

Electronic Supplementary Information (ESI) for RSC Advances

Solvent-controlled Cd(II) metal-organic frameworks constructed from tetrapodal silicon-based linker

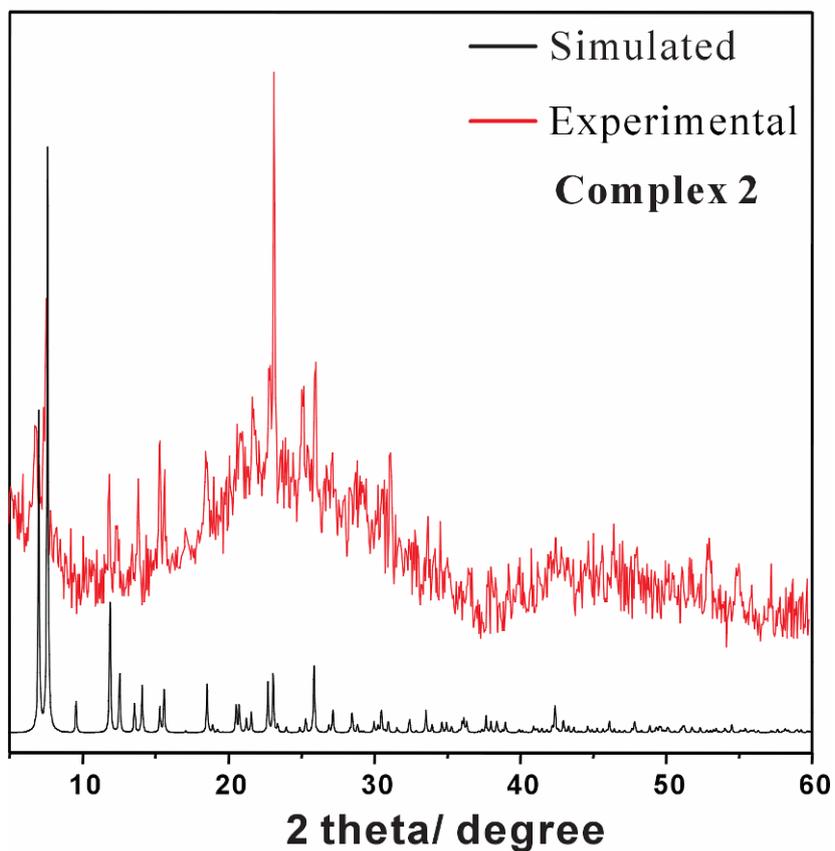
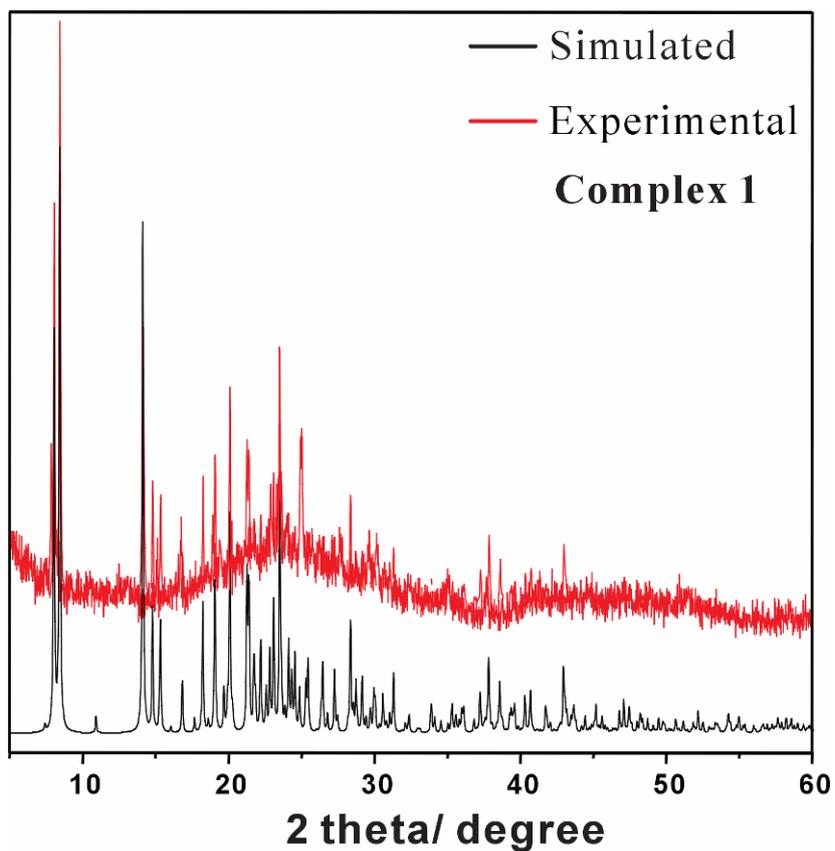
Xiaoliang Zhao, Liangliang Zhang, Huiqing Ma, Di Sun,* Dengxu Wang, Shengyu Feng,
and Daofeng Sun*

