Supplementary Information

Coordination and supramolecular assemblies of Monohydroxylated octamethylcucurbit[6]uril with alkali and alkaline earth metal ions in the presence of polychloride cadmium anions Fang-Fang Shen,^{†b} Jiang-Lin Zhao,^{†c} Kai Chen,^{*,a} Jing Xu,^{*,a} Yuan Wang,^a Zi-Yi Hua,^a Lu Wu, ^a Min-Dong Chen,^a Yun-Qian Zhang,^b Zhu Tao^{*,b}

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Figure S1. Crystal structure of **3**: (a) Overall view of the supramolecular assembly constructed of $[Cd_2Cl_8]^{4-}$ and (OH)OMeQ[6]/Rb⁺ complexes along the crystallographic *c* axis; (b) $[Cd_2Cl_8]^{4-}$ based square grid-like framework along the crystallographic *c* axis; (c) an (OH)OMeQ[6]/Rb⁺ complex-based supramolecular chain linked by shared interaction with O2W molecules; (d) detailed interactions in an (OH)OMeQ[6]/Rb⁺ complex; (e) detailed interactions between two (OH)OMeQ[6]/Rb⁺ complexes; (f) interactions of an (OH)OMeQ[6]/Na⁺ complex with six $[Cd_2Cl_8]^{4-}$ anions.



Figure S2. Powder X-ray diffraction (PXRD) patterns of crystals of 1–3 in comparison with the respective simulations.



Figure S3. Powder X-ray diffraction (PXRD) patterns of crystals of compounds **4** and **5** in comparison with the respective simulations.