Electronic Supplementary Information

Dual modes of binding on hexafluorosilicate anion by a C_3v symmetric flexible tripodal amide ligand in solid state

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Characterizations of the complexes:

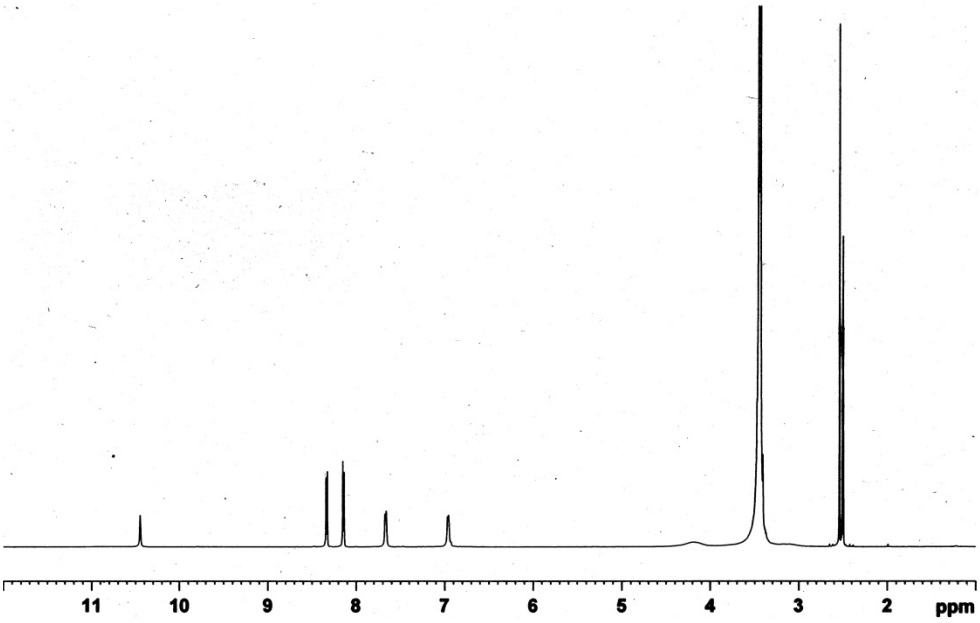

Fig. S1. ^{1}H NMR spectrum of complex **1a** in DMSO-d_6 at 298 K.

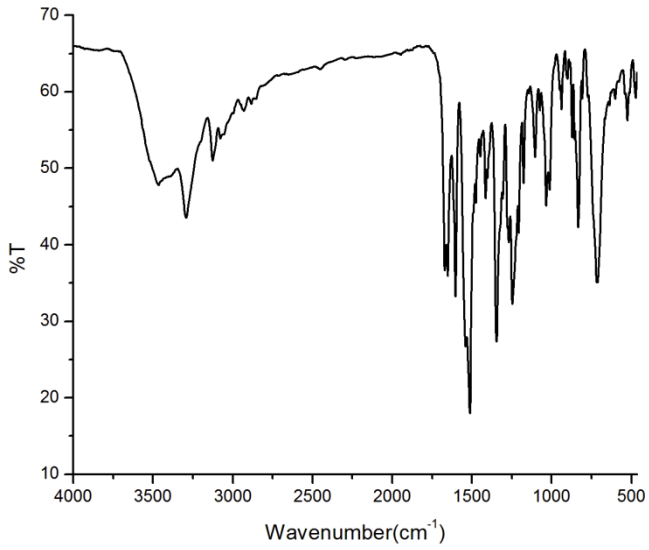

Fig. S2 FT-IR spectrum of complex **1a** recorded in KBr pellet.