*Key Lab of Colloid and Interface Chemistry, Ministry of Education, School of Chemistry and
Chemical Engineering, Shandong University, Jinan, Shandong, 250100, China. E-mail:
dsun@sdu.edu.cn; dfsun@sdu.edu.cn; Fax: +86-531-88364218.*

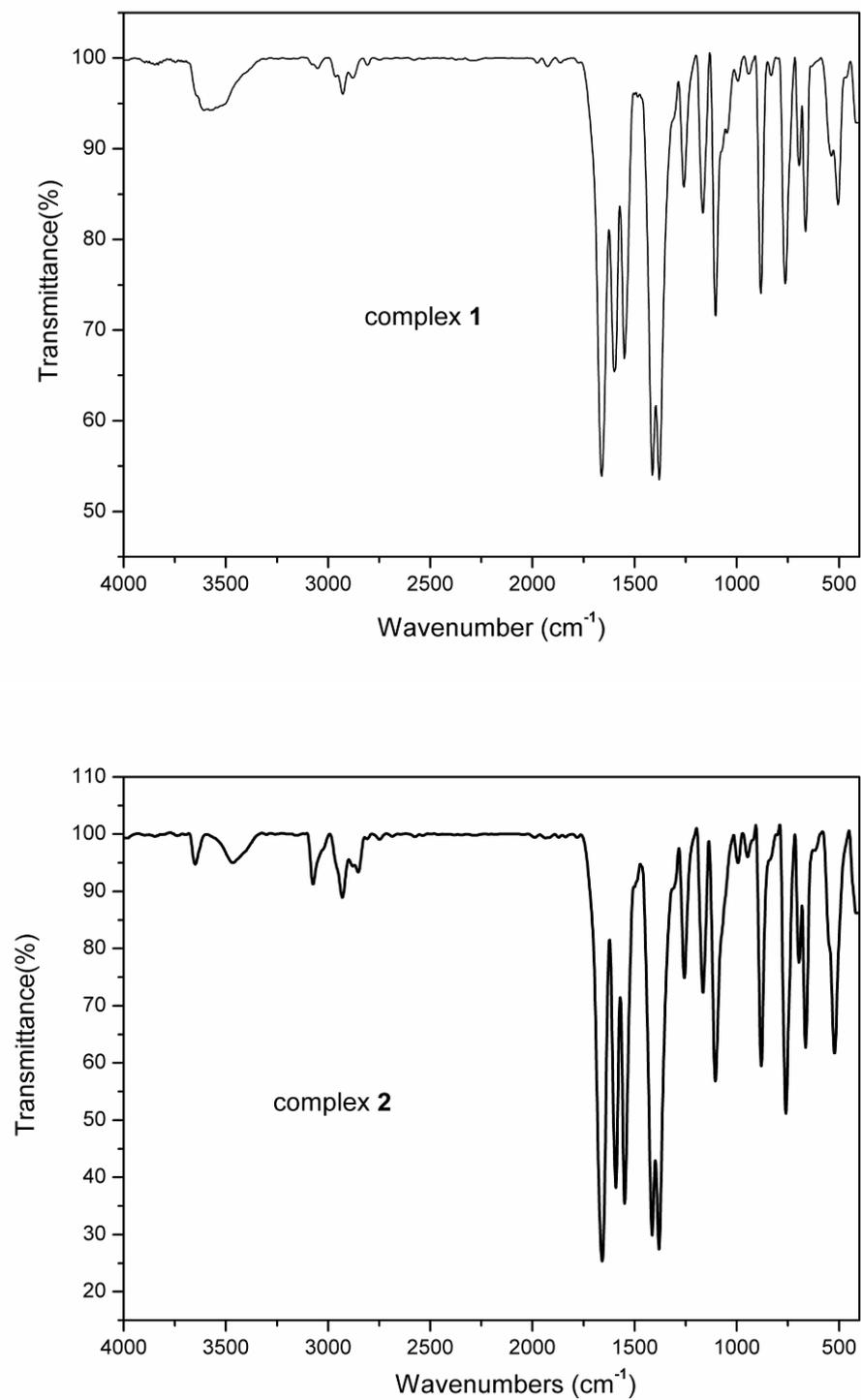
Content

(1) Figure S1: The powder XRD patterns and the simulated one from the single-crystal diffraction data for 1-2.....	2
(2) Figure S2: IR spectra of 1-2.....	3
(3) Figure S3: Ball-and-stick and polyhedral representation of [Cd(COO) ₄] SBU in 1.....	4
(4) Figure S4: Top (left) and side (right) views of the TCS ligands arranged around 4 ₁ helical axis.....	5
(5) Figure S5: Ball-and-stick and polyhedral representation of the [Cd ₄ (COO) ₈ (DMF) ₄] SBU in 2.	6
(6) Figure S6: The TG curve of 1 and 2.....	7
(7) Figure S7: The ESI-MS for tetrakis(3-carboxyphenyl)silicon.....	8
(8) Figure S8: The ¹ H NMR for tetrakis(3-carboxyphenyl)silicon.....	9
(9) Figure S9: The excitation spectra of complexes 1 and 2 monitored the emissions at 410 nm.....	10

