

SUPPORTING INFORMATION

2,3-Bis(2-pyridyl)thieno[3,4-*b*]pyrazine and Its Ruthenium(II) complexes: A New Bidentate Bridging Ligand for Enhanced Metal-Metal Communication

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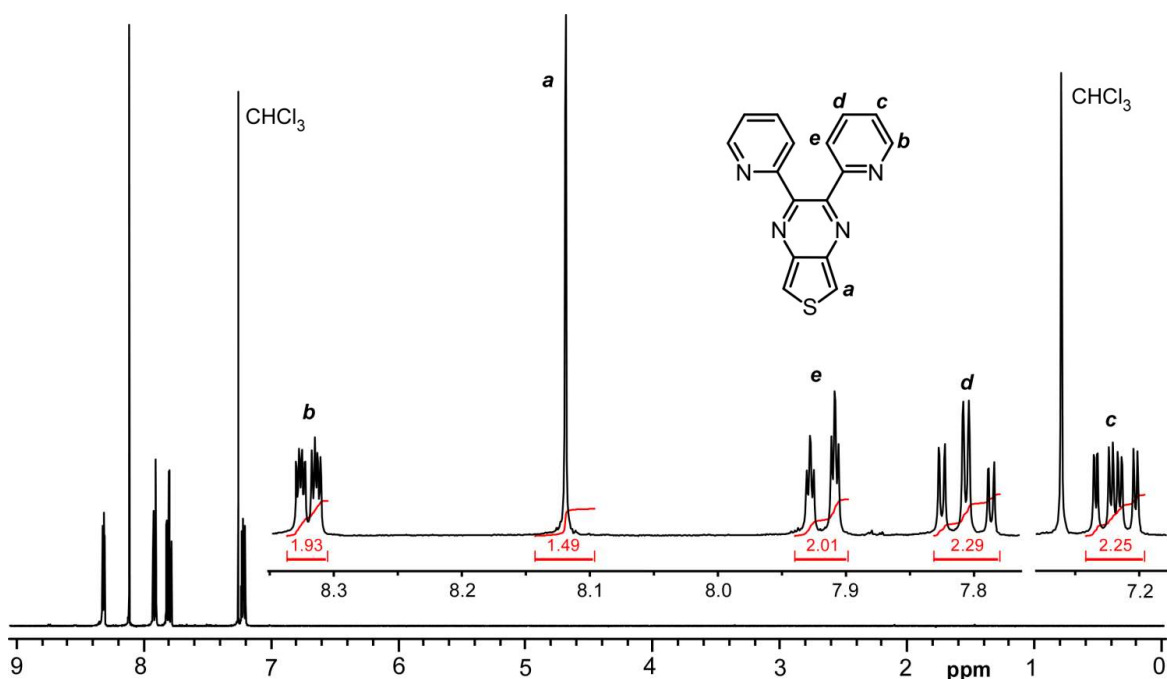


