

# Virus-like Cage Hybrid: Covalent Organic Cages Attached Metal Organic Cage

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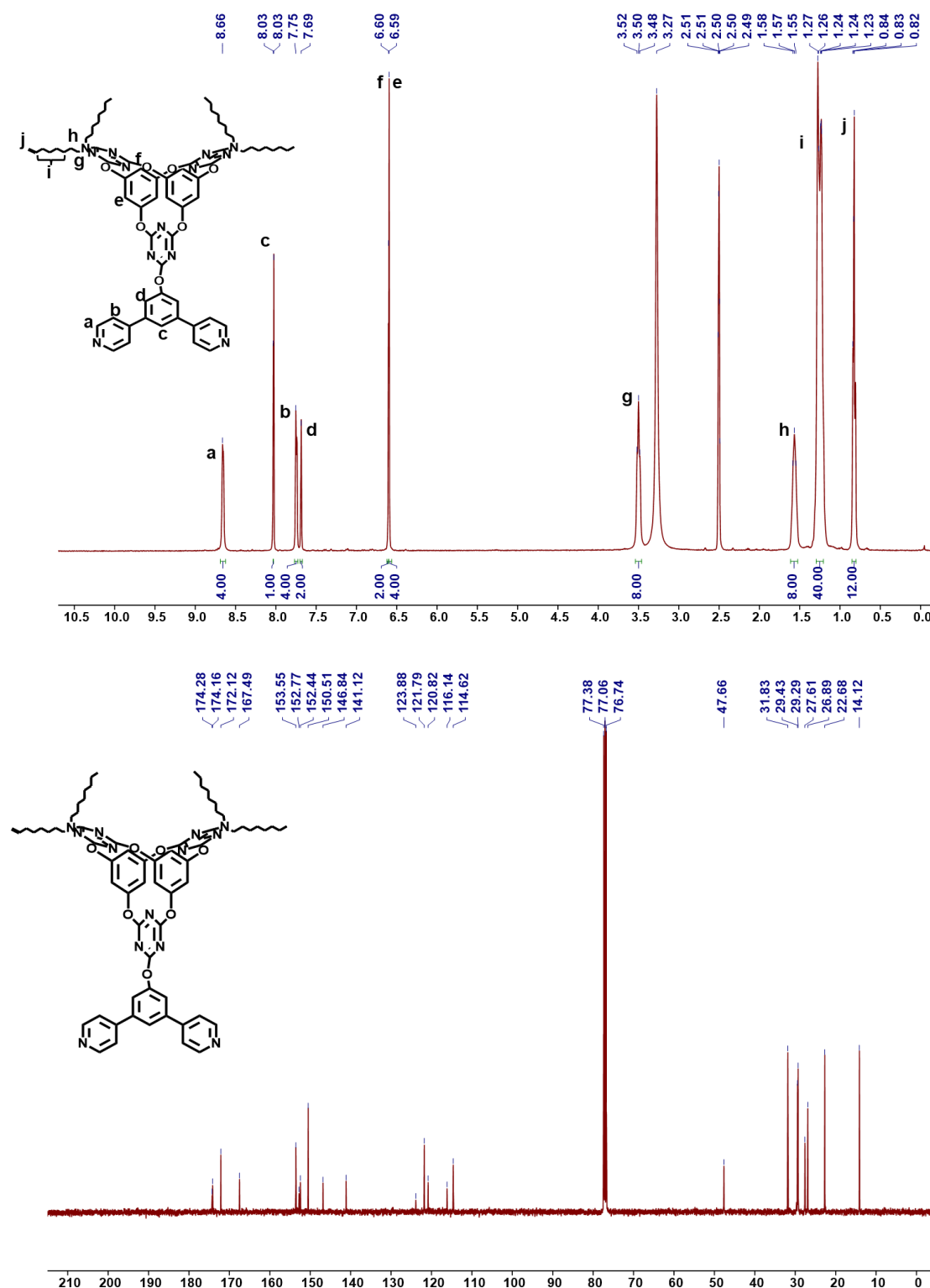
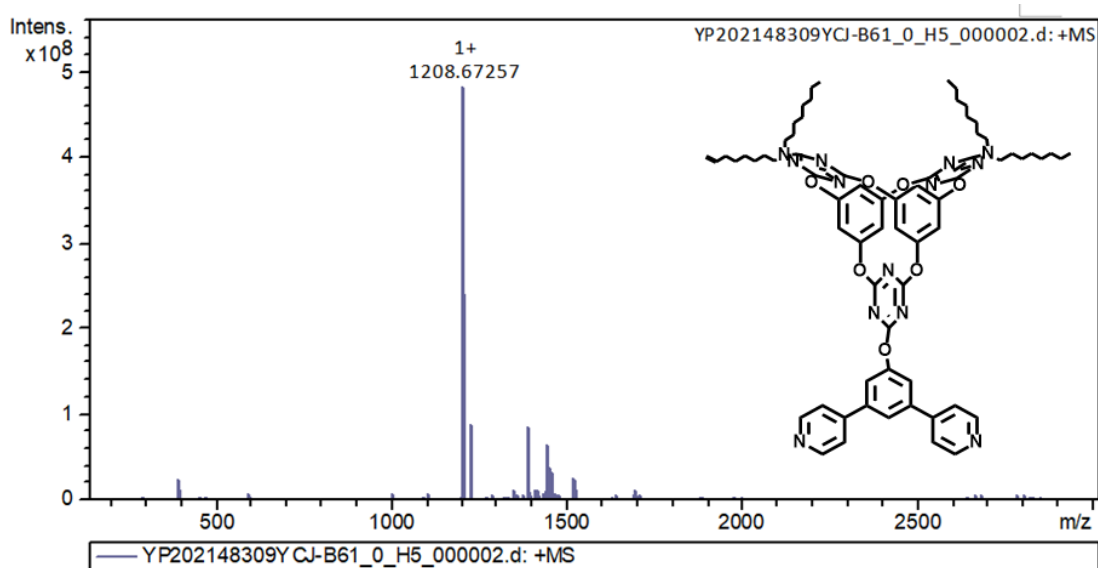
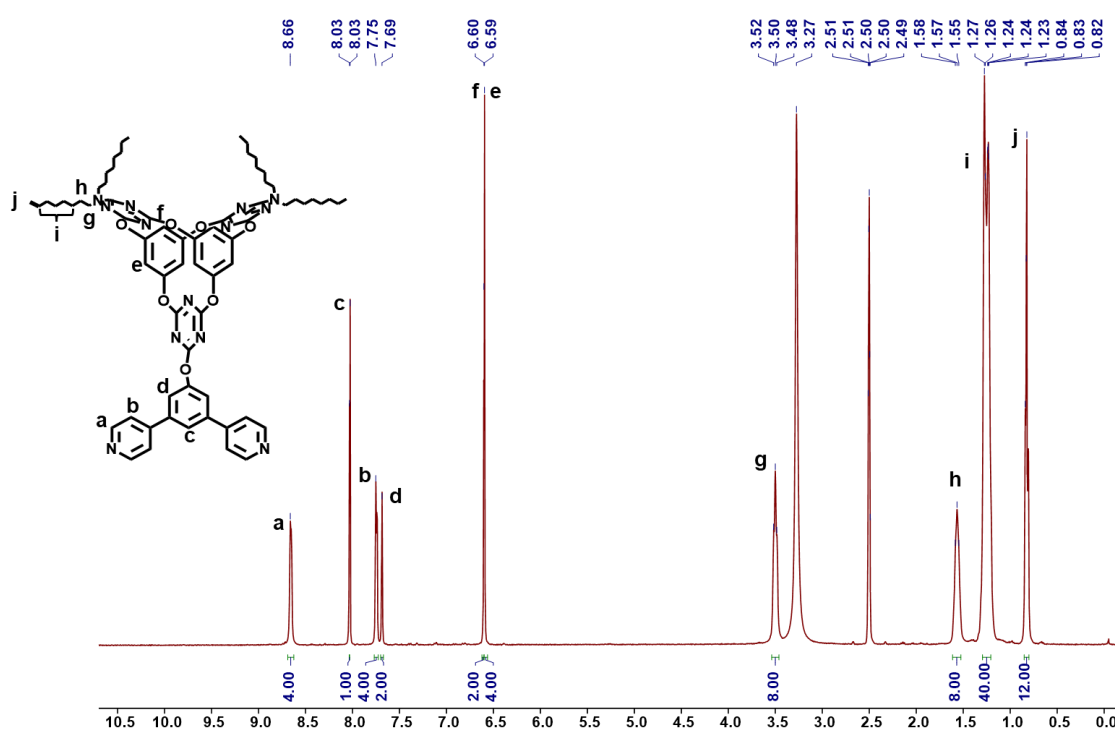


