

Supporting Information

Synthesis, Spectroscopic and Magnetic Characterization of Cobalt(II) Aryloxides with Bent and Linear Coordination

Aimee M. Bryan,[†] Gary J. Long^{*,‡} Fernande Grandjean^{*,‡} and Philip P. Power^{*,†}

[†]Department of Chemistry, University of California, Davis, One Shields Avenue,
Davis, California 95616, United States

[‡]Department of Chemistry, Missouri University of Science and Technology,
University of Missouri, Rolla, Missouri 65409, United States

Table of Contents:

S2. IR spectra of **1**, **2a**, HOAr^{Me₆}, HOAr^{iPr₄} and **2a** doped with excess HOAr^{iPr₄}

S4. UV-Vis spectra of **1** and **2a**

Figure S1. IR Spectrum of **1** in a Nujol mull (cm^{-1}) with CsI plates.

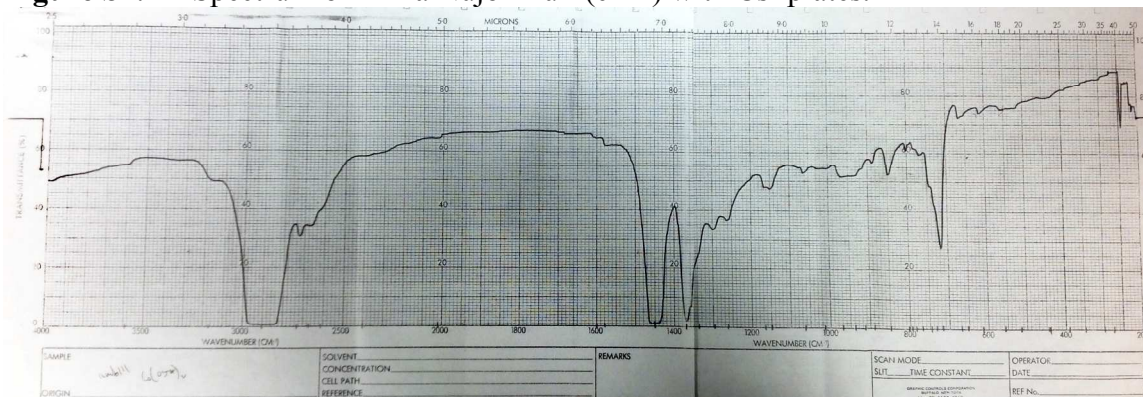


Figure S2. IR Spectrum of **2a** in a Nujol mull (cm^{-1}) with CsI plates.