Figure S1. ^1H NMR spectra of dpTP in CDCl_3

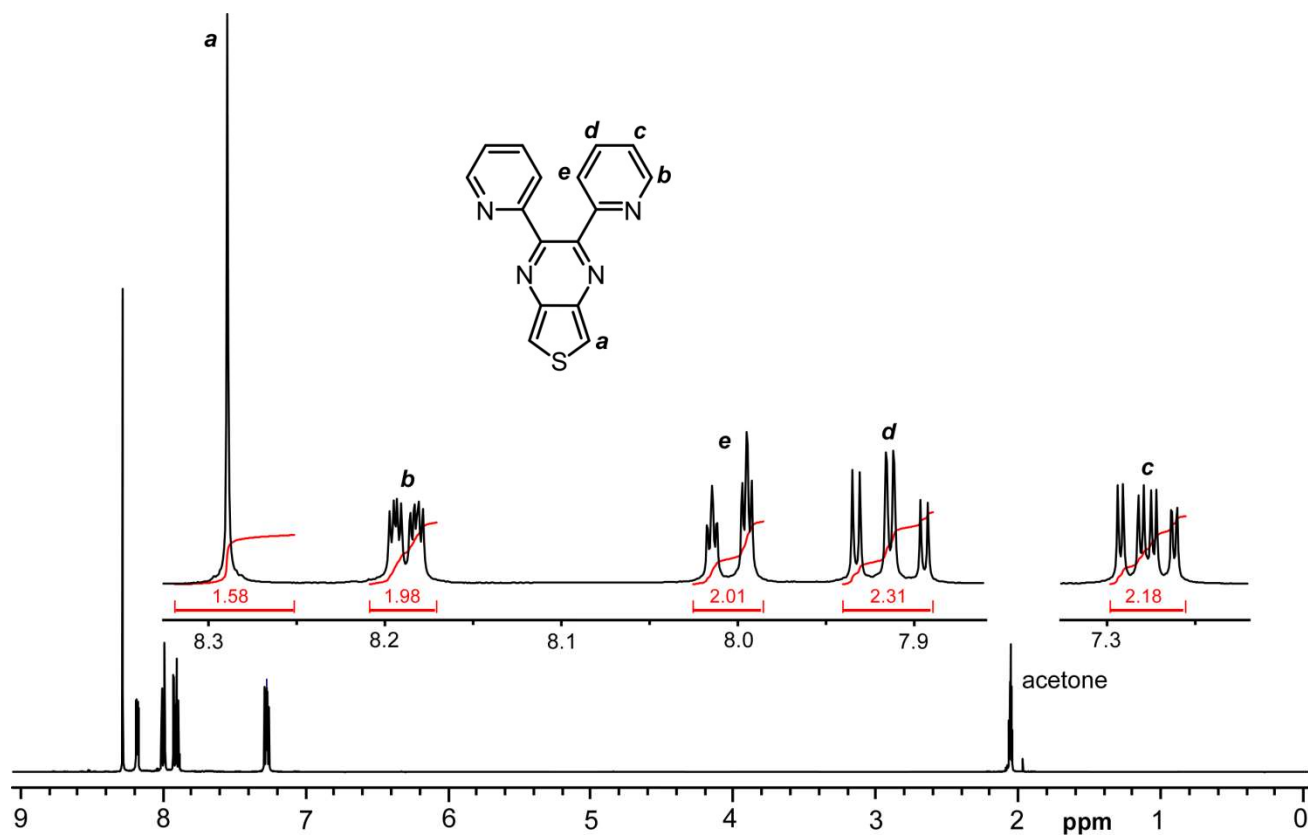


Figure S2. ^1H NMR spectra of **dpTP** in d_6 -acetone

