

Supplementary Information

Guest inducing *p*-sulfonatocalix[4]arene into three dimensional capsule architecture and mixed A-B double layer framework

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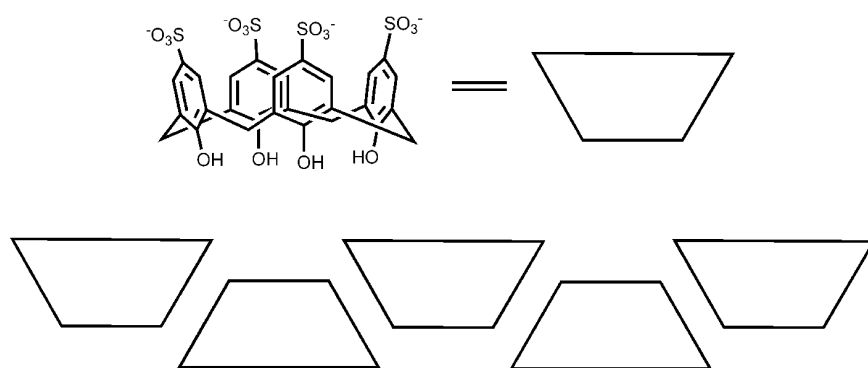


Fig. S1 Schematic representation of the bi-layer structure of *p*-sulfonatocalix[4]arene.

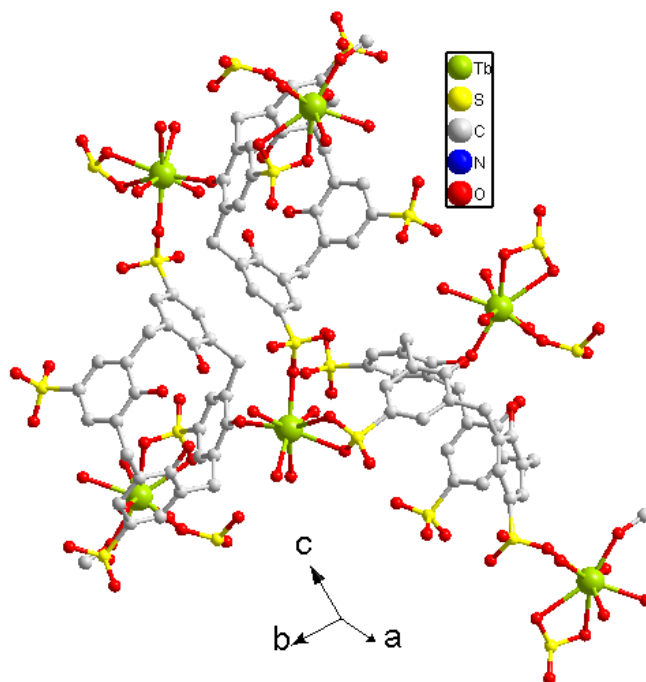


Fig. S2 The coordination environment of Tb^{3+} .