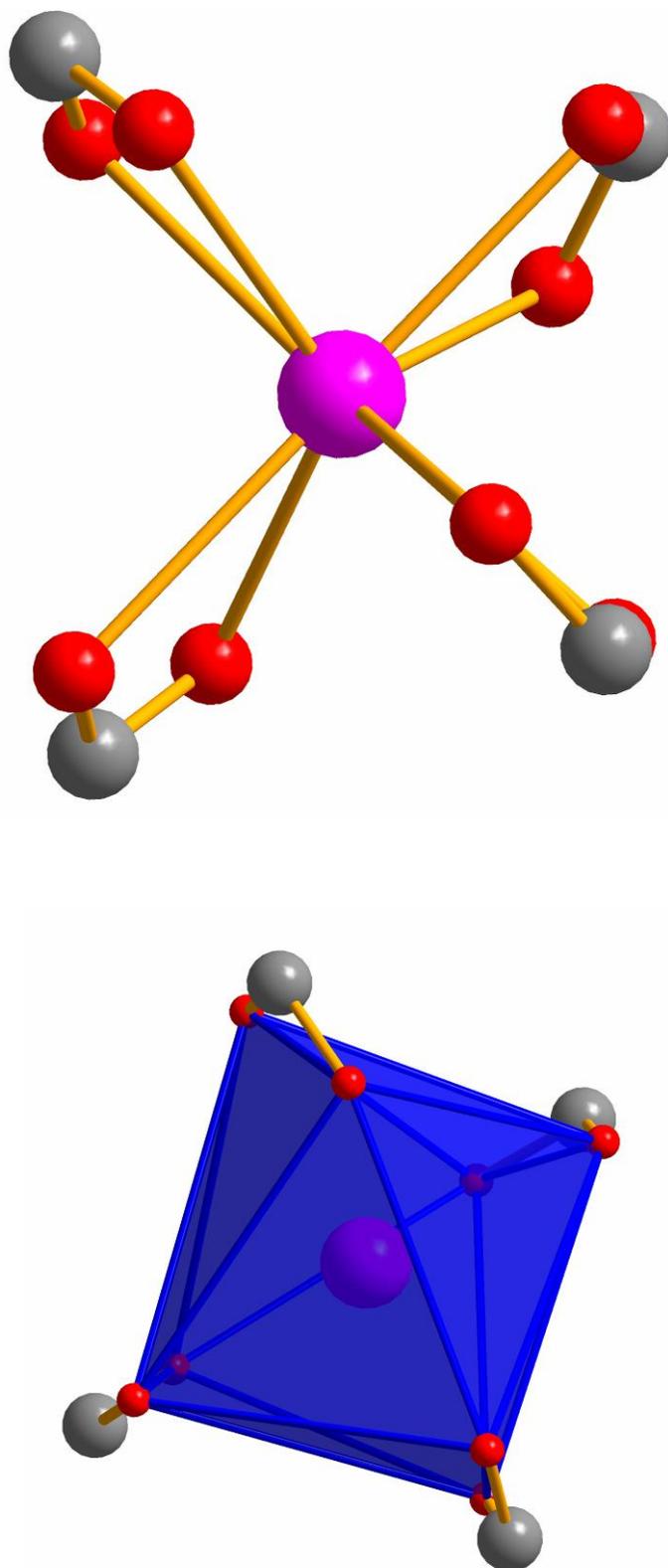
(1) **Figure S1: The powder XRD patterns and the simulated one from the single-crystal diffraction data for 1-2**