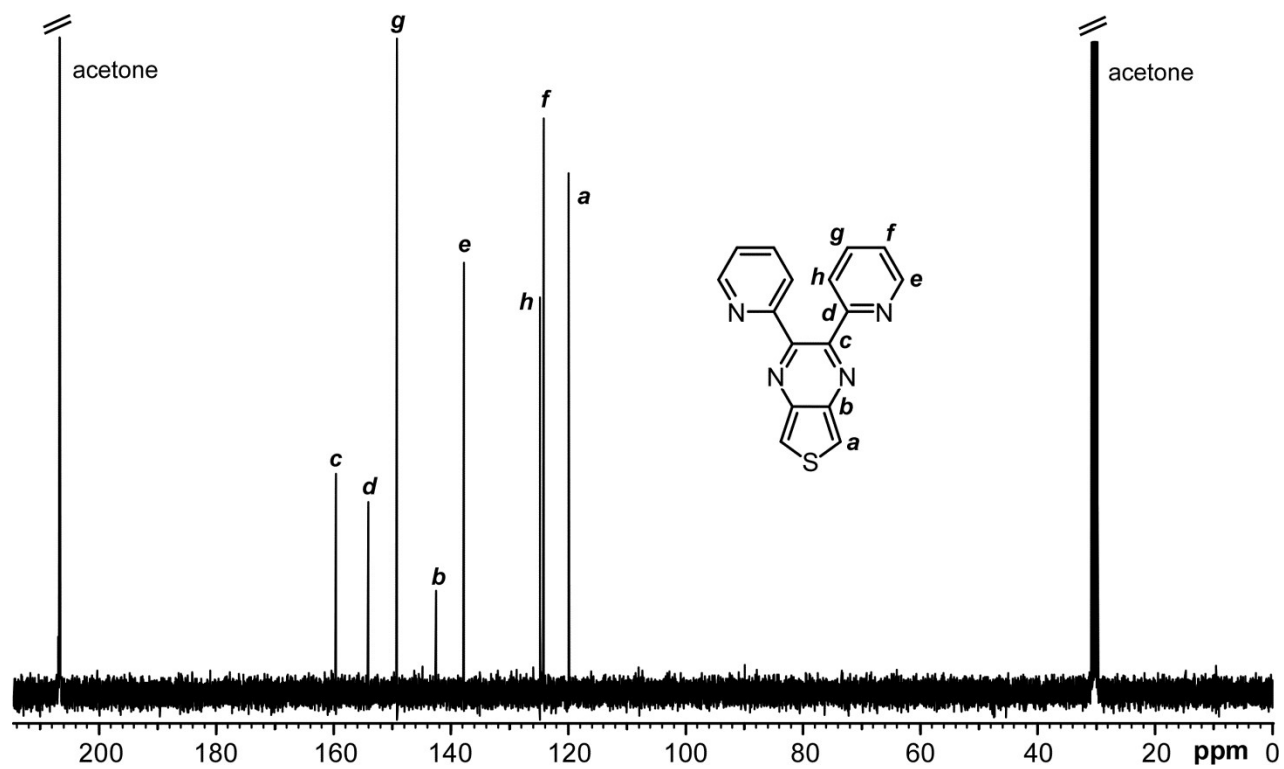


Figure S3. ^{13}C NMR spectra of **dpTP** in d_6 -acetone

