## **Electronic Supplementary Information** (ESI) for:

Synthesis, structures and luminescent properties of cadmium(II) metal organic frameworks based on 3-pyrid-4-ylbenzoic acid, 4-pyrid-4-ylbenzoic acid ligands

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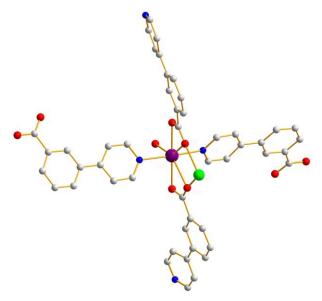


Fig. S1 Coordination sphere of Cd atom in crystal 1 (Cd atoms: pink, K atoms: green, N atoms: blue, O atoms: red, H atoms are omited for clarity).

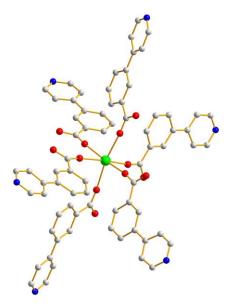


Fig. S2 Coordination sphere of K atom in crystal 1 (K atoms: green, N atoms: blue, O atoms: red, H atoms are omited for clarity).

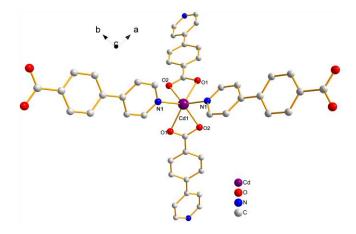
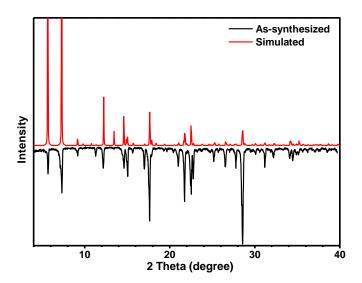


Fig. S3 Coordination sphere of Cd atom in crystal 2 (Cd atoms: purple, Nitrogen: blue, Oxygen: red, Carbon: gray).



 $Fig. \ S4 \ {\hbox{The PXRD of crystal 1}}.$ 

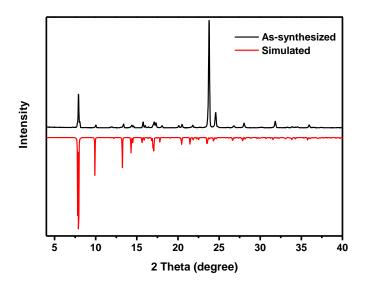


Fig. S5 The PXRD of crystal 2.

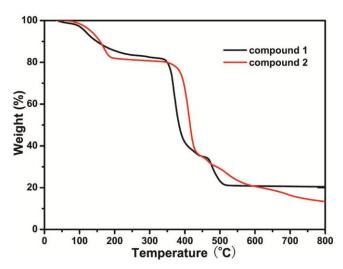
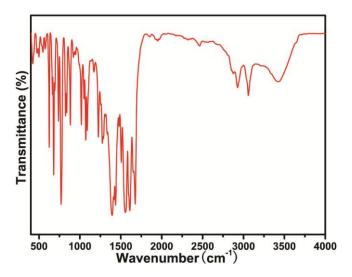


Fig. S6 TGA profile of the compound 1, 2.



 $Fig.\ S7\ {\hbox{The IR spectrum of compound 1}}.$ 

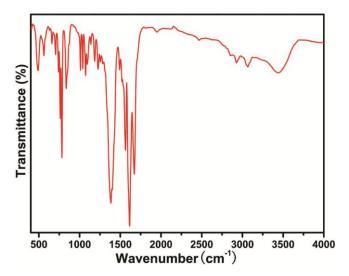


Fig.~S8~The IR spectrum of compound 2.