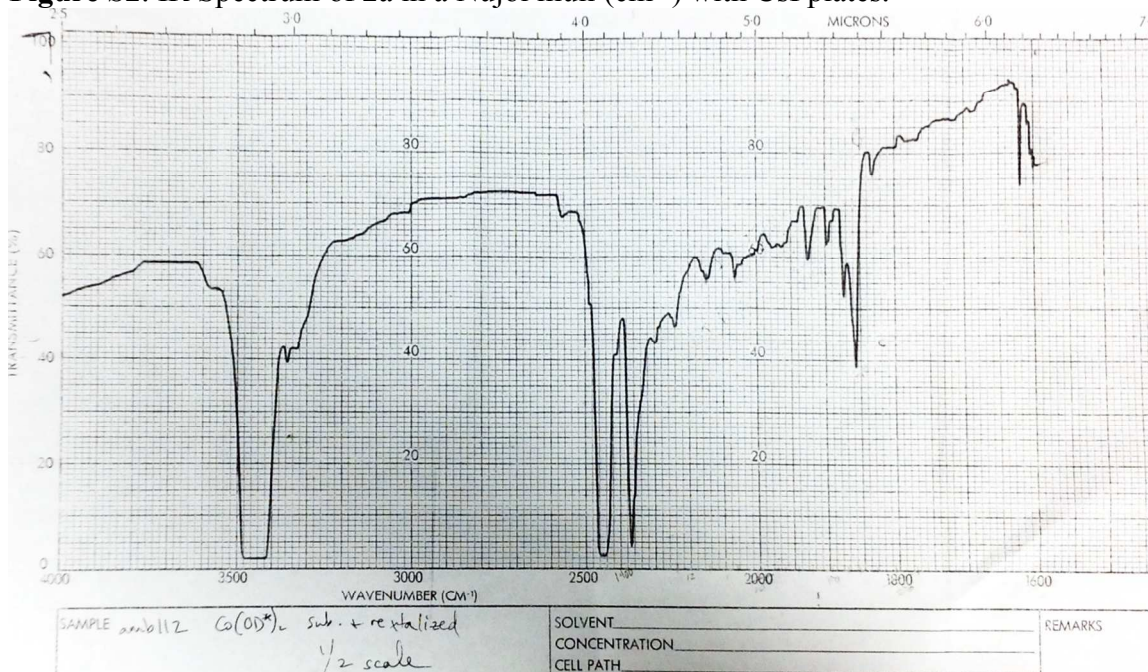


Figure S3. IR Spectrum of HOAr^{Me6} in a Nujol mull (cm^{-1}) with CsI plates.



Figure S4. IR Spectrum of HOAr^{iPr}₄ in a Nujol mull (cm⁻¹) with CsI plates; IR in Nujol mull (cm⁻¹) in CsI plates: 3530, 3140, 2900, 2720, 2660, 1570, 1450, 1370, 1290, 1210, 1145, 1065, 940, 885, 840, 800, 750, 600, 560, 430.

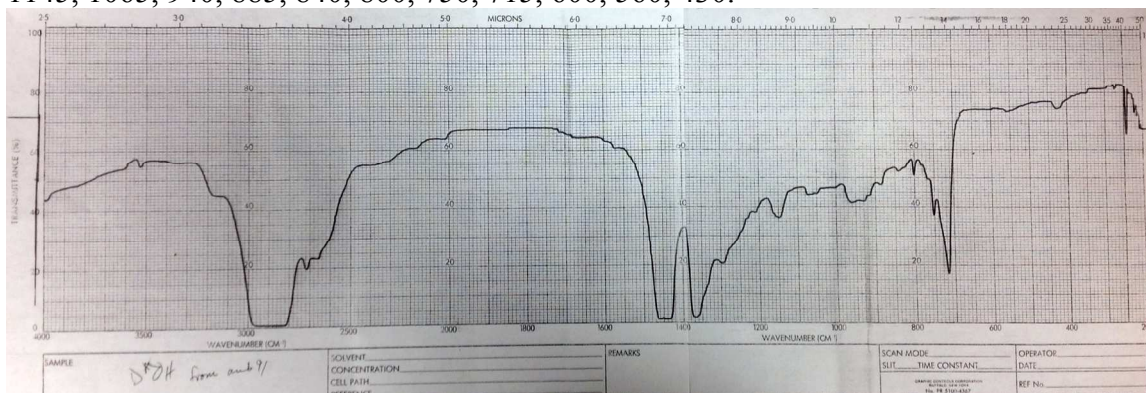


Figure S5. IR Spectrum of **2a** doped with excess HOAr^{iPr}₄ in a Nujol mull (cm⁻¹) with CsI plates; IR in Nujol mull (cm⁻¹) in CsI plates: 3530, 3140, 2900, 2720, 2660, 1570, 1530, 1450, 1370, 1290, 1240, 1200, 1145, 1065, 940, 880, 840, 795, 780, 745, 715, 660, 600, 550, 430, 380.

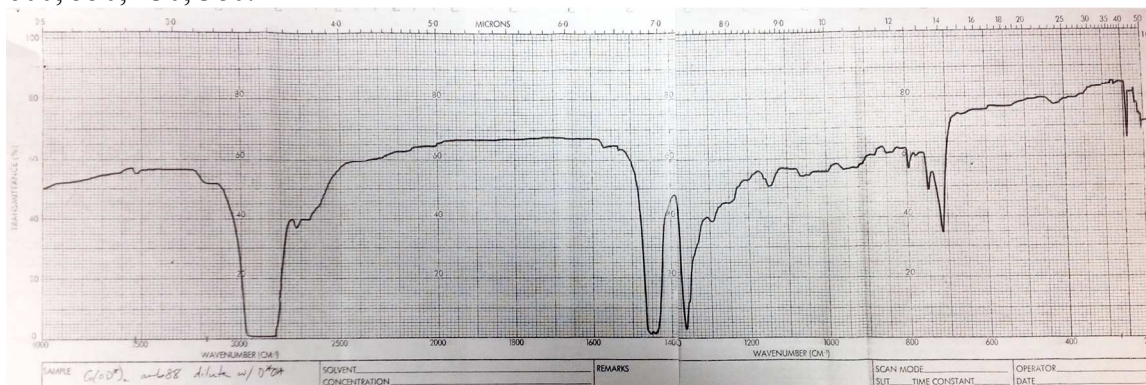


Figure S6. UV-vis spectrum of a dilute solution (0.00070 M) of **1** in toluene at 25 °C.

