Metal-Metal Interactions in Dinuclear Ruthenium Complexes incorporating "Stepped-Parallel" Bridging Ligands: Synthesis, Stereochemistry and Intervalence Charge Transfer

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SUPPLEMENTARY INFORMATION

Table S1. Reduction potentials (in mV relative to the Fc^+/Fc^0 couple) for the diastereoisomers of $[\{Ru(bpy)_2\}_2(\mu\text{-BL})]^{4+}$ in 0.1 M $[(n\text{-}C_4H_9)_4N]PF_6/CH_3CN$.[a]

BL	Diastereoisomer	E_{red1}	E_{red2}	E_{red3}	E_{red4}	E_{red5}
2,5-dpp	*meso*	-980	-1530			
	rac	-978	-1522			
dpop	*meso*	-588	-1348	-1908[b]	-2100	
	rac	-608	-1332	-1908[b]	-2165	-2218
apy[c]	*meso*	35	-615	-1735[b]	-2025	
	rac	25	-645	-1745[b]	-2055	

[a] Potentials are quoted ±3 mV.

[b] Two-electron reduction process.

[c] Potentials measured in 0.1 M $[(n\text{-}C_4H_9)_4N]ClO_4/CH_3CN$ {L. S. Kelso, D. A. Reitsma, and F. R. Keene, *Inorg. Chem.*, 1996, **35**, 5144-5153}.

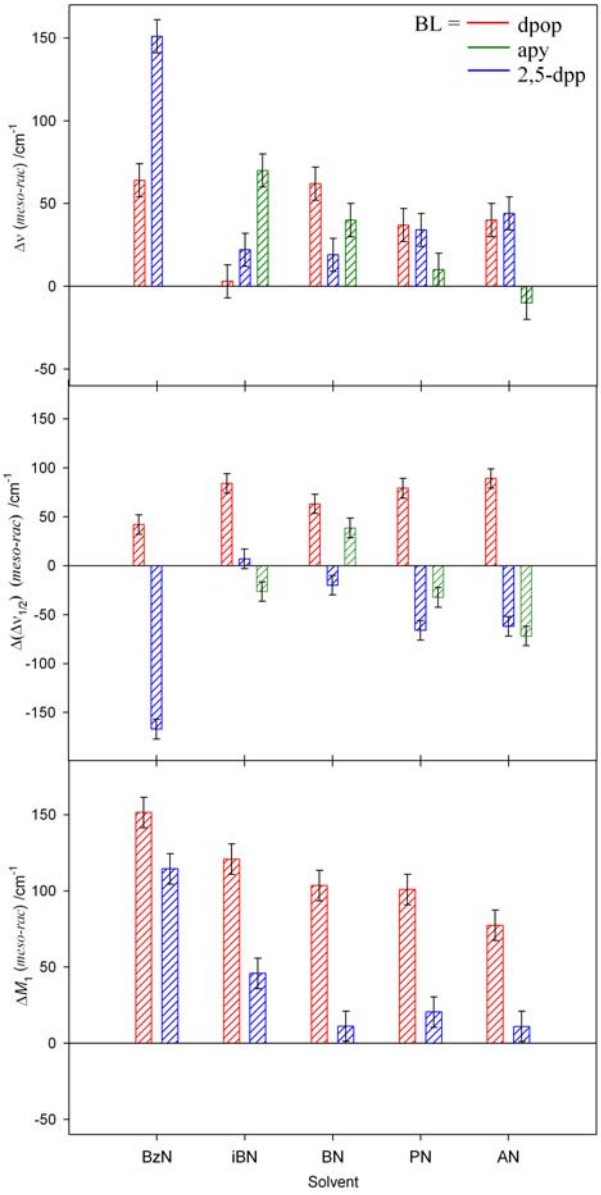
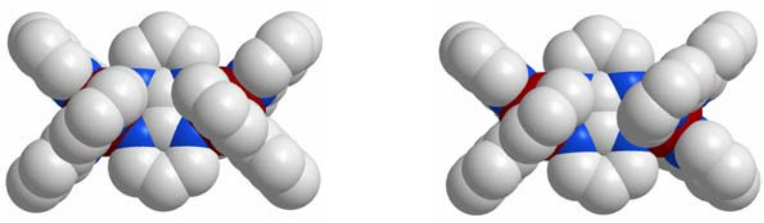


Figure S1. Differential energies, bandwidths and first moments of the IVCT transitions for the diastereoisomers.



meso (ΔΛ) *rac* (ΔΔ)

Figure S2. T*op view* of the *meso* (ΛΔ) and *rac* (ΔΔ) diastereoisomers of $[\{Ru(bpy)_2\}_2(\mu\text{-bpm})]^{4+}$ illustrating the subtle variation in the dimensions of the clefts above and below the plane of the bridging ligand. Hydrogen atoms are omitted for clarity.