

Online Supporting Information for

**Computer-Aided Design of Interpenetrated Tetrahydrofuran-Functionalized 3D  
Covalent Organic Frameworks for CO<sub>2</sub> Capture**

Ravichandar Babarao,<sup>†</sup> Radu Custelcean,<sup>†,\*</sup> Benjamin P. Hay,<sup>†</sup> and De-en Jiang<sup>‡,\*</sup>

<sup>†</sup>Chemical Science Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831 and

<sup>‡</sup>Department of Chemistry, University of Tennessee, Knoxville, TN 37966

**Table S1.** CO<sub>2</sub> uptake capacity in selected interpenetrated MOFs at 298 K and 1 atm in comparison with our designed COF.

Frameworks	Degree of Interpenetration <i>n</i> -Fold	CO <sub>2</sub> uptake capacity, mmol/g	Reference
PCN-124	self-interpenetrated	5.08	1
Cu-TATB-60	2-fold	4.29 (3.54) <sup>b</sup>	2
SUMOF-2	2-fold	4.26 <sup>a</sup> (1.55) <sup>b</sup>	3
Cd-ANIC-1	2-fold	3.84	4
Co-ANIC-1	2-fold	3.48	4
PMOF-3	2-fold	3.24	5
UHM-6	2-fold	2.10	6
SNU-71'	2-fold	1.05 (0.79) <sup>b</sup>	7
MOF-508b	2-fold	1.80	8
Zn <sub>5</sub> (BTA) <sub>6</sub> (TDA) <sub>2</sub>	4-fold	1.65	9
Cu <sub>2</sub> (HBTB) <sub>2</sub>	2-fold	1.30	10
YO-MOF	2-fold	1.20	11
NOTT-202 <sup>a</sup>	partial-interpenetrated	1.20	12
UCY-1	2-fold	0.98	13
In-MOF1	2-fold	0.77	14
M' MOF-20	3-fold	0.45	15
COF_THF	4-fold	4.60	This work
COF_THF	5-fold	4.00	This work

<sup>a</sup> at 273K and 1 atm, <sup>b</sup> numbers in parentheses are for the non-interpenetrated framework.

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