Trinuclear Silver(I) Complexes of Fluorinated Pyrazolates

H. V. Rasika Dias,* Chammi S. Palehepitiya Gamage, Jeremy Keltner, Himashinie V. K. Diyabalanage, Ivan Omari, Yvonne Eyobo, Nadeeka R. Dias, Nathan Roehr, Lesly McKinney, Theresa Poth

Supplementary materials
Figure S1. Molecular structure of \{[3-(CF_3),5-(CH_3)Pz]Ag\}_3. ORTEP diagram (Top) and a view showing CF_3/CH_3 positional disorder (bottom)
Figure S2. Molecular structure of $\{[3-(CF_3),5-(Bu^t)Pz]Ag\}_3$.

Figure S3. Molecular structure of $\{[3-(C_3F_7),5-(Bu^t)Pz]Ag\}_3$.
Figure S4. A view showing closest inter-trimer Ag···F and Ag···H distances of {[3-(C₃F₇),5-(Bu')Pz]Ag}₃.
**Figure S5.** Molecular structure of \(\{[3-(C_3F_7),5-(Bu')Pz]Ag\}_3\cdot(\text{toluene})\) showing the repeating unit
Figure S6. Molecular structure of $\{[\text{Ag}_3]^*\text{[toluene]}\}_\infty$ showing toluene-silver trimer contacts
Figure S7. Asymmetric unit of $\{[\text{Ag}_3]^2\cdot\text{toluene}\}_\infty$. There are five $[3,5-(\text{CF}_3)_2\text{Pz}]\text{Ag}_3$ units and 2.5 toluene molecules in the asymmetric unit.
Figure S8. Molecular structure of $\{[\text{Ag}_3]^2\cdot[\text{toluene}]\}_\infty$ showing silver trimer and toluene contacts (note that one of the toluenes disordered)
Figure S9. Figures showing various structures (Ag₆ core geometries) of the dimer of \{[3,5-(CF₃)₂Pz]Ag\}_3 units in \{[Ag₃]₂•[toluene]\}_∞.
Figure S10. A view showing the planarity of $[\text{Ag}_3]$ in the parent molecule, and the distortion to the $[\text{Ag}_3]$ unit during the $\{[\text{Ag}_3]_2\cdot[\text{toluene}]\}_\infty$ adduct formation, see also Figure S8.

Figure S11. A view showing structural changes to the $[\text{Ag}_3]'$ ring during the $\{[\text{Ag}_3]'\cdot[\text{toluene}]\}_\infty$ adduct formation. These figures also show the relative orientation of bulky t-Bu and C$_3$F$_7$ substituents, and the effects of inter-trimer substituents interactions.