

Supporting Information for

Copper(I) Clusters with Bulky Dithiocarboxylate, Thiolate, and Selenolate Ligands

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Thermal ellipsoid plot of 5	1
Thermal ellipsoid plot of 7	2
Thermal ellipsoid plot of 11	2
Thermal ellipsoid plot of 12	3

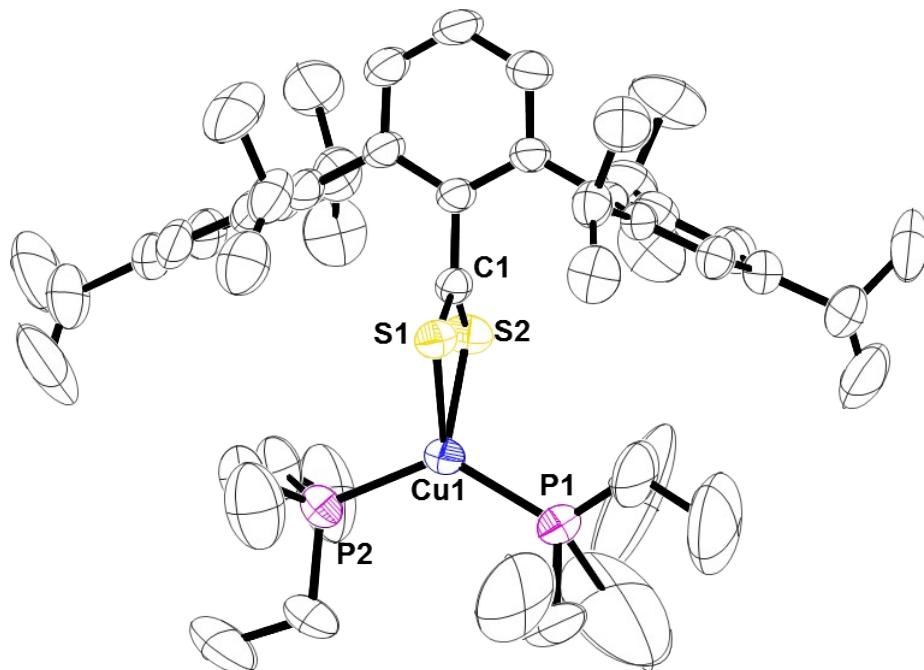


Figure S1. Thermal ellipsoid plot of **5** shown at the 30% probability level. All hydrogen atoms are omitted for clarity. Selected bond lengths: C1-S1: 1.65864(3) Å; C1-S2: 1.67355(3) Å; Cu1-S1: 2.44188(3) Å; Cu1-S2: 2.43358(3) Å; Cu1-P1: 2.2175(10) Å; Cu1-P2: 2.2361(10) Å;

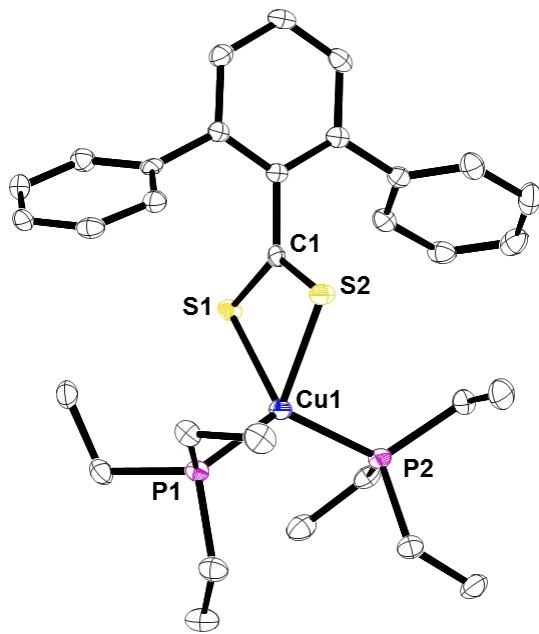


Figure S2. Thermal ellipsoid plot of **7** shown at the 50% probability level. All hydrogen atoms are omitted for clarity. Selected bond length C1-S1: 1.68312(8) Å; C1-S2: 1.6780(1) Å; Cu1-S1: 2.45045(11) Å; Cu1-S2: 2.42886(12) Å; Cu1-P1: 2.2316(6) Å; Cu1-P2: 2.2335(6) Å; P1-Cu1-P2: 125.81(2)°; S1-Cu1-S2: 73.25(2)°; S1-Cu1-P1: 115.10(2)°; S2-Cu1-P2: 105.33(2)°.