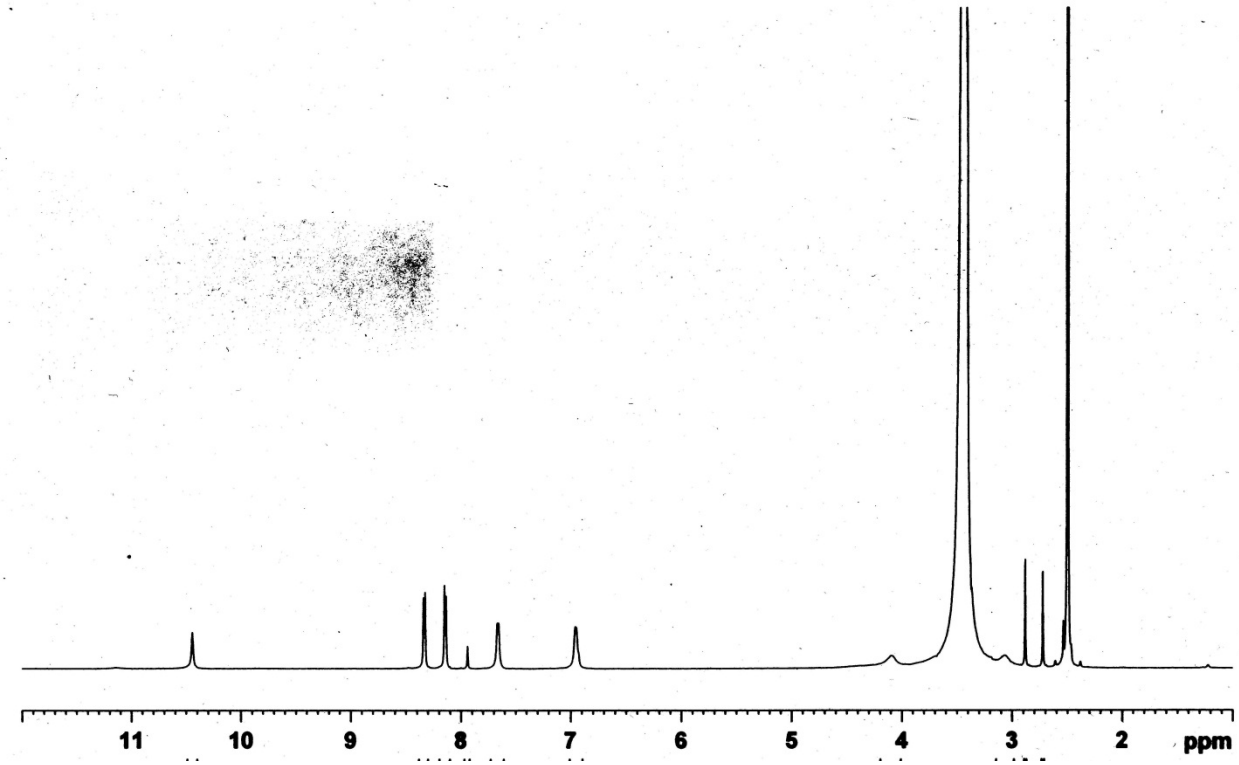

Fig. S3 ^{1}H NMR spectrum of complex **1b** in DMSO-d_6 at 298 K

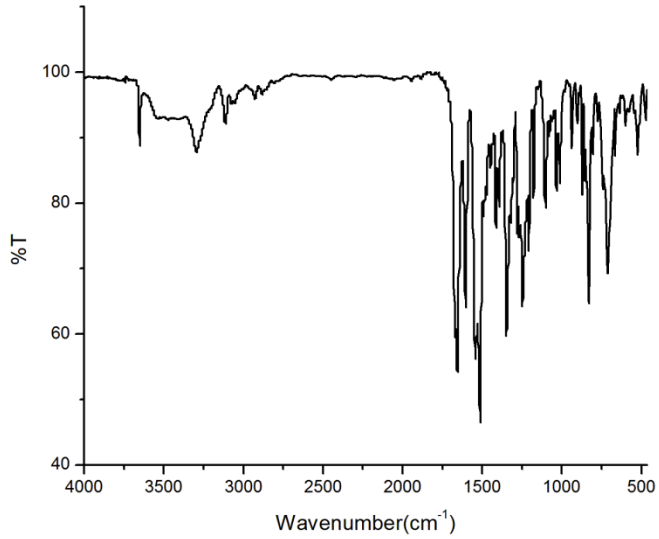

Fig. S4 FT-IR spectrum of complex **1b** recorded in KBr pellet.