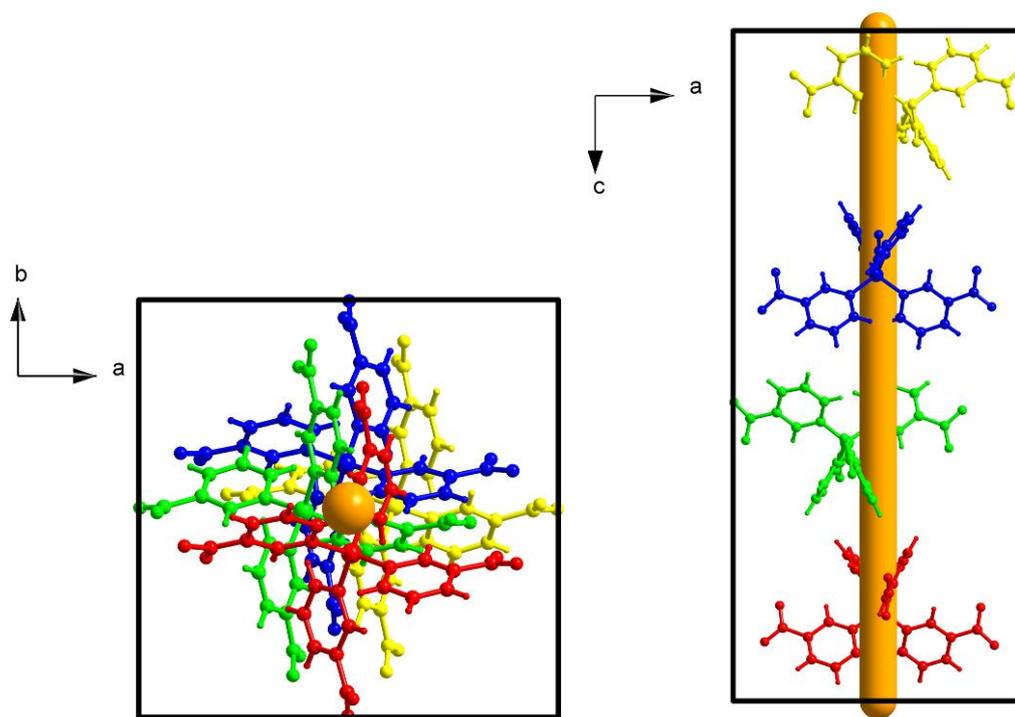
(2) Figure S2: IR spectra of 1-2



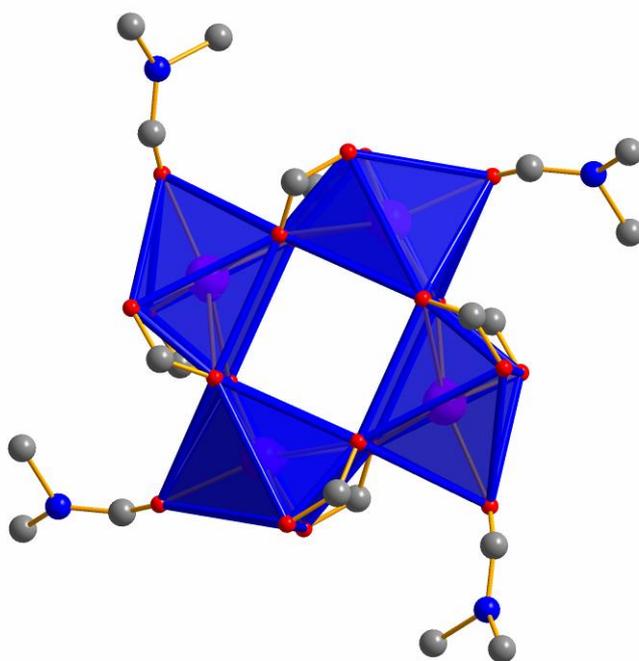
