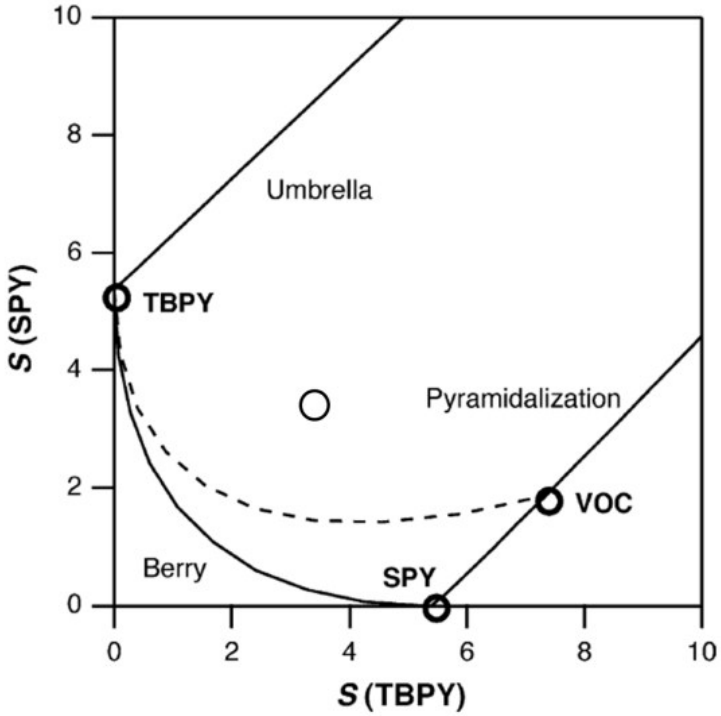


Fig. 4 Shape map[14] showing an interconversion pathway (Berry pseudo-rotation). The three bold circles represent the positions of the ideal geometries (TBPY: trigonal bipyramid, SPY: square pyramid, and VOC: vacant octahedron). The light circle indicates the position of **5**