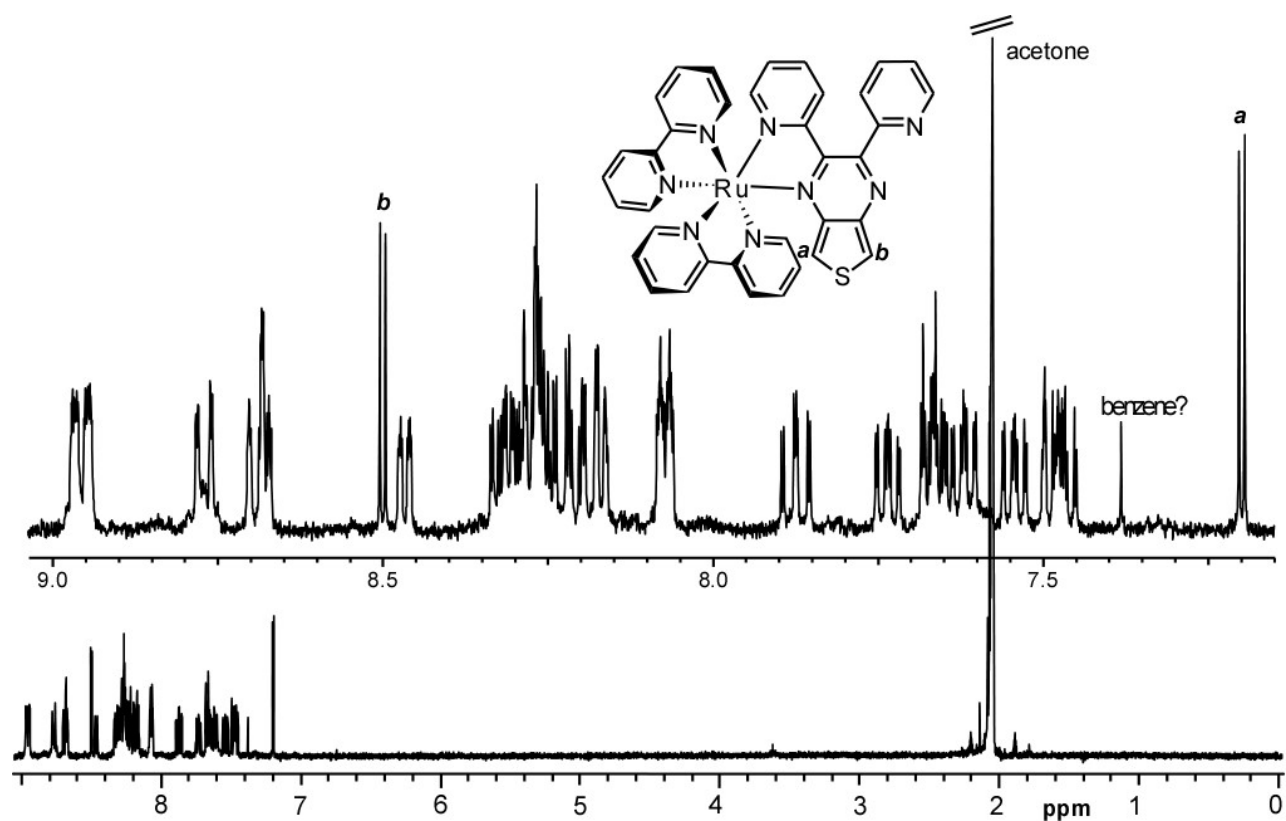


Figure S4. ^1H NMR spectra of $[(\text{bpy})_2\text{Ru}(\text{dpTP})](\text{PF}_6)_2$ in d_6 -acetone