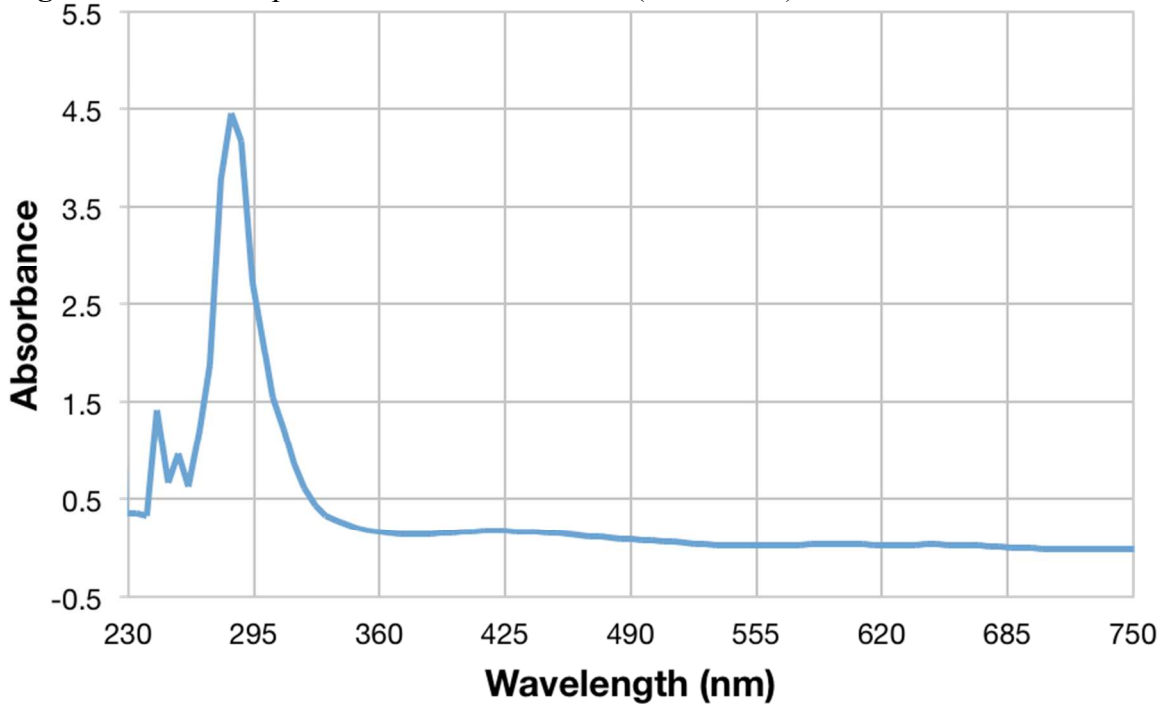


Figure S7. UV-vis spectrum of a concentrated solution (0.0143 M) of **1** in toluene at 25 °C.

