

Uranyl Dicyanoaurate Coordination Polymers Through the Dimensions

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The structural chemistry of uranyl (UO_2^{+2}) coordination polymer chemistry has been greatly expanded by recent work, but it currently remains dominated by bridging units bearing carboxylic acids. To expand this field, we have used dicyanoaurate ($\text{Au}(\text{CN})_2^-$) linkers in the creation of coordination polymers. Initial efforts showed an interesting array of one-dimensional coordination polymers, and we have recently completed work expanding these structures to be multidimensional using aurophilic interactions and hydrogen bonds.

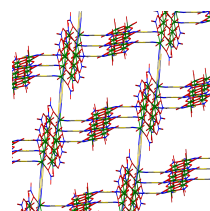


Figure 1

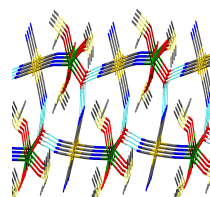


Figure 2

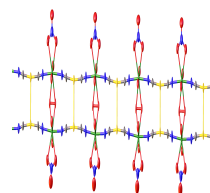


Figure 3