Synthesis, Characterisation and Reactivity of Germanium(II) Amidinate and Guanidinate Complexes

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SUPPLEMENTARY MATERIAL

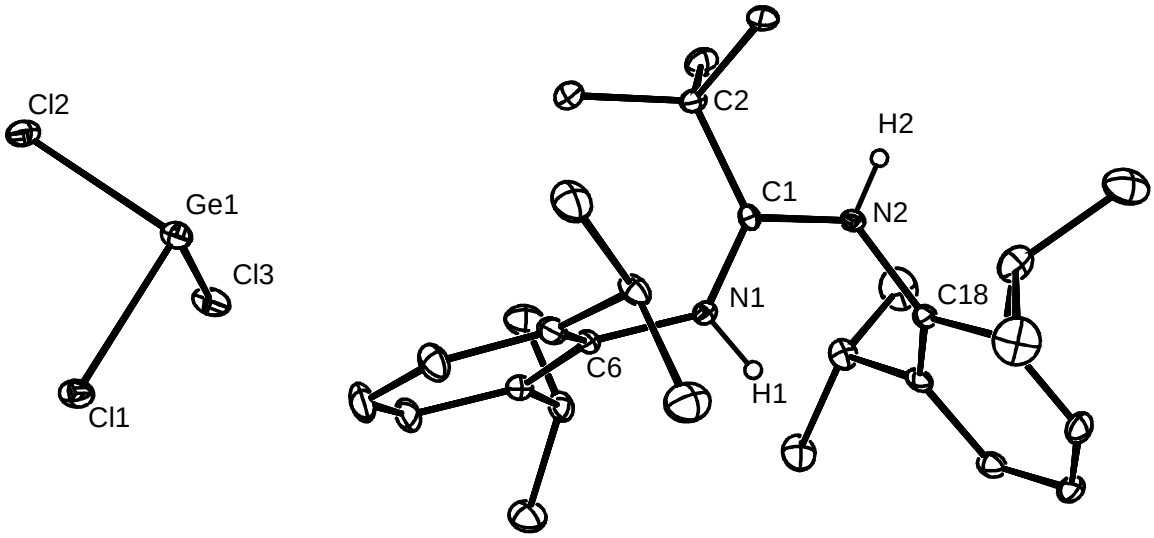

Figure S1. Molecular structure of $[PisoH_2][GeCl_3]$ **5** (25% thermal ellipsoids are shown). Selected bond lengths (Å) and angles (°): Ge(1)-Cl(3) 2.2782(11), Ge(1)-Cl(2) 2.3118(11), Ge(1)-Cl(1) 2.3311(11), N(1)-C(1) 1.325(4), N(2)-C(1) 1.319(4), Cl(3)-Ge(1)-Cl(2) 97.02(5), Cl(3)-Ge(1)-Cl(1) 93.52(4), Cl(2)-Ge(1)-Cl(1) 95.97(5), N(2)-C(1)-N(1) 117.6(3).

Crystal data for [(Priso)GeGa($I_{0.6}$/$Cl_{0.4}$)(Giso)]: $C_{68}H_{104}Cl_{0.4}GaGeI_{0.6}N_6$, a = 10.482(2) Å, b = 30.477(6) Å, c = 20.832(4) Å, β = 97.87(3)°, monoclinic, $P2_1/c$, Z = 4, V = 6592(2) Å^3, FW = 1238.20, D_C = 1.248 gcm^{-3}, F(000) = 2622, μ(Mo-Kα) = 1.205 mm^{-1}, 150(2) K, 11567 unique reflections [R(*int*) 0.0439], R (on F) 0.0469, wR (on F^2) 0.0974 (all data).