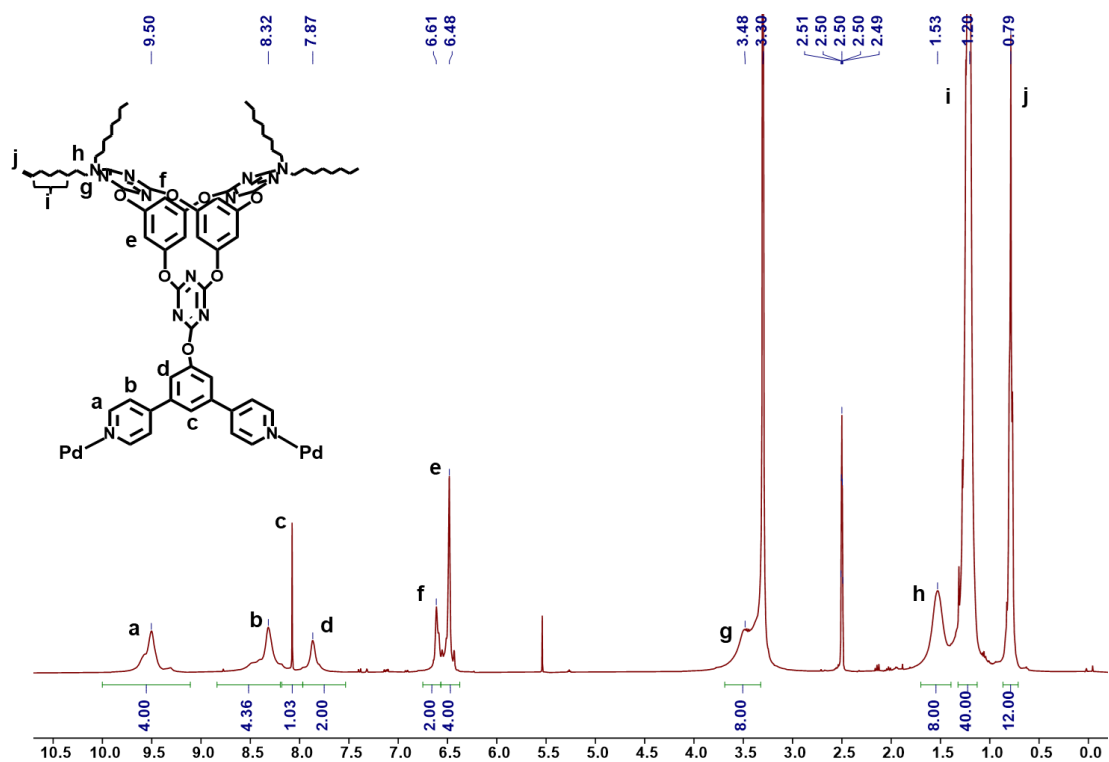
Figure. S1 The  $^1\text{H}$ -NMR and  $^{13}\text{C}$ -NMR spectra of the COC ligand in  $\text{CDCl}_3$ .



