

## Supporting Information

### Homochiral Zinc Phosphonates with Layered and Open Framework Structures Using Polycarboxylate as Second Linkers

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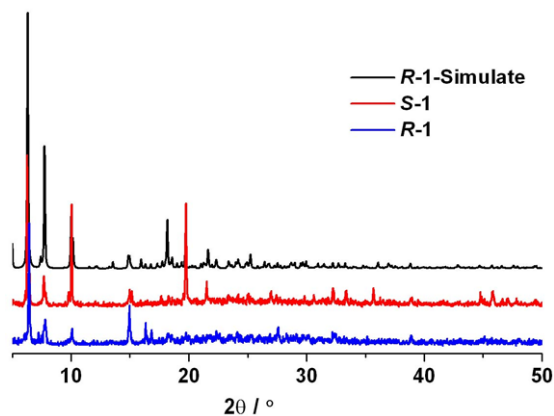


Figure S1 XRD curves for compounds *S-1* and *R-1*.

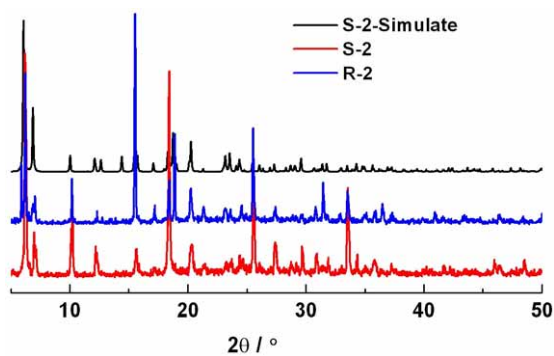


Figure S2 XRD curves for compounds *S-2* and *R-2*.

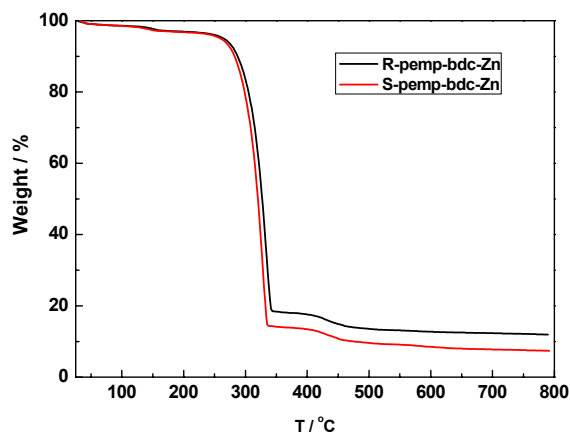
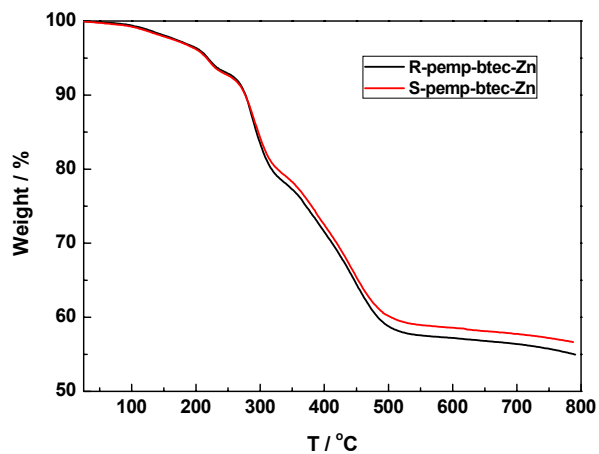
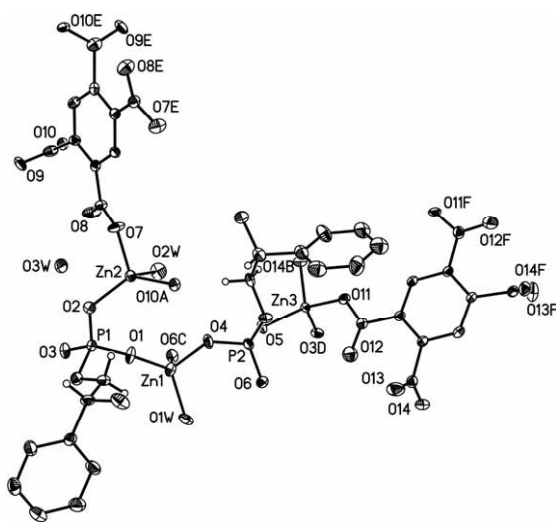


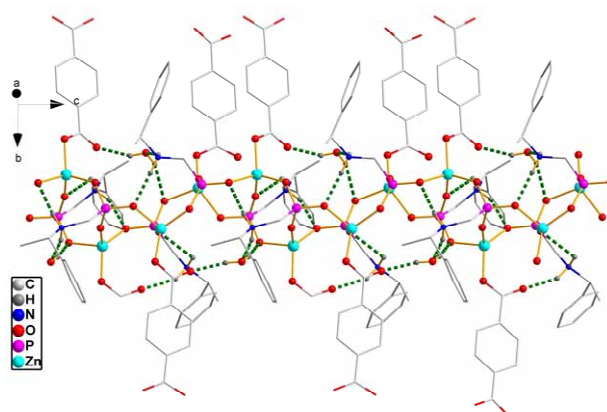
Figure S3 Thermal analyses for *R-1* and *S-1*.



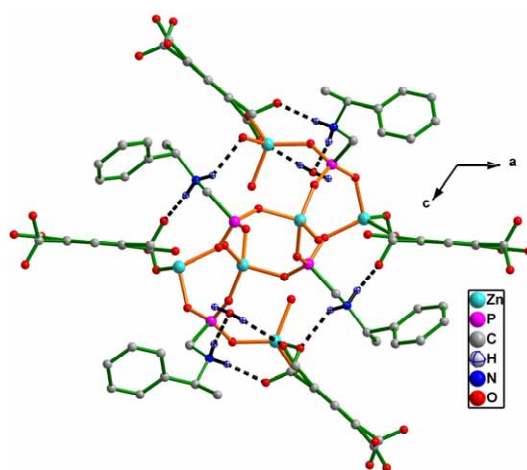
**Figure S4** Thermal analyses for *R-2* and *S-2*.



**Figure S5** Coordination geometries of zinc in *R-2* with atomic labeling scheme. Thermal ellipsoids are at the 30% probability level. All H atoms except those attached to N and chiral C atoms are omitted for clarity.



**Fig. S6** The hydrogen bonds within chain in compound S-1.



**Fig. S7** The hydrogen bonds within chain in compound S-2.