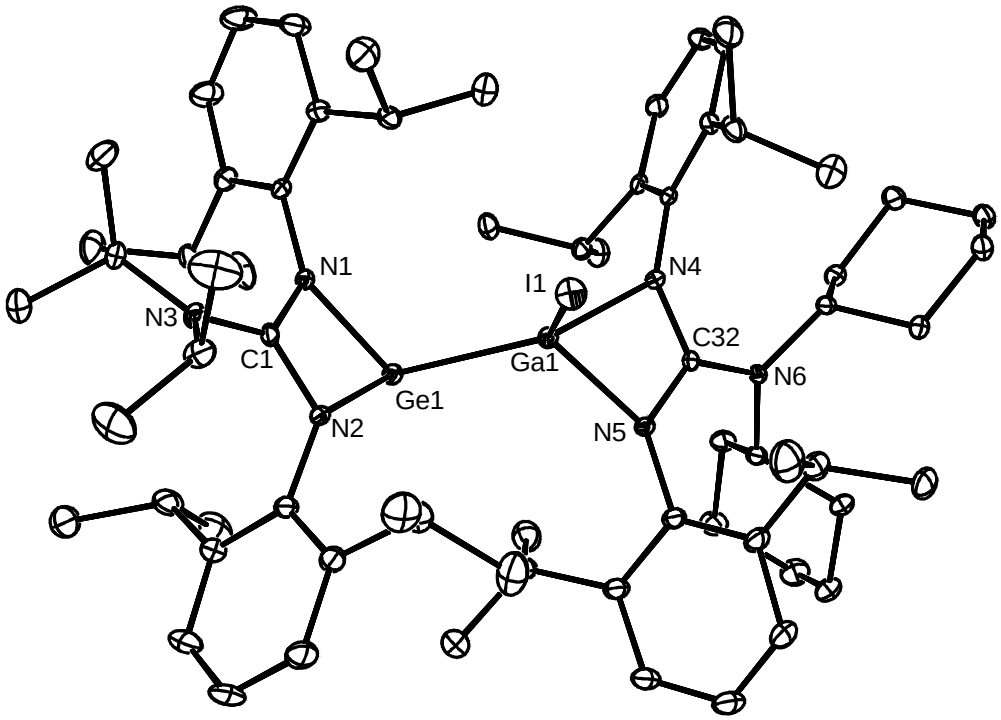

Figure S2. Molecular structure of [(Priso)GeGa($I_{0.6}$/$Cl_{0.4}$)(Giso)] showing only the iodide component of the disordered halide site (25% thermal ellipsoids are shown). Selected bond lengths (Å) and angles (°): I(1)-Ga(1) 2.6298(15), Ge(1)-N(1) 2.017(3), Ge(1)-N(2) 2.024(3), Ge(1)-Ga(1) 2.5921(6), Ga(1)-N(4) 2.032(3), Ga(1)-N(5) 2.033(3), Ga(1)-Cl(1) 2.247(7), N(1)-C(1) 1.343(4), C(1)-N(2) 1.355(4), C(1)-N(3) 1.370(4), N(4)-C(32) 1.361(4), N(4)-C(32) 1.361(4), N(5)-C(32) 1.351(4), N(6)-C(32) 1.376(4), N(1)-Ge(1)-N(2) 65.40(10), N(1)-Ge(1)-Ga(1) 104.26(7), N(2)-Ge(1)-Ga(1) 97.93(8), N(4)-Ga(1)-N(5) 65.35(10), N(4)-Ga(1)-Cl(1) 106.6(3), N(5)-Ga(1)-Cl(1) 112.0(4), N(4)-Ga(1)-Ge(1) 126.91(7), N(5)-Ga(1)-Ge(1) 111.36(7), Cl(1)-Ga(1)-Ge(1) 121.1(3), N(4)-Ga(1)-I(1) 104.96(9), N(5)-Ga(1)-I(1) 111.31(9), Ge(1)-Ga(1)-I(1) 122.66(5), N(1)-C(1)-N(2) 108.0(3), N(5)-C(32)-N(4) 108.1(3).