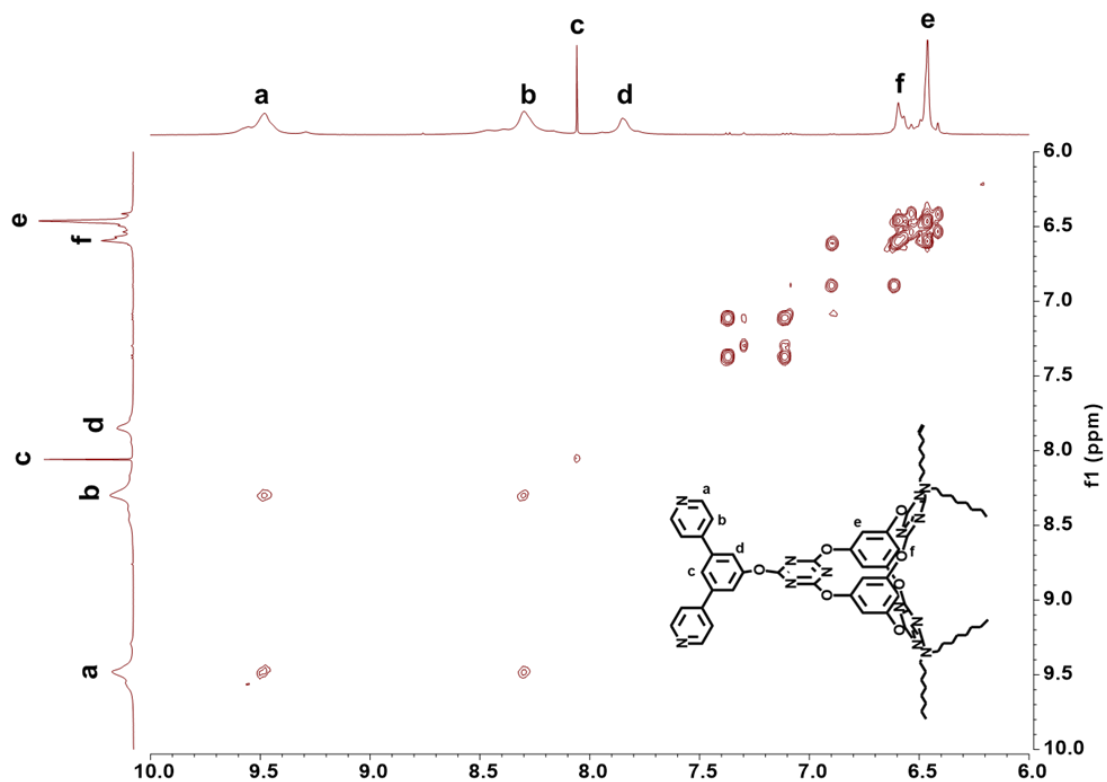
**Figure. S2** The MALDI-TOF mass spectrum of COC ligand.



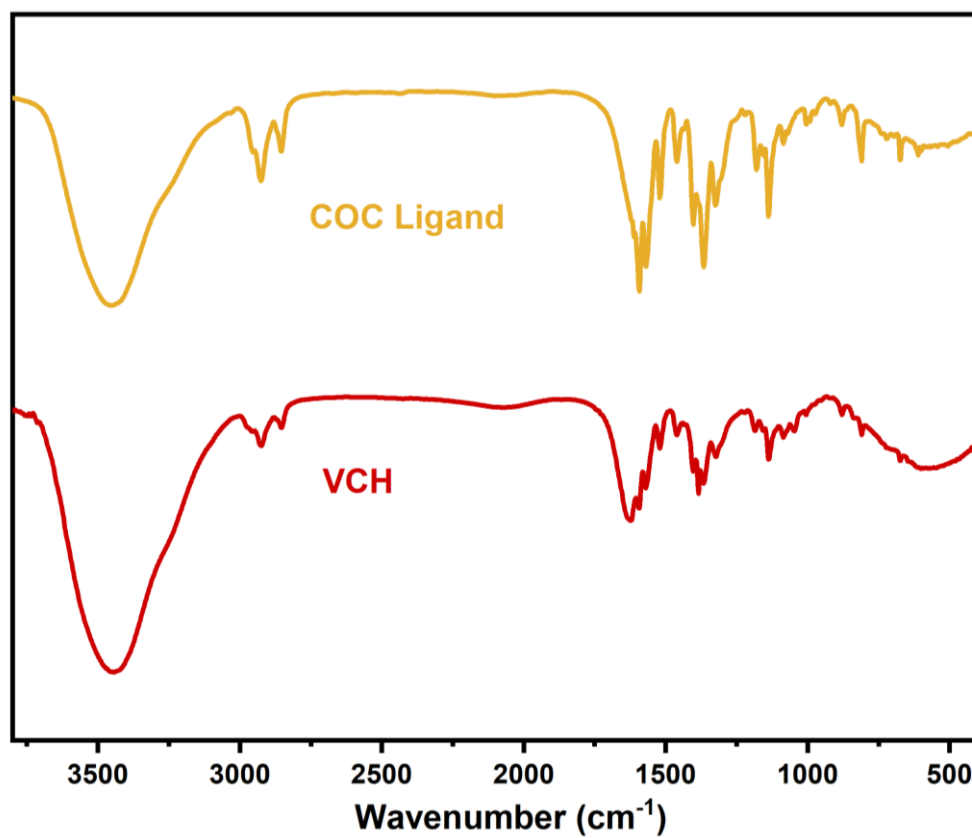
**Figure. S3** The  $^1\text{H}$ -NMR spectrum of COC ligand in  $\text{CDCl}_3$  and  $\text{DMSO-d}_6$ .