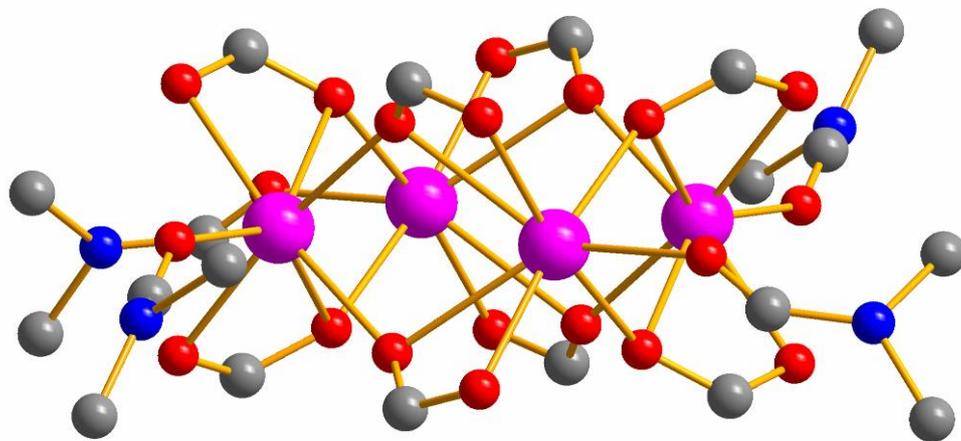
(3) **Figure S3: Ball-and-stick and polyhedral representation of $[\text{Cd}(\text{COO})_4]$ SBU in 1.**



