Electronic supplementary information (ESI) for:

Solvothermal synthesis, crystal structures and photoluminescence properties of the novel Cd/X/α,ω-bis(benzotriazole)alkane hybrid family

(X = Cl, Br and I)

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Caption for Figures

**Fig. S1.** XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 1.

**Fig. S2.** XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 2.

**Fig. S3.** XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 3.

**Fig. S4.** XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 4.

**Fig. S5.** XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 5.

**Fig. S6.** XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 6.

**Fig. S7.** XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 7.

**Table S1.** TG results of complexes 1 – 7.
Fig. S1 XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 1.
Fig. S2 XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 2.
Fig. S3 XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 3.
Fig. S4 XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 4.
Fig. S5 XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 5.
Fig. S6 XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 6.
Fig. S7 XRPD (top), IR (middle) and TG (black)/DTA (blue) (bottom) curves for 7.
Table S1 TG results of complexes 1 – 7.

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<tr>
<th>Complexes</th>
<th>Temperature (°C)</th>
<th>Weight losses</th>
<th>Assignments</th>
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<tr>
<td></td>
<td></td>
<td>Exptl (%)</td>
<td>Calcd (%)</td>
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<tr>
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