

Challenging crystal structures of some iridium complexes: Disorder and twinning

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A systematic study has been undertaken of a number of iridium (III) complexes containing *bis*-2-(4,6-difluorophenyl)pyridyl- or *bis*-2-(phenyl)pyridyl ligands and a variety of picolinate and acac ligands in order to investigate their photo-physical properties. While some materials provided suitable crystal structure determinations most displayed solvent issues and/or twinning that complicated the overall study. Several examples will be presented where solvent of crystallization *and* disordered ligands further complicated the structural model. An example of a solvent-mediated phase transition will be presented.