

Supplementary Information for:

Five 3D Metal-Organic Frameworks Constructed From V-shaped Polycarboxylate Acids and Flexible Imidazole-Based Ligands

Guang-Xiang Liu,*^a Kun Zhu,^a Huan-Min Xu,^a Sadafumi Nishihara,^b Rong-Yi Huang*^a and Xiao-Ming Ren^{a,c}

^aAnhui Key Laboratory of Functional Coordination Compounds, School of Chemistry and Chemical Engineering, Anqing Normal University, Anqing 246003, P. R. China

^bDepartment of Physical Science, Graduate School of Science, Osaka Prefecture University, Sakai, Osaka 599-8531, Japan

^cDepartment of Applied Chemistry, Science College, Nanjing University of Technology, Nanjing 210009, P. R. China

E-mail: liugx@live.com; huangrongyi@aqtc.edu.cn

Table S1. Distance [\AA] and angles [$^\circ$] of hydrogen bonding for complex **3**

D-H...A	$d(\text{D-H})$	$d(\text{H}\cdots\text{A})$	$d(\text{D}\cdots\text{A})$	$\angle(\text{DHA})$
O4-H4...O5	0.93	2.56	2.928(7)	104
C13-H13...O6	0.93	2.55	2.913(7)	103
C19-H19...O4#1	0.93	2.49	3.093(7)	123

C23-H23···O2#2	0.93	2.58	3.091(7)	115
C26-H26A···O6#3	0.97	2.55	2.971(7)	106
C33-H33A···O2W#4	0.96	2.46	3.365(9)	157
C34-H34B···O5#5	0.96	2.48	3.364(9)	153

Symmetry codes: #1 $3/2-x, 1-y, -1/2+z$; #2 $1-x, 1/2+y, 3/2-z$; #3 $1/2+x, 3/2-y, 1-z$; #4 $1/2-x, 1-y, 1/2+z$; #5 $1+x, 1+y, z$.

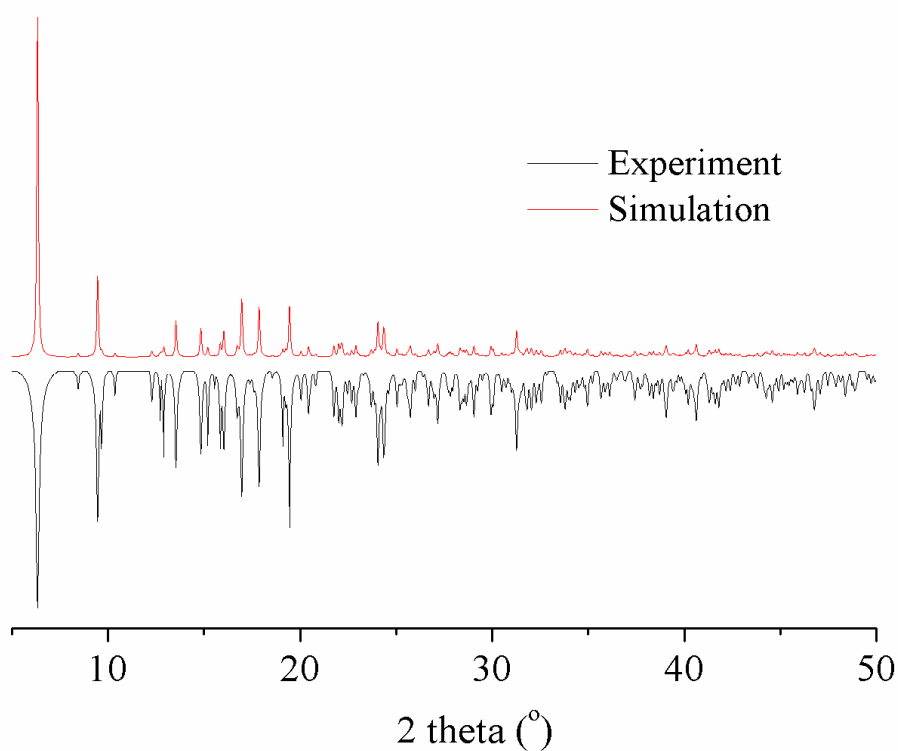


Figure S1 X-Ray power diffraction profiles of complex **1**.