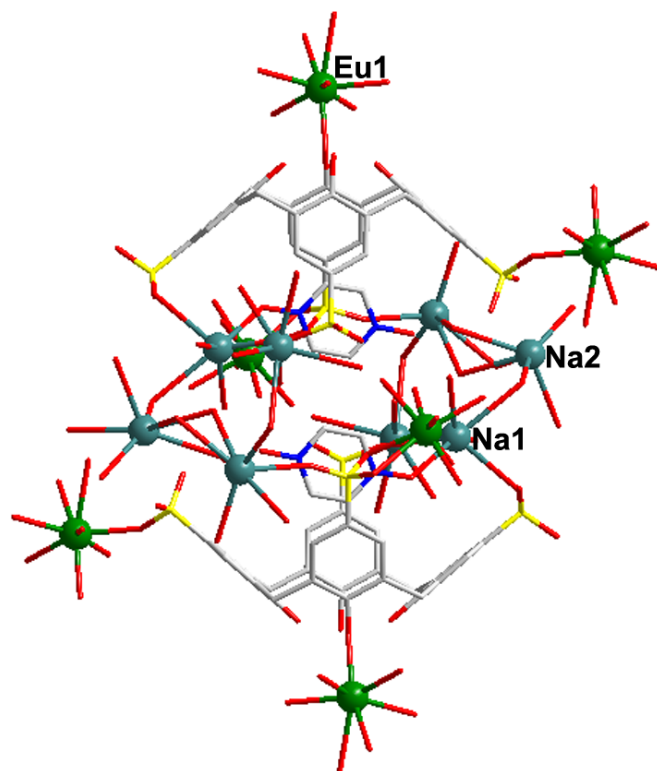


Fig. S3 Capsule structure of compound 2

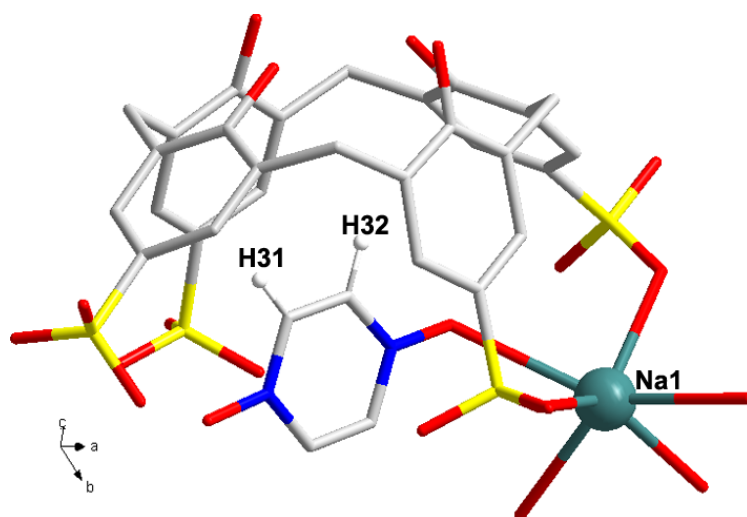


Fig. S4 Host-guest interactions in compound 1 and 2.

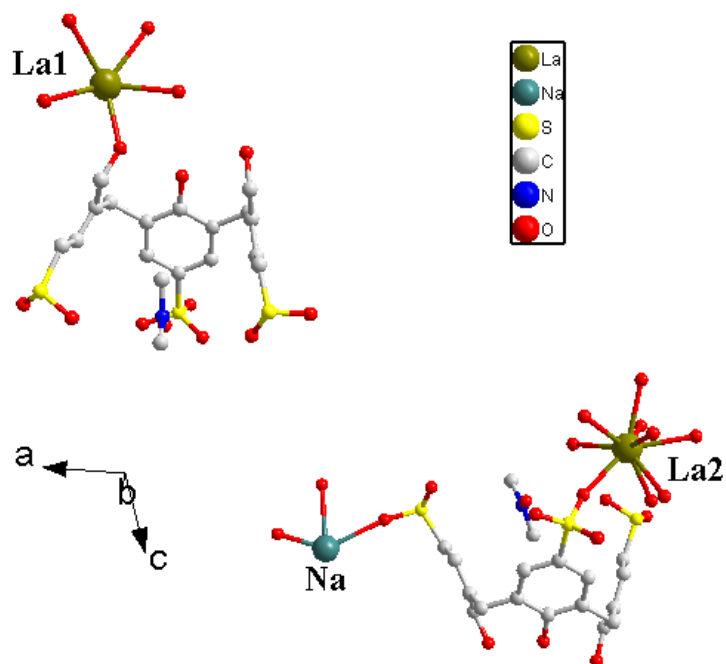


Fig. S5 The asymmetric unit of compound 3.

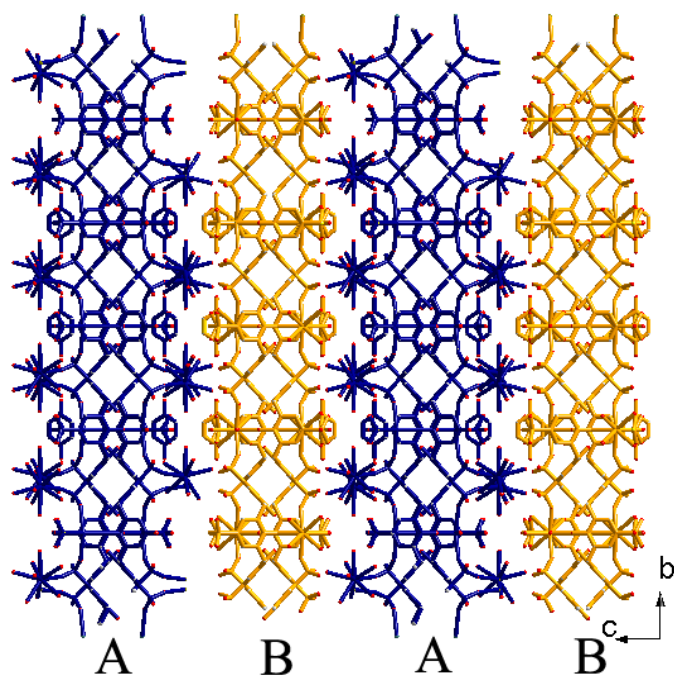


Fig. S6 Crystal packing structure of compound 3 (viewed down the *a* direction).

