

Supplementary Information for:

**The Interplay of Metal and Supporting Ligand in Labile
Coordination to Pincer Complexes of Ag(I).**

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IR data on Compounds **3**, **4**, **3a-d** and **4a**

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General Procedure: Infrared spectra were collected on a Hartmann & Braun BOMEM B-100 spectrometer. Samples of compounds **3** and **4** were prepared as KBr pellets. Samples of **3a-d** and **4a** were isolated from solution, dried only briefly to avoid loss of coordinated ligand, and prepared as smears on NaCl plates. All experiments were conducted under laboratory atmosphere. Values are reported in cm^{-1} and are ranked in order of decreasing intensity. The rank is provided in brackets. Absorbances with the same relative intensities were given identical ranking.

3: 3060.2(26), 2961.3(9), 2906(15), 2867.1(14), 1598.1(12), 1586.3(11), 1494 (16), 1462.3(20), 1444.2(19), 1385.2(17), 1360.7(21), 1281.9(2), 1256.7(1), 1224(13), 1148.4(8), 1133.4(7), 1051.6(18), 1031.6(4), 928.2(27), 820.7(10), 777.6(25), 756.9(9), 719.1(23), 697.8(5), 637.2(3), 537.9(27), 517.4(24).

3a: 3078(11), 3052.4(14), 3025(10), 3000.5(13), 1921.5(19), 1873.4(18), 1632.7(17), 1597.4(8), 1580.7(3), 1482(9), 1437.8(2), 1216.7(16), 1146.6(15), 1068.2(12), 1030.5(6), 990.6(7), 747.8(4), 704.5(1), 602.8(5).

3b: 3086.5(10), 3062(7), 3027.1(4), 2920.2(5), 2872.1(12), 2734.1(21), 1942.6(16), 1858(17), 1803(18), 1736.6(22), 1604.3(6), 1523.5(14), 1495.7(3), 1460.9(8), 1379.3(13), 1178.7(15), 1081.3(11), 1030.1(9), 895.6(19), 785.3(20), 728.7(1), 694.4(2).

3c: 2958.8(2), 2922.9(1), 2862.8(4), 2738.2(10), 1598(13), 1444.8(3), 1375.1(8), 1275.7(9), 1249.9(7), 1162.2(11), 1028.5(6), 700.6(12), 637.8(5).

3d: 3015.2(4), 2926.7(1), 2851.8(2), 2682.1(13), 1710.9(22), 1650.2(16), 1466.1(5), 1448.5(8),
1357.9(15), 1277.4(14), 1264.1(14), 1242.7(11), 1175.1(18), 1117(19), 1069.6(20), 1024.7(21),
982.8(12), 971(18), 892.8(9), 874.4(18), 820.3(17), 765.4(10), 751.1(3), 701.9(6), 575.5(7).

4: 3059.4(22), 2959.6(11), 2927.2(16), 2868.3(17), 1622.6(10), 1600.1(21), 1581.7(13),
1492.7(25), 1462.6(14), 1444.1(12), 1383.8(19), 1362(26), 1328.2(19), 1281.7(5), 1246.6(3),
1220.4(9), 1154.4(4), 1080.6(20), 1049.4(15), 1026.9(1), 846.86(23), 772.9(8), 754.3(7),
707.3(10), 698.9(6), 635.22(2), 572(24), 515.9(18).

4a: 3078.7(6), 3025.4(7), 3000.9(10), 2008.7(18), 1928.3(17), 1822.1(19), 1597.3(9), 1581(3),
1482.3(11), 1438.2(2), 1275.6(16), 1216.6(15), 1147.1(14), 1068.2(13), 1030.9(8), 990.9(12),
748.6(5), 704.5(1), 602.7(4).