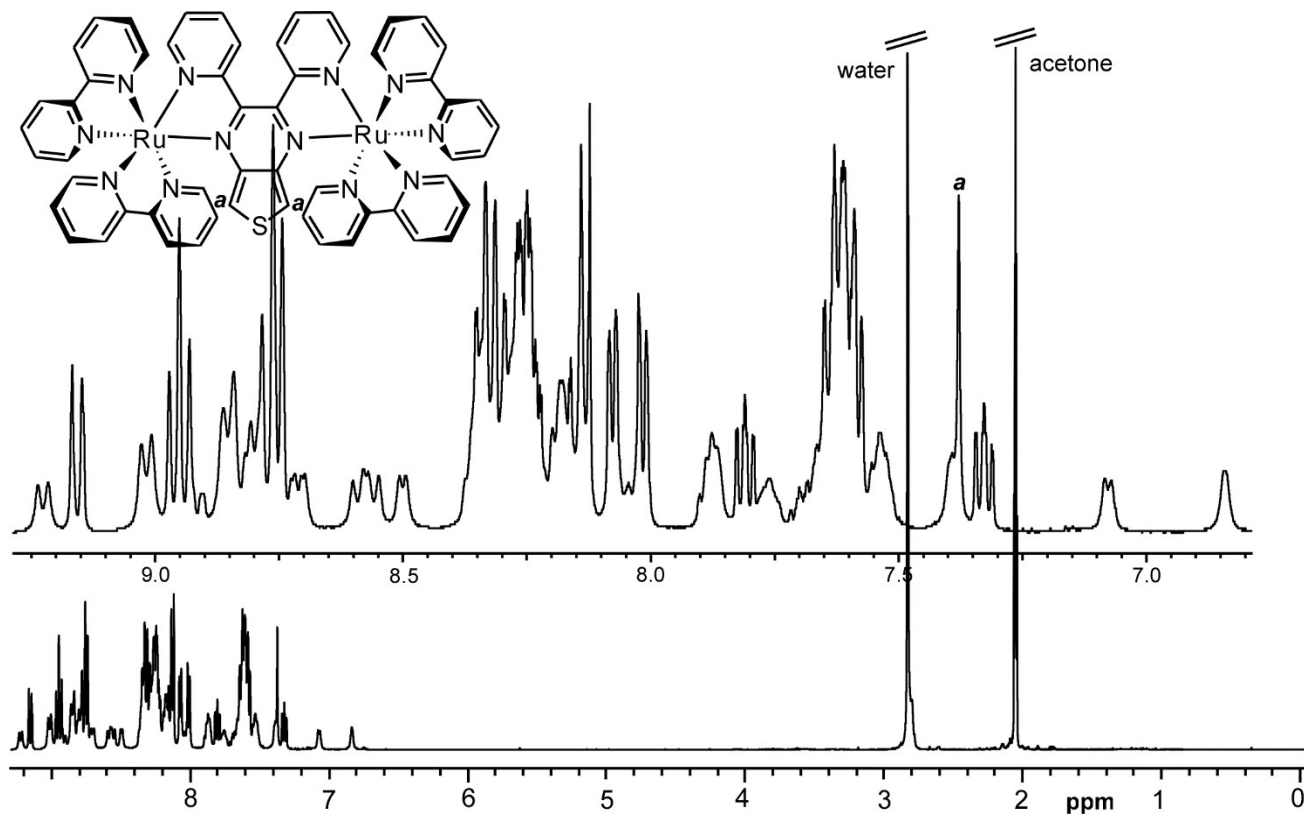


Figure S5. ^1H NMR spectra of $[\{(\text{bpy})_2\text{Ru}\}_2(\text{dpTP})](\text{PF}_6)_4$ in d_6 -acetone

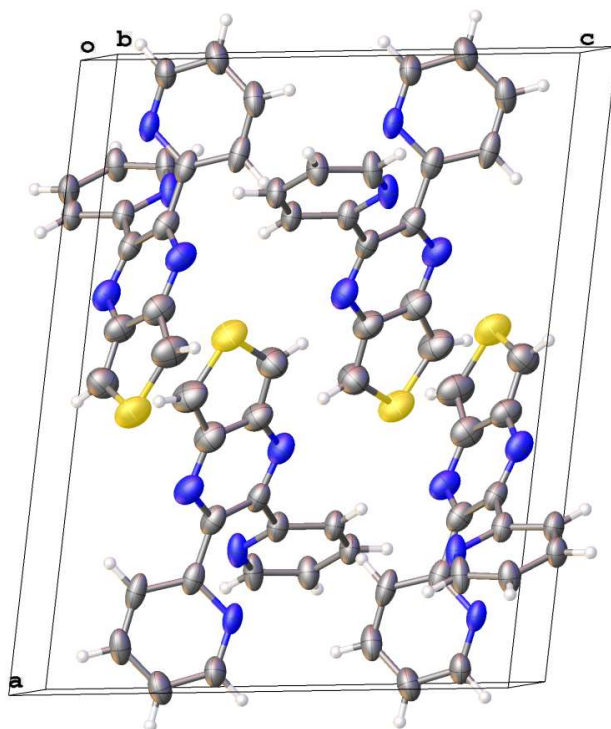


Figure S6. Unit cell of dpTP (thermal ellipsoids shown at the 50% probability level)