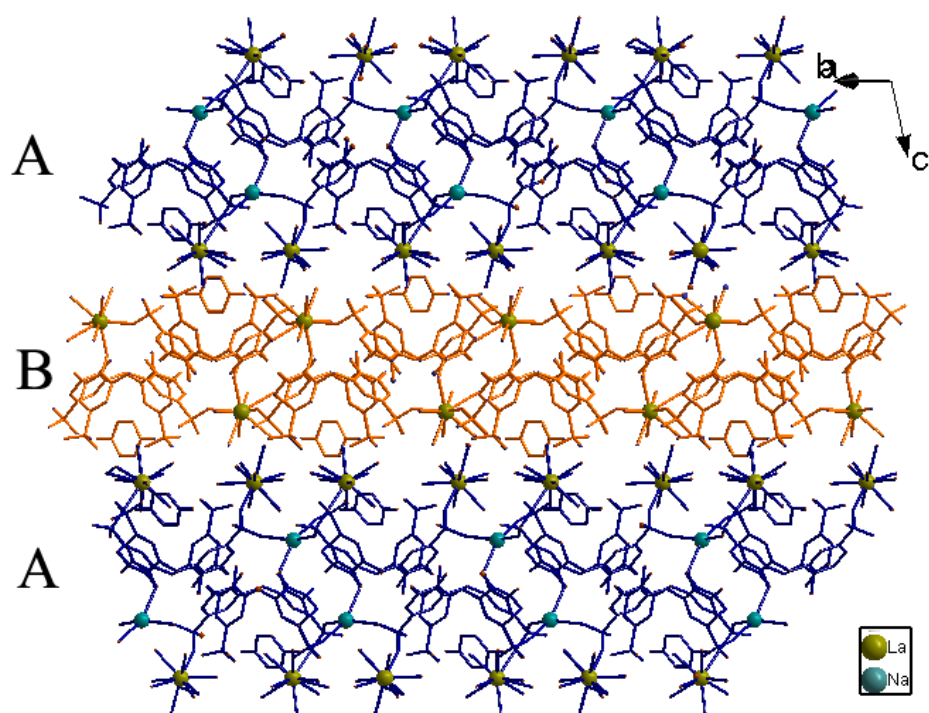


Fig. S7 Each types of compound 3 showing the bi-layer arrangement.

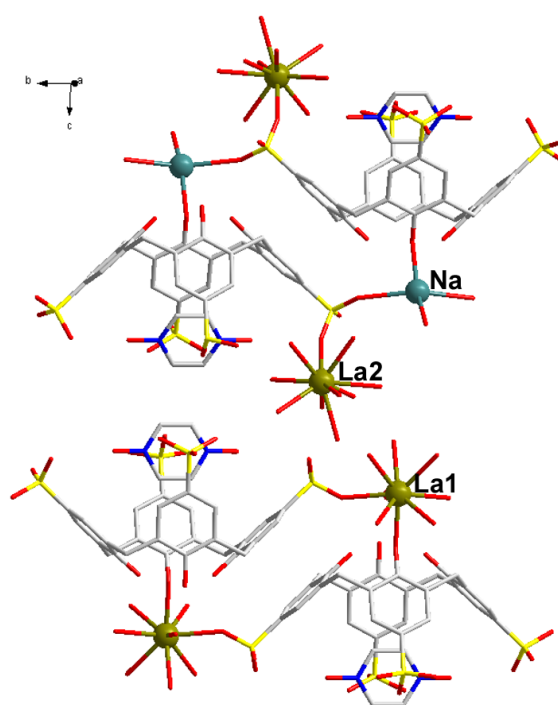


Fig. S8 The coordination environment of La^{3+} ions in type A and type B.