

Poster Presentation

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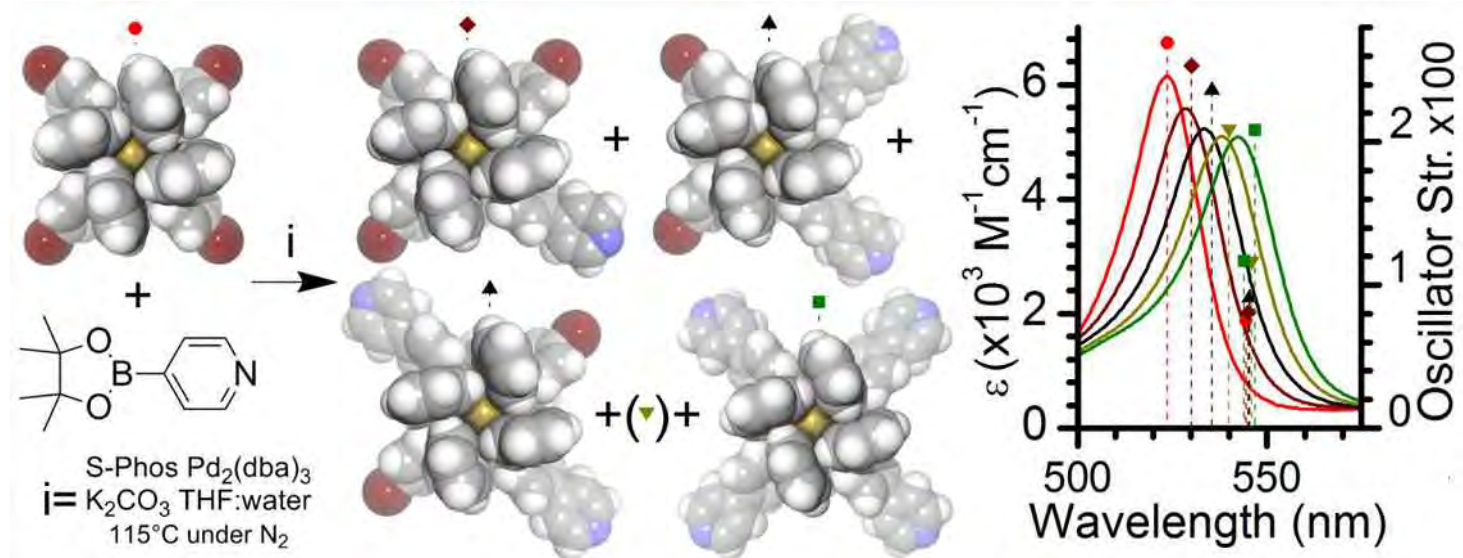
Rhodium dimers as structural hubs for multichromophore assemblies

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Our main building blocks for forming supra-molecular assemblies of chromophoric units are the rhodium amidinate dimers. They offer an excellent structural backbone for rigid polynuclear assemblies with their paddle wheel motif and strongly bonded ligands. We already showed that with a well designed amidinate ligand with a pyridyl group up to four metallic centers can be attached to the dimer.[1,2] Two main approaches were used to extend these assemblies: the first is through Suzuki coupling reactions which allows for an extended ligand and a control on the number of pyridyl present on the dimer; The second is through bisocyanide ligands which are used to bridge the dimers through their axial site, thus forming 1D coordination polymer in the solid state. These different assemblies will be presented with their solid state structure, photophysical and electrochemical properties.

[1] Chartrand, D., Hanan, G.S., *Chem. Comm.* 2008, 6, 727-728., [2] Chartrand, D.; Hanan, G. S. *Inorg. Chem.* 2014, 53, 624.



Keywords: Rhodium dimer, Rhenium