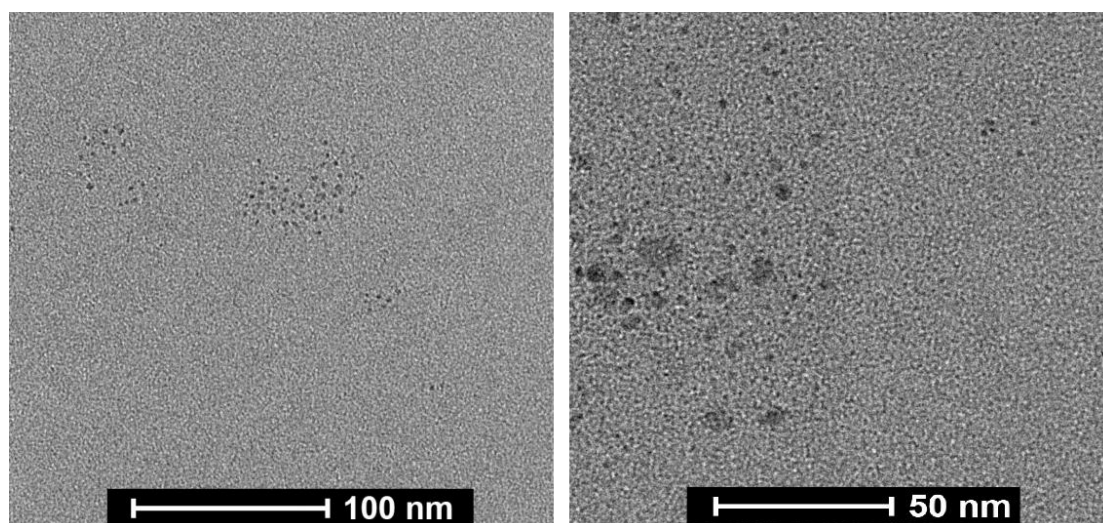
**Figure. S4** The  $^1\text{H}$ -NMR spectrum of VCH in  $\text{CDCl}_3$  and  $\text{DMSO-d}_6$ .



**Figure. S5** The  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of VCH in  $\text{CDCl}_3$  and  $\text{DMSO-d}_6$ .