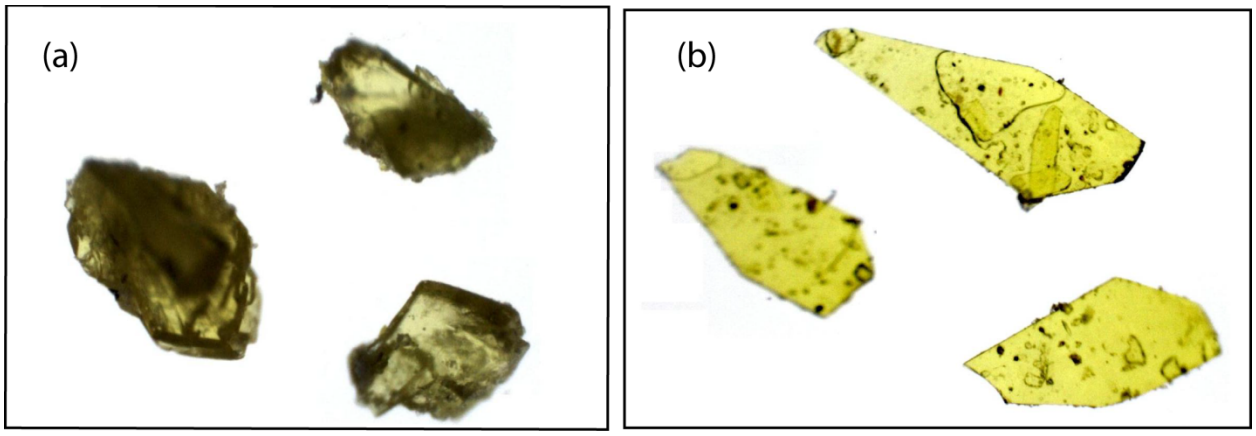

Fig. S5 Optical micrograph images of crystals (a) Complex **1a** and (b) Complex **1b**.

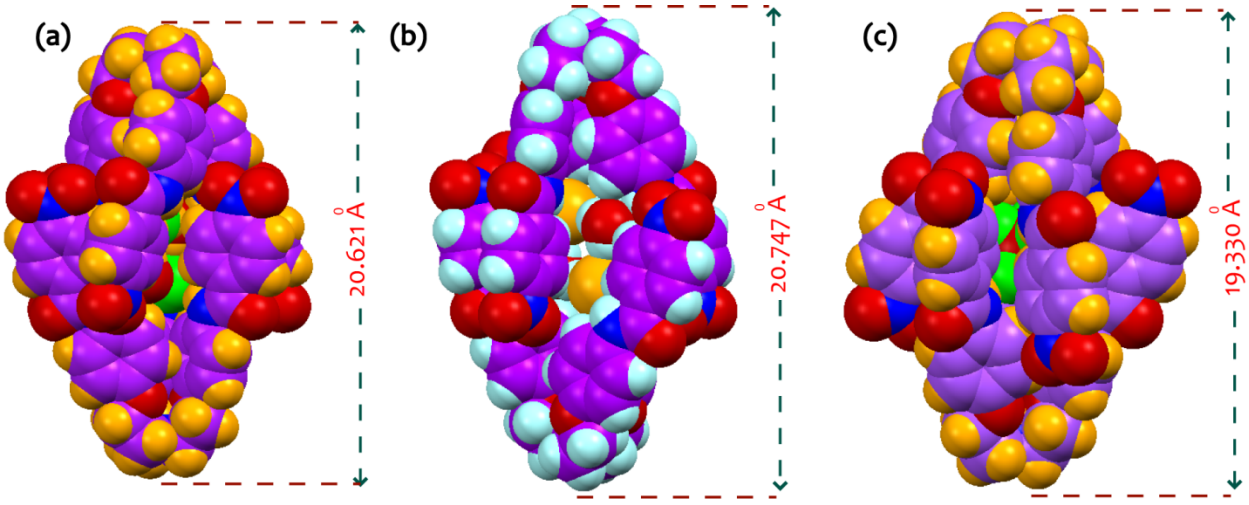

Fig. S6 Comparison of the length of the capsules (a) Chloride complex (b) Bromide complex and (c) Hexafluorosilicate complex (1a).