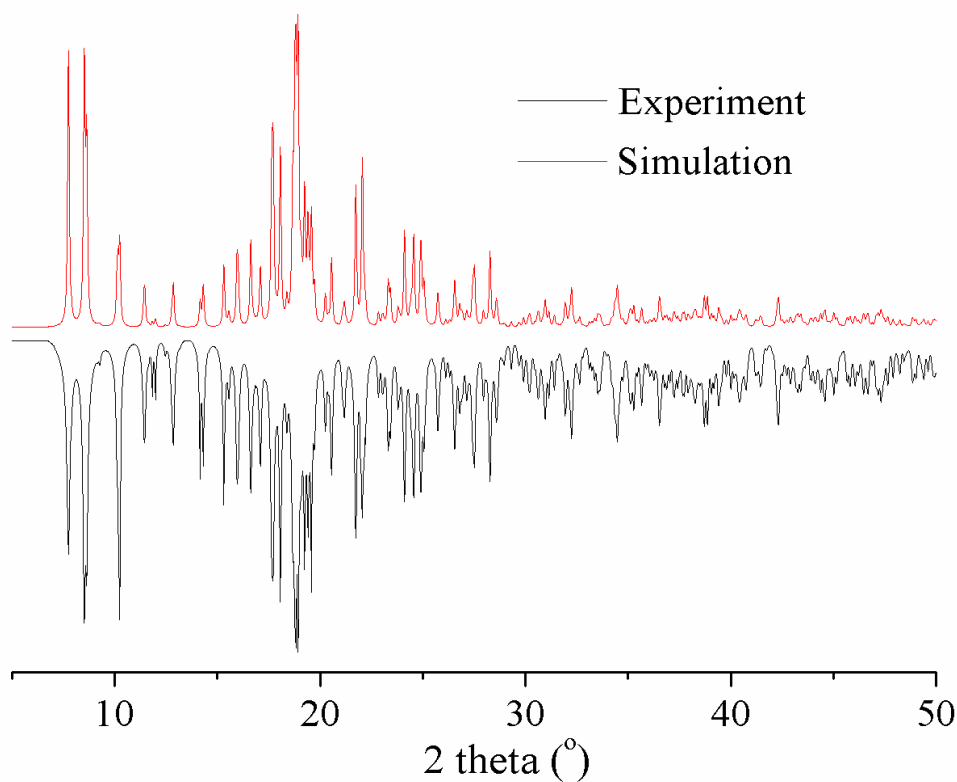


Figure S2 X-Ray power diffraction profiles of complex 2.

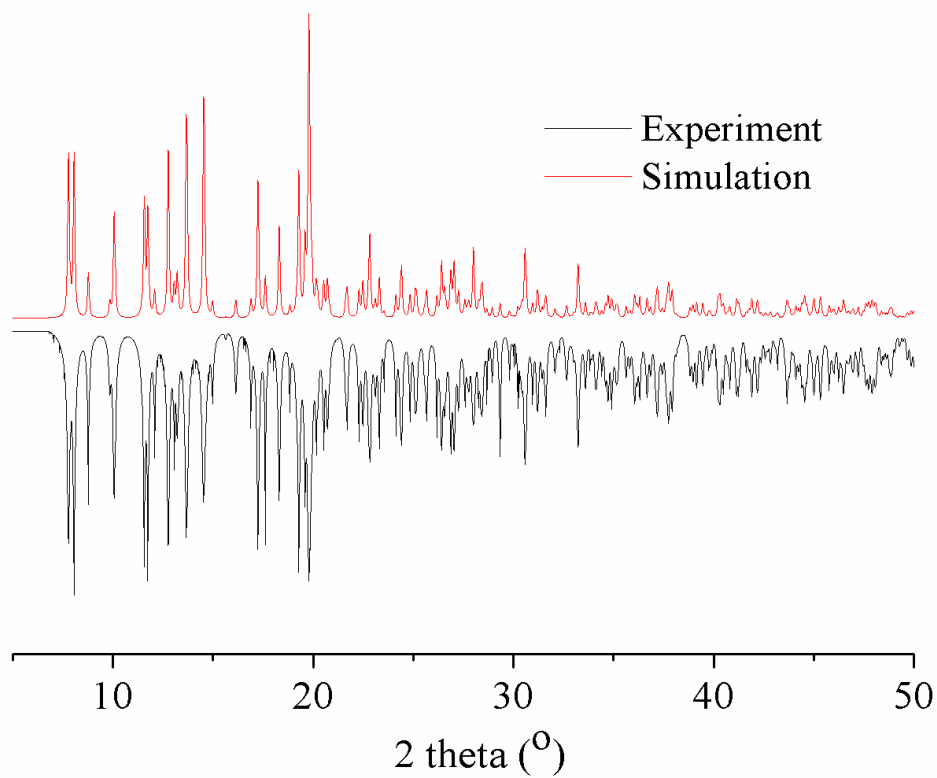


Figure S3 X-Ray power diffraction profiles of complex 3.