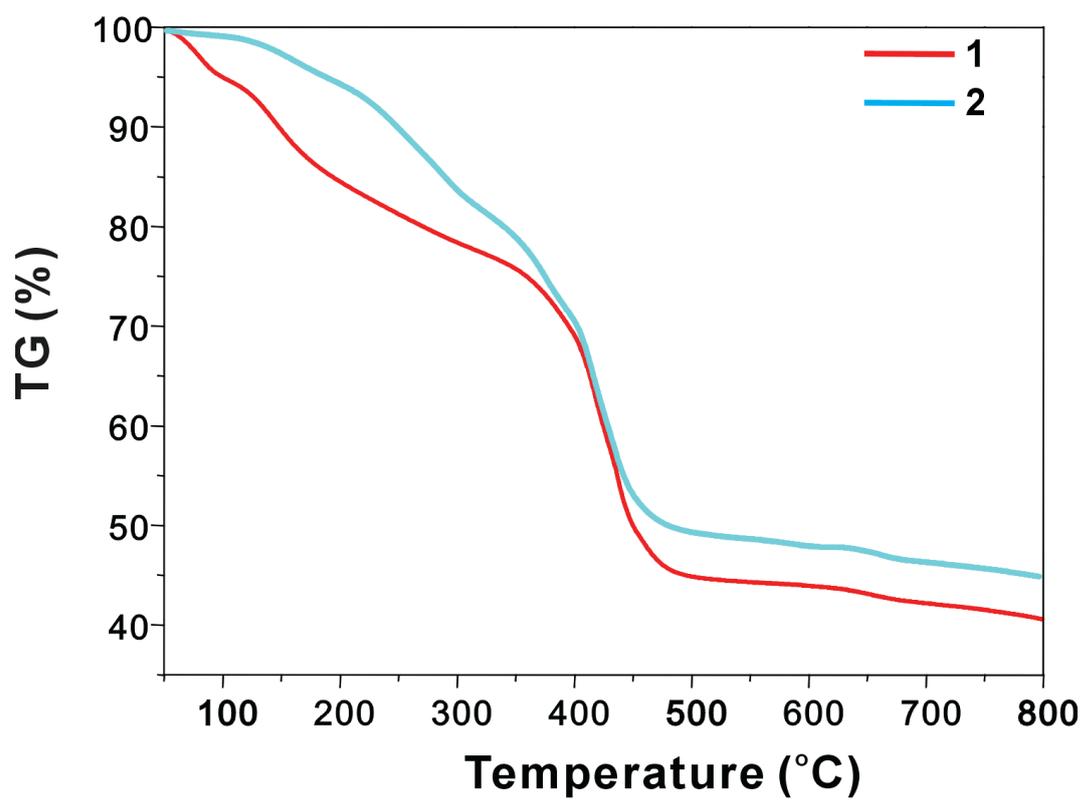
(4) Figure S4: Top (left) and side (right) views of the TCS ligands arranged around 4_1 helical axis.