**Figure. S6** The FT-IR spectra of COC ligand and VCH.



**Figure. S7** The TEM images of VCH.

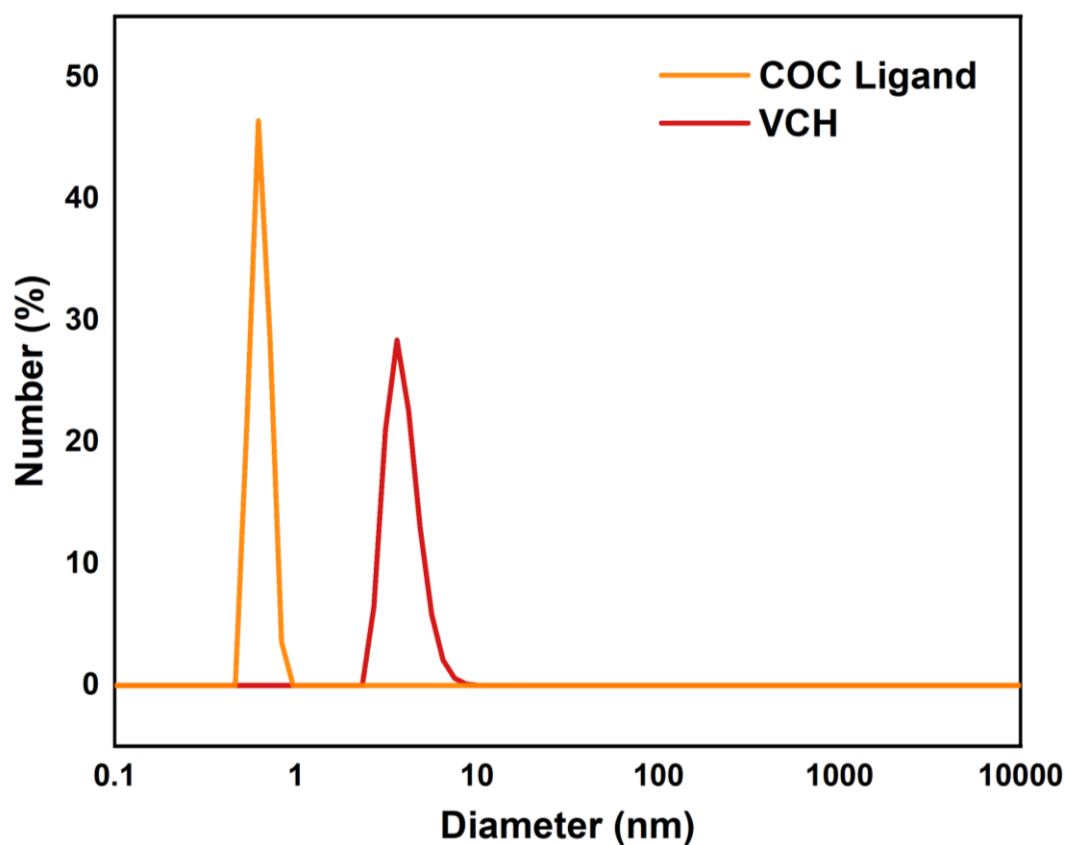


Figure. S8 The DLS plots of COC ligand and VCH in THF.