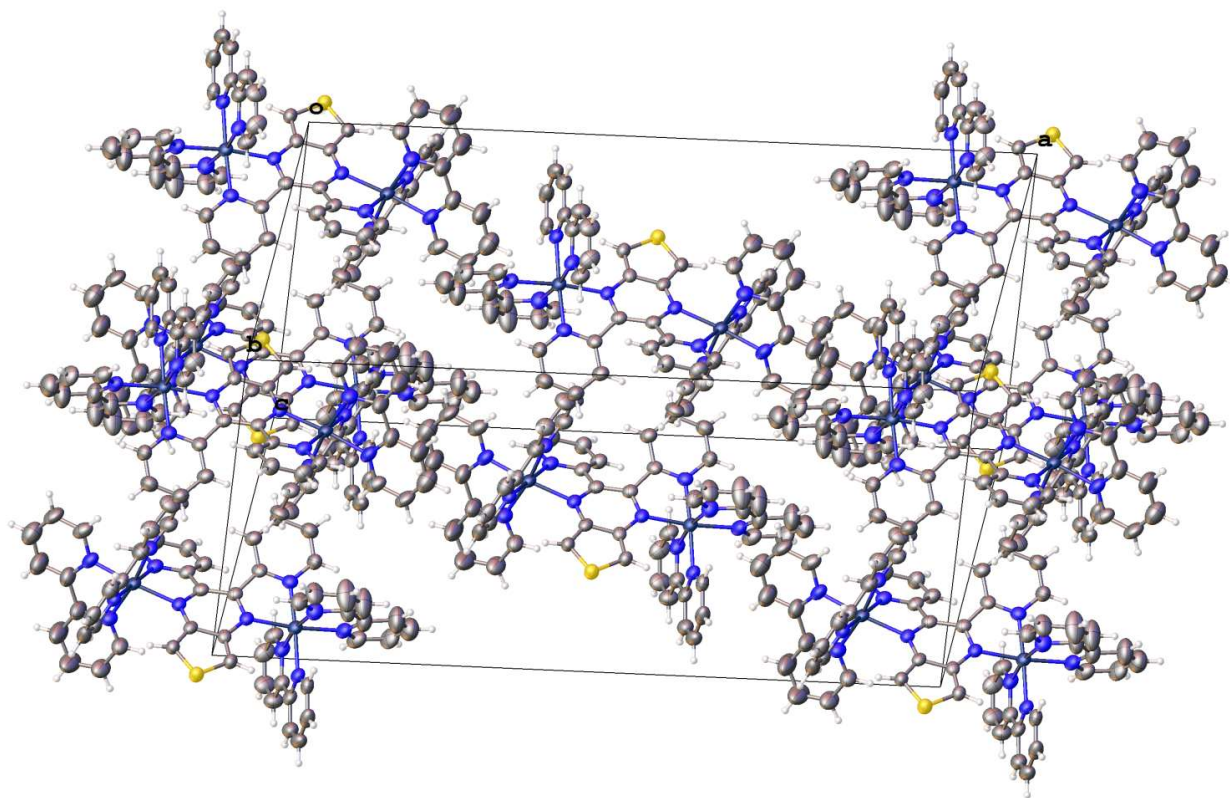
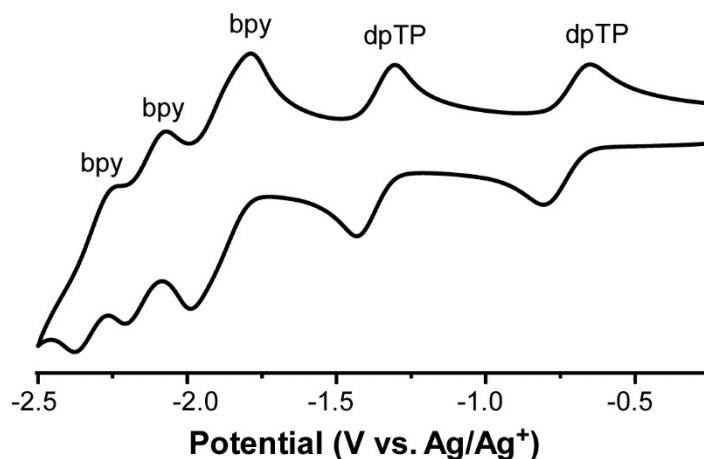


Figure S7. Unit cell of $[\{(\text{bpy})_2\text{Ru}\}_2(\text{dpTP})]^{4+}$ (thermal ellipsoids shown at the 50% probability level, PF_6^- counterions, and CH_3CN solvent not shown for clarity)

Table S1. Selected bond distances (Å) of various fused-ring pyrazines.

Parameter	dpTP	Me ₂ TP ^a	dpq ^b
S1-C1	1.688(6)	1.691(2)	
C1-C2	1.365(7)	1.372(3)	
C2-C3	1.432(7)	1.427(2)	1.407(4)
C2-N1	1.374(6)	1.377(2)	1.368(4)
N1-C5	1.300(6)	1.308(2)	1.317(4)
C5-C6	1.468(7)	1.460(3)	1.436(3)
C5-C7	1.488(6)	1.495(3)	1.485(4)
C7-C8	1.401(6)		1.389(4)
C8-C9	1.376(6)		1.382(4)
C9-C10	1.378(6)		1.377(5)
C10-C11	1.384(6)		1.375(5)
C11-N3	1.324(6)		1.340(4)
N3-C7	1.335(6)		1.338(4)

^aRef. 1. ^bRef. 2.**Figure S8.** Cyclic voltammogram of [{(bpy)₂Ru} ₂(dpTP)]⁴⁺ in DMF.

References

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