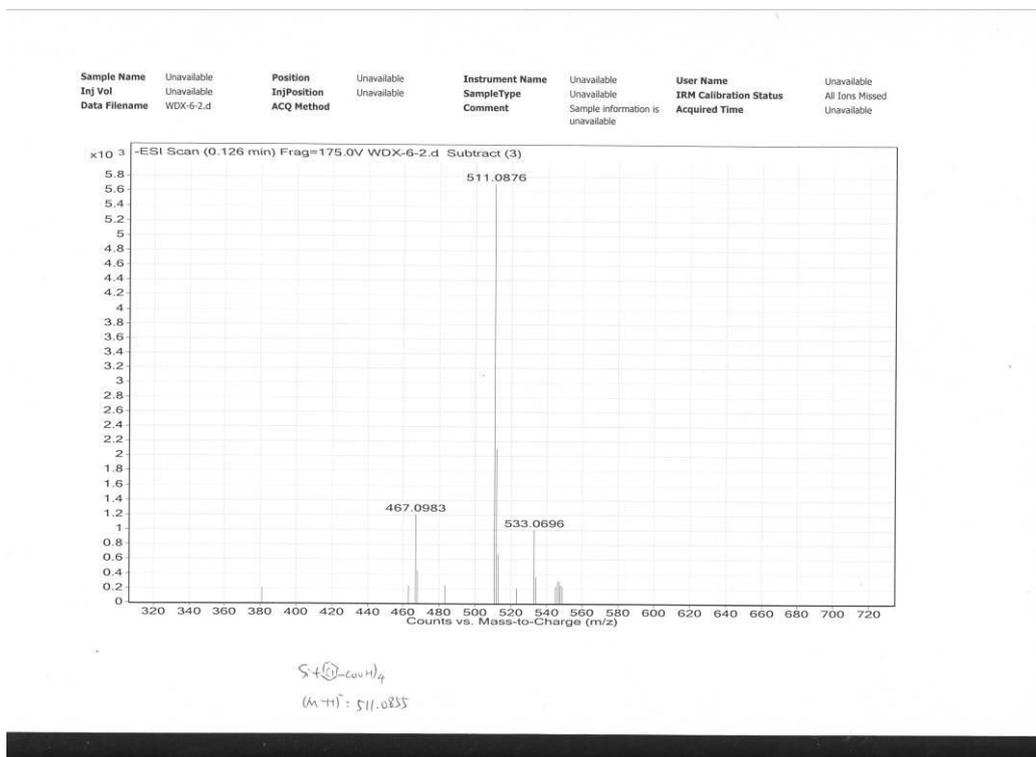
(5) Figure S5: Ball-and-stick and polyhedral representation of the $[\text{Cd}_4(\text{COO})_8(\text{DMF})_4]$ SBU in **2**.



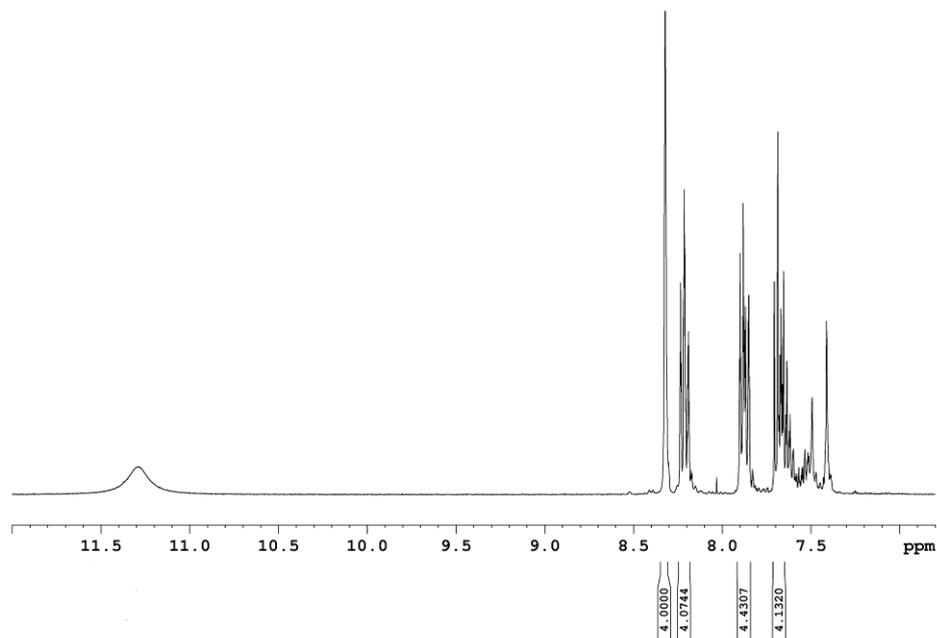
(6) Figure S6: The TG curve of 1 and 2



(7) Figure S7: The ESI-MS for tetrakis(3-carboxyphenyl)silicon



(8) Figure S8: The ^1H NMR for tetrakis(3-carboxyphenyl)silicon



(9) Figure S9: The excitation spectra of complexes 1 and 2 monitored the emissions at 410 nm.