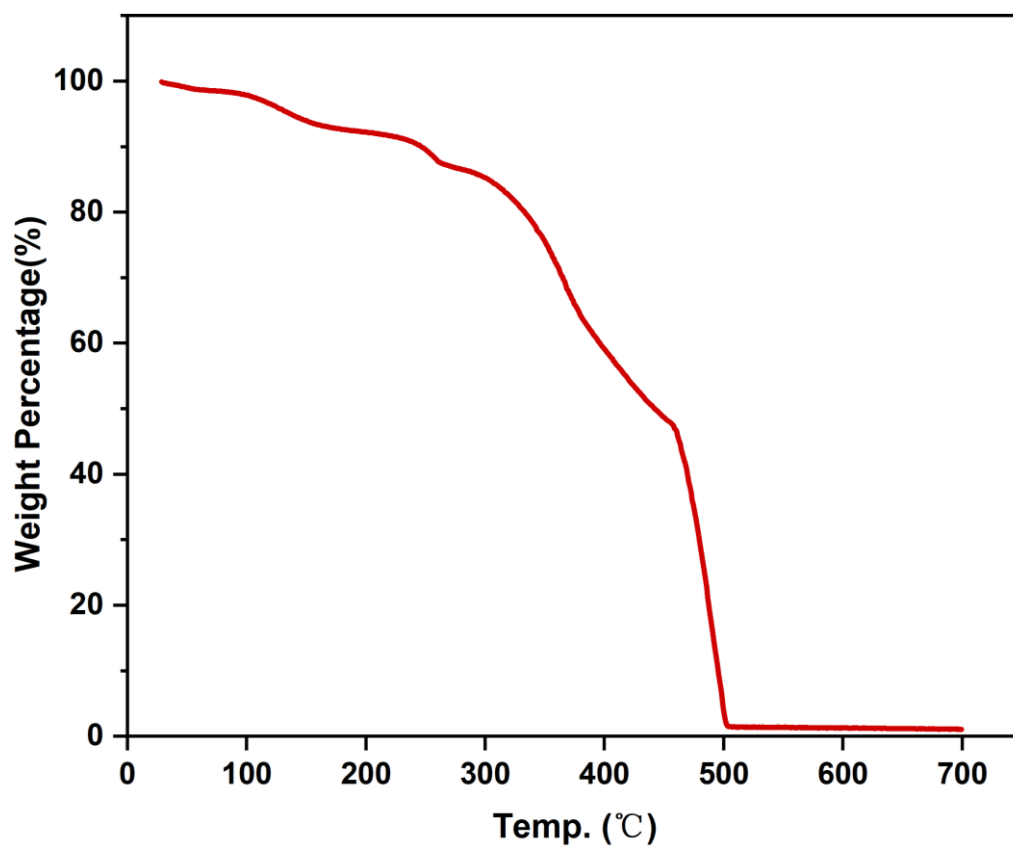


Figure. S9 The TGA plots of VCH under air condition.

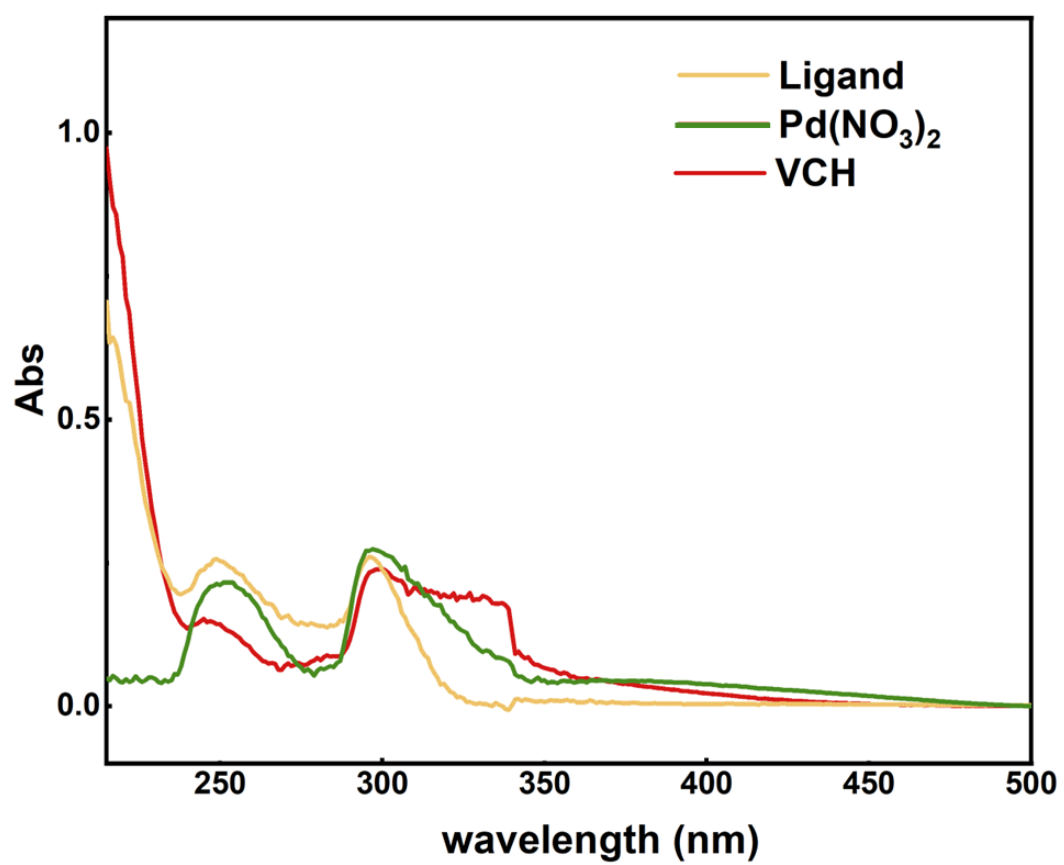


Figure. S10 The UV-Vis spectra of COC ligand and VCH.