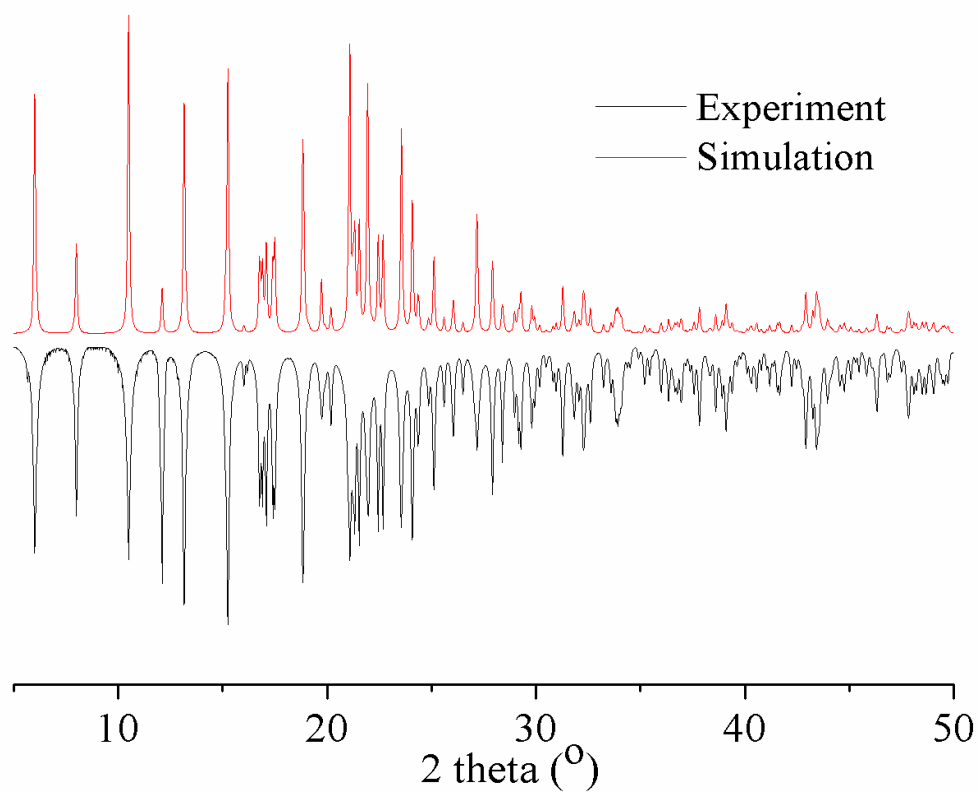


Figure S4 X-Ray power diffraction profiles of complex **4**.

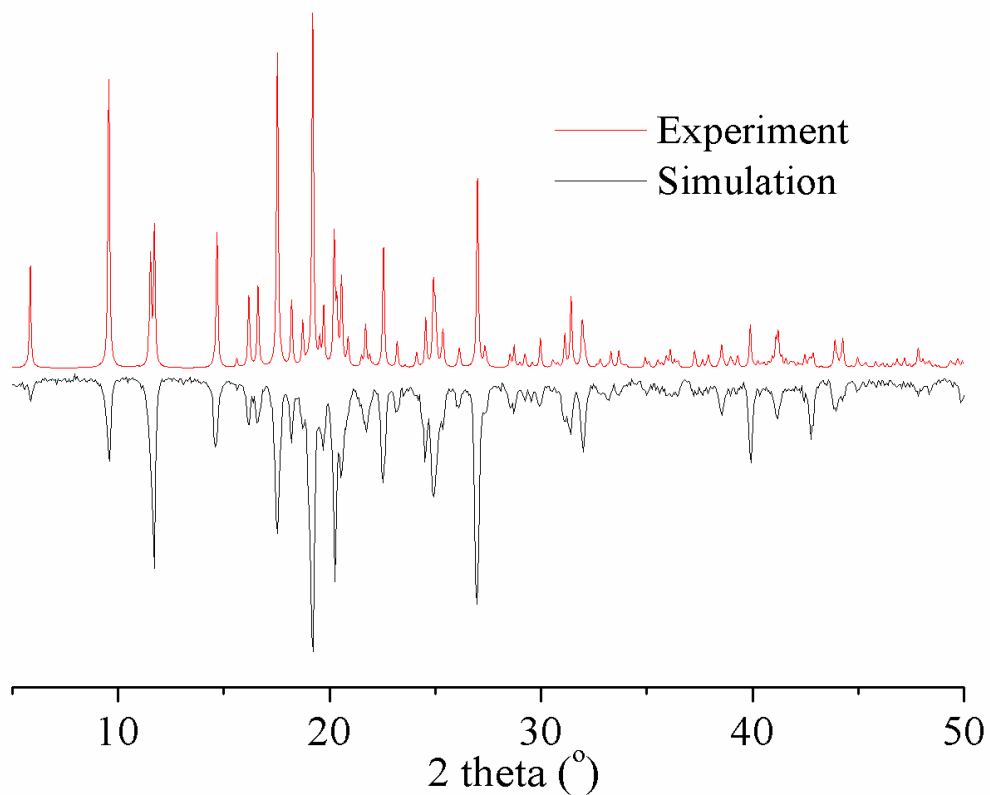


Figure S5 X-Ray power diffraction profiles of complex **5**.