

Supporting Information

Electrochemical and Spectroscopic Characterization of a Series of Mixed-Ligand Diruthenium Compounds

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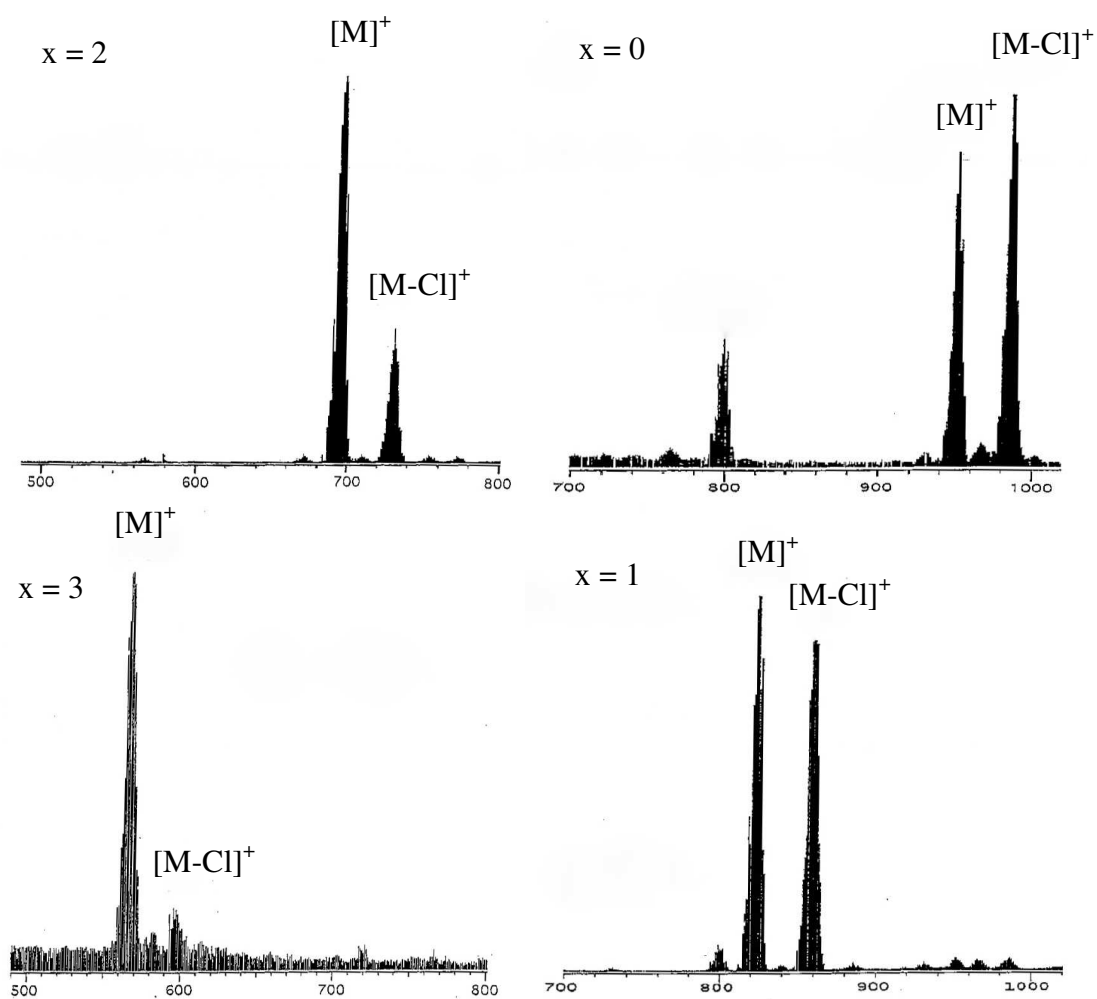


Figure S1. Mass Spectra of $\text{Ru}_2(\text{CH}_3\text{CO}_2)_x(\text{Fap})_{4-x}\text{Cl}$ ($x = 0, 1, 2$ or 3). $[\text{M}-\text{Cl}]^+ =$ molecular ion peak.

S2. Half-Wave Potentials for Redox Reactions of $\text{Ru}_2(\text{CH}_3\text{CO}_2)_x(\text{Fap})_{4-x}\text{Cl}$ in MeCN and PhCN containing 0.1 M TBAP.

solvent	# bridging ligand		$E_{1/2}$ (V vs SCE)			$E_{1/2}$ (V vs Fc/Fc ⁺)		
	$(\text{CH}_3\text{CO}_2)_3, (x)$	Fap	$\text{Ru}_2^{6+/5+}$ $\text{Ru}_2^{4+/3+}$	$\text{Ru}_2^{5+/4+}$		$\text{Ru}_2^{6+/5+}$ $\text{Ru}_2^{4+/3+}$	$\text{Ru}_2^{5+/4+}$	
MeCN	3	1	1.08	-0.41	-1.68 ^a	0.66	-0.81	-2.15 ^a
	2	2	0.78	-0.55		0.29	-1.00	
	1	3	0.55	-0.71		0.06	-1.20	
	0	4	0.47	-0.75		-0.03	-1.25	
PhCN	3	1	1.11	-0.43	-1.63 ^a	0.62	-0.92	-2.10 ^a
	2	2	0.75	-0.57	-1.55 ^a	0.27	-1.06	-2.02 ^a
	1	3	0.56	-0.63	-1.48 ^a	0.07	-1.11	-1.92 ^a
	0	4	0.49 ^b	-0.65 ^b		-0.01 ^b	-1.15 ^b	

^a = peak potential, E_{pc} , at a scan rate of 0.1 V/s