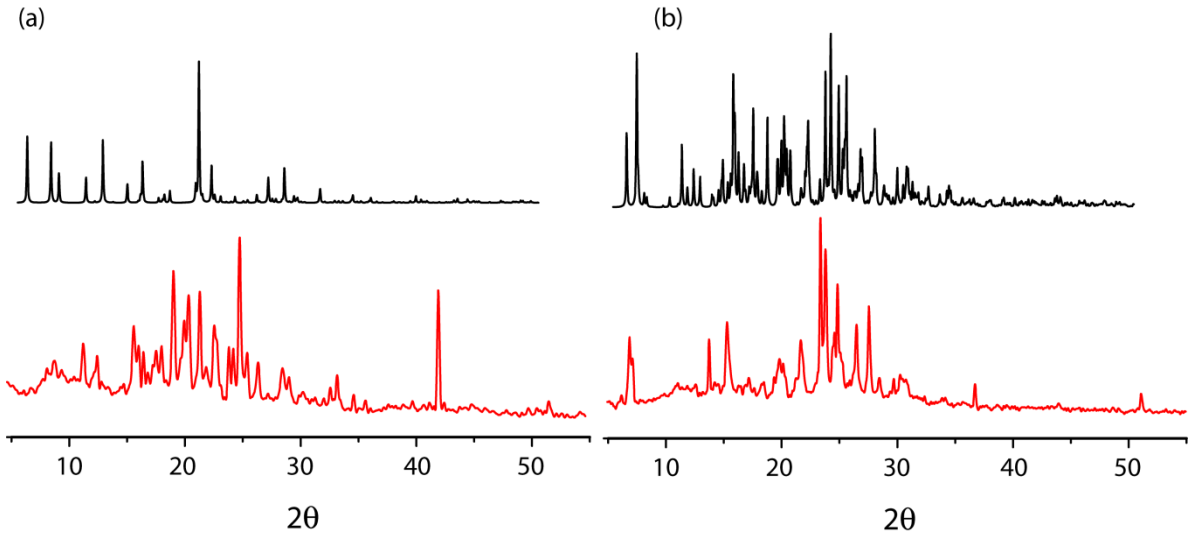

Fig. S7. (a) Powder X-ray diffraction: simulated pattern from the single−crystal X-ray of complex **1a** (red), experimental pattern from the crystalline solid of complex **1a** (black); (b) Powder X-ray diffraction: simulated pattern from the single−crystal X-ray of complex **1b** (red), experimental pattern from the crystalline solid of complex **1b** (black);

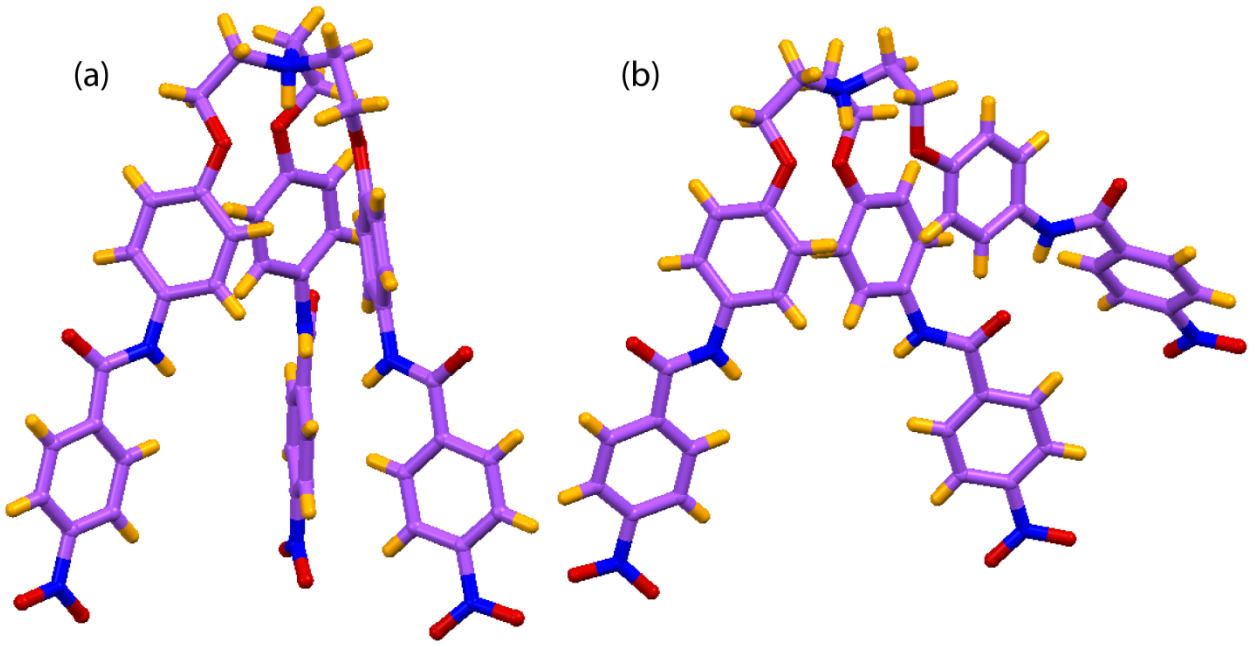

Fig. S8 Conformations of the receptors are in the hexafluorosilicate complexes. All of the counter anions and solvent molecules have been omitted for clarity. (a) Perfect C_3 symmetric conformation seen in complex **1a**; (b) Distorted C_3 symmetric conformation seen in complex **1b**.