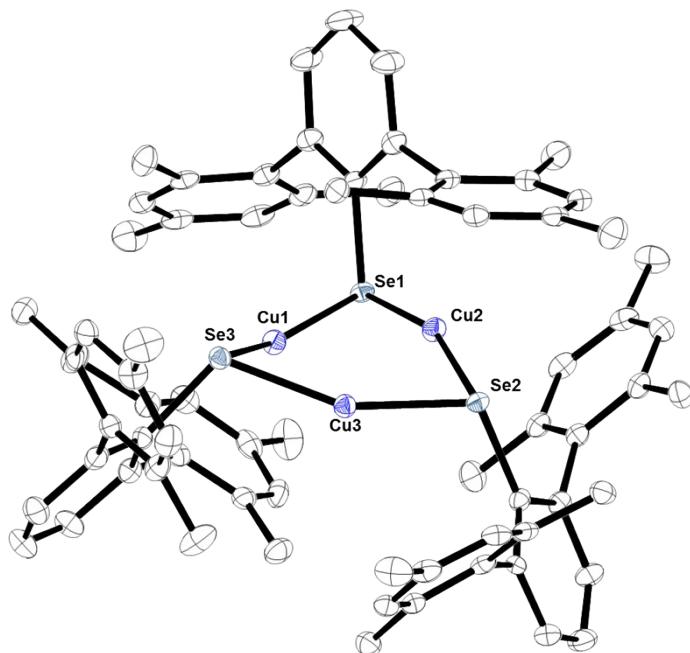


Figure S3. Thermal ellipsoid plot of **11** shown at the 50% probability level. All hydrogen atoms are omitted for clarity. Selected bond lengths and angles: Cu1-Se1: 2.3154(5) Å; Cu2-Se1: 2.3176(5) Å; Cu1-Se3: 2.3113(5) Å; Cu3-Se3: 2.3190(6) Å; Cu3-Se2: 2.3190(6) Å; Cu2-Se2:

2.3334(5) Å; Cu1-Cu2: 2.7946(8) Å; Cu2-Cu3: 2.6769(7) Å; Cu1-Cu3: 2.6537(5) Å; Se1-Cu1-Se3: 154.501(6)°; Se2-Cu3-Se3: 157.013(8)°; Se1-Cu2-Se2: 160.8907(19)°.

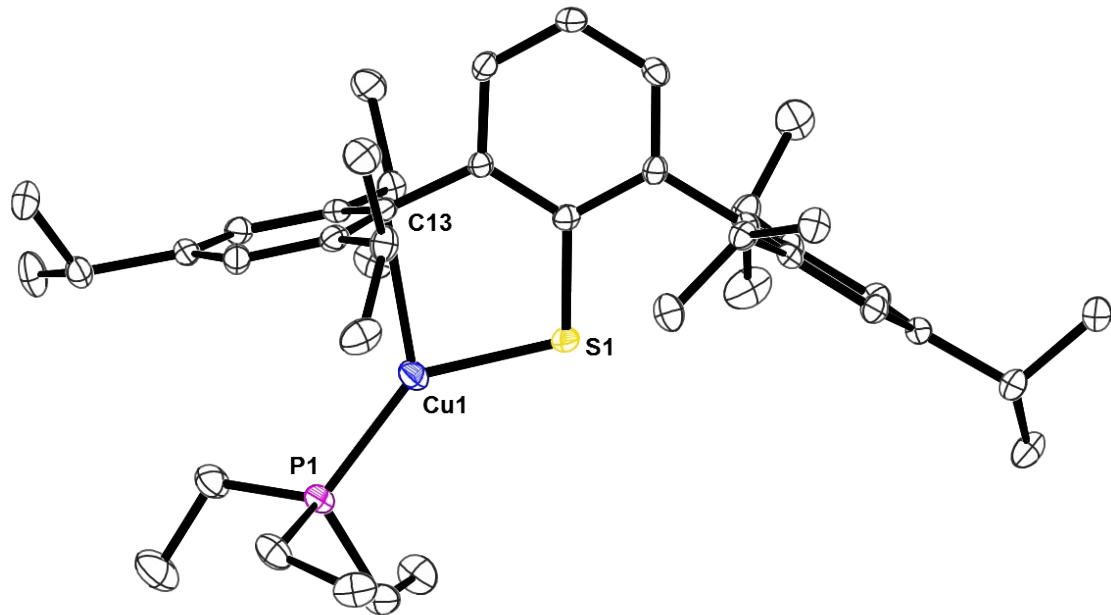


Figure S4. Thermal ellipsoid plot of **12** shown at the 50% probability level. All hydrogen atoms are omitted for clarity. Selected bond distances: Cu1-S1: 2.1734(10) Å; Cu1-C13: 2.378(3) Å; Cu1-P1: 2.1882(10) Å; S1-Cu1-C13: 87.03(8)°; C1-S1-Cu1: 103.53(7)°.