

Supporting Information:

Metal Complexes Bearing 2-(Imidazole-2-yl)phenol Ligands: Synthesis, Characterization and Catalytic Performance in the Fixation of Carbon Dioxide with Epoxides

Jing Peng^{a,b}, Hai-Jian Yang^{*,b}, Zidong Wei^a, Cun-Yue Guo^{*,c}

^a *The State Key Laboratory of Power Transmission Equipment & System Security and New Technology, College of Chemistry and Chemical Engineering, Chongqing university, Chongqing 400044, China*

^b *Key Laboratory of Catalysis and Materials Science of the State Ethnic Affairs Commission & Ministry of Education, Hubei Province, Key Laboratory of Analytical Chemistry of the State Ethnic Affairs Commission, College of Chemistry and Materials Science, South-Central University for Nationalities, Wuhan, 430074, P.R. China.*

Email addresses: yanghaijian@vip.sina.com Tel./Fax: +86-27-67842752

^c *School of Chemistry and Chemical Engineering, University of Chinese Academy of Sciences, Beijing, 100049, P.R. China*

Email

addresses: cyguo@ucas.ac.cn

Table S1. Provenance and Mass Fraction Purity of the Materials

Materials	Mass fraction purity	CAS	Provenance
Propylene oxide	0.99	16088-62-3	Shanghai Darui Finechemical Co., Ltd.
1,2-Epoxyethylbenzene	0.99	96-09-3	Shanghai Darui Finechemical Co., Ltd.
Epichlorohydrin	0.99	106-89-8	Shanghai Darui Finechemical Co., Ltd.
Carbon dioxide	0.9999	124-38-9	Sichuan Tianyi Science & Technology Co., Ltd.
Salicylaldehyde	0.99	90-02-8	J&K Chemica Co.
3,5-Dichlorosalicylaldehyde	0.98	90-60-8	Tokyo Chemical Industry Co., Ltd.
3,5-Dibromosalicylaldehyde	0.98	90-59-5	Shanghai Darui Finechemical Co., Ltd.
3,5-Diiodosalicylaldehyde	0.98	2631-77-8	Alfa Aesar, A. Johnson Matthey Company
5-Methylsalicylaldehyde	0.98	613-84-3	Tokyo Chemical Industry Co., Ltd.
5-Chlorosalicylaldehyde	0.98	635-93-8	Shanghai Darui Finechemical Co., Ltd.
5-Bromosalicylaldehyde	0.98	1761-61-1	Shanghai Darui Finechemical Co., Ltd.
5-Nitrosalicylaldehyde	0.98	97-51-8	Shanghai Darui Finechemical Co., Ltd.
4-Methoxysalicylaldehyde	0.98	673-22-3	Shanghai Darui Finechemical Co., Ltd.
Diphenylethanedione	0.99	134-81-6	Shanghai Darui Finechemical Co., Ltd.
Ammonium acetate	0.98	631-61-8	Sinopharm Chemical Reagent Co., Ltd.
Magnesium sulfate anhydrous	0.99	7487-88-9	Sinopharm Chemical Reagent Co., Ltd.
Zinc acetate dihydrate	0.99	5970-45-6	Sinopharm Chemical Reagent Co., Ltd.
Copper (II) acetate monohydrate	0.98	6046-93-1	Sinopharm Chemical Reagent Co., Ltd.
Lead (II) acetate trihydrate	0.995	6080-56-4	Tianjin TEDA Letai Chemical Co., Ltd.
Nickel(□) chloride hexahydrate	0.98	7791-20-0	Shanghai Shanpu Chemical Co., Ltd.
Cobalt(□) chloride hexahydrate	0.99	7791-13-1	Tianjin Tianda Chemical Reagent Factory
1,2-Epoxyhexane	0.99	1436-34-6	J&K Chemica Co.
Glycidyl isopropyl ether	0.99	4016-14-2	J&K Chemica Co.
Isobutylene oxide	0.97	558-30-5	J&K Chemica Co.
Calcium hydride	0.97	7789-78-8	J&K Chemica Co.
Chloroform-d	99.8atom%D	865-49-6	J&K Chemica Co.
Tetra-n-butylammonium bromide	0.99	1643-19-2	Tianjin Bodi Chemical Engineering Co., Ltd.
Tetra-n-butylammonium iodide	0.99	311-28-4	Tianjin Bodi Chemical Engineering Co., Ltd.
Tetra-n-butylammonium chloride	0.99	1112-67-0	Tianjin Bodi Chemical Engineering Co., Ltd.
Tetraethylaminopyridine	0.98	71-91-0	Shanghai Darui Finechemical Co., Ltd.
Potassium iodide	0.985	7681-11-0	Tianjin Standard Science & Technology Co., Ltd.
4-Dimethylaminopyridine	0.99	1122-58-3	J&K Chemica Co.
Triphenylphosphine	0.98	603-35-0	Shanghai Darui Finechemical Co., Ltd.
Dimethyl sulfoxide-d6	0.9999	2206-27-1	Tianjin Standard Science & Technology Co., Ltd.
Methanol	A. R. grade	67-56-1	Sinopharm Chemical Reagent Co., Ltd.
Ethanol	A. R. grade	64-17-5	Sinopharm Chemical Reagent Co., Ltd.
Dichloromethane	A. R. grade	75-09-2	Sinopharm Chemical Reagent Co., Ltd.
Acetic acid	A. R. grade	64-19-7	Sinopharm Chemical Reagent Co., Ltd.
n-pentane	A. R. grade	109-66-0	Aladdin Industrial Corporation