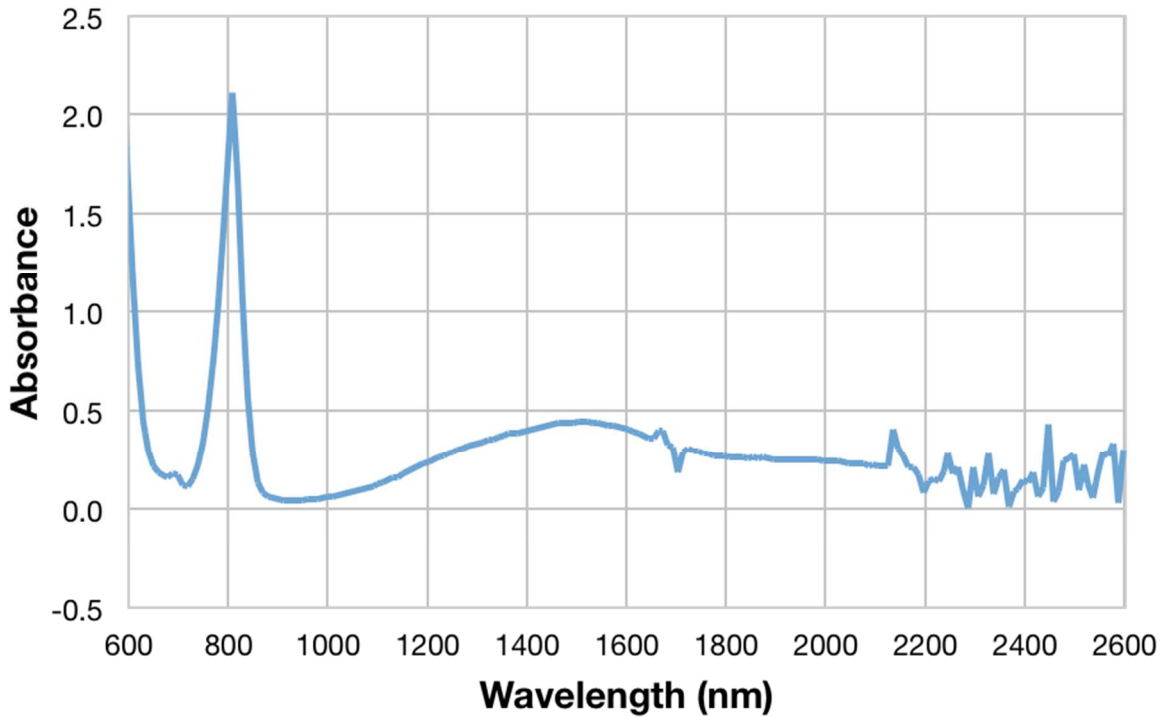


Figure S8. UV-vis spectrum of a dilute solution (0.00098 M) of **2a** in toluene at 25 °C.

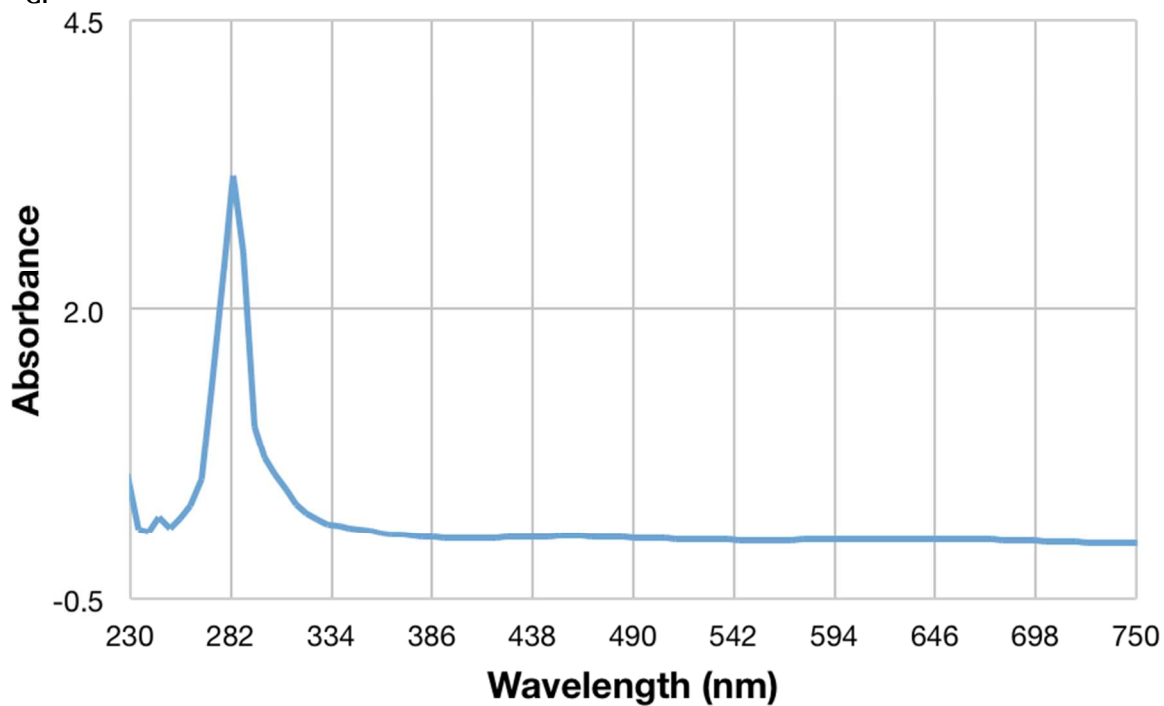


Figure S9. UV-vis spectrum of a dilute solution (0.0106 M) of **2a** in toluene at 25 °C.

