Supporting Information – ORTEP Plots of Asymmetric Units of Structures 1 - 15

Figure S1: ORTEP representation of the asymmetric unit of \([\text{La(BA)}_3(\text{DMSO})]_n\) 1. Ellipsoids displayed at 50% probability.

Figure S2: ORTEP representation of the asymmetric unit of \({[\text{La}_3\text{BA}_9(\text{DMF})_3]\cdot\text{DMF}}_n\) 2. Ellipsoids displayed at 50% probability.
**Figure S3:** ORTEP representation of the asymmetric unit of $[\text{La}_3(2\text{-MeBA})_9(\text{DMF})_2]_n$ 3. Ellipsoids displayed at 50% probability. Hydrogen atoms omitted for clarity.

**Figure S4:** ORTEP representation of the asymmetric unit of $\{[\text{La}(3\text{-MeBA})_3(\text{DMSO})(\text{H}_2\text{O})]\text{H}_2\text{O}\}_n$ 4. Ellipsoids displayed at 50% probability.
**Figure S5:** ORTEP representation of the asymmetric unit of \([\text{La}(3\text{-MeBA})_3(3\text{-MeBAH})]\cdot3\text{-MeBAH}\)\(_n\) 5. Ellipsoids displayed at 50% probability.

**Figure S6:** ORTEP representation of the asymmetric unit of \([\text{La}(2,4,6\text{-Me}_3\text{BA})_3(\text{DMSO})_2]\)\(_2\) 6. Ellipsoids displayed at 50% probability. Hydrogen atoms omitted for clarity.
Figure S7: ORTEP representation of the asymmetric unit of [La(4-tBuBA)₃(DMSO)]ₙ 7. Ellipsoids displayed at 50% probability.

Figure S8: ORTEP representation of the asymmetric unit of {[La(MeNHBA)₃(DMF)]·DMF}ₙ 8. Ellipsoids displayed at 50% probability.
**Figure S9:** ORTEP representation of the asymmetric unit of \{[La(3-NO₂BA)₃(DMSO)(H₂O)]·2DMSO\}_n 9. Ellipsoids displayed at 50% probability.

**Figure S10:** ORTEP representation of the asymmetric unit of \{[La₂(3-NO₂BA)₆(DMF)₃]·DMF·H₂O\}_n 10. Ellipsoids displayed at 50% probability.
Figure S11: ORTEP representation of the asymmetric unit of \{[\text{La}(4-\text{NO}_2\text{BA})_3(\text{DMSO})(\text{H}_2\text{O})]\cdot\text{DMSO}\}_n \text{ 11. Ellipsoids displayed at 50% probability.}

Figure S12: ORTEP representation of the asymmetric unit of \{[\text{La}(3-\text{MeOBA})_3(\text{DMSO})(\text{H}_2\text{O})]\cdot\text{DMSO}\}_n \text{ 12. Ellipsoids displayed at 50% probability. Hydrogen atoms omitted for clarity.}
**Figure S13:** ORTEP representation of the asymmetric unit of \([\text{La}(3,4-\text{MeO}_{2}\text{BA})_3(\text{DMSO})(\text{H}_2\text{O})]_n\) \text{13}. Ellipsoids displayed at 50% probability.

**Figure S14:** ORTEP representation of the asymmetric unit of \([^\{\text{La}_2(4-\text{MeOBA})_6(\text{DMSO})_2(\text{H}_2\text{O})_2\}\cdot\text{DMSO} \cdot \text{H}_2\text{O}\}_n\) \text{14}. Ellipsoids displayed at 50% probability.
Figure S15: ORTEP representation of the asymmetric unit of \{[\text{La}(4-EtOBA)_3(\text{DMF})(\text{H}_2\text{O})]\cdot\text{DMF}\}_n 15. Ellipsoids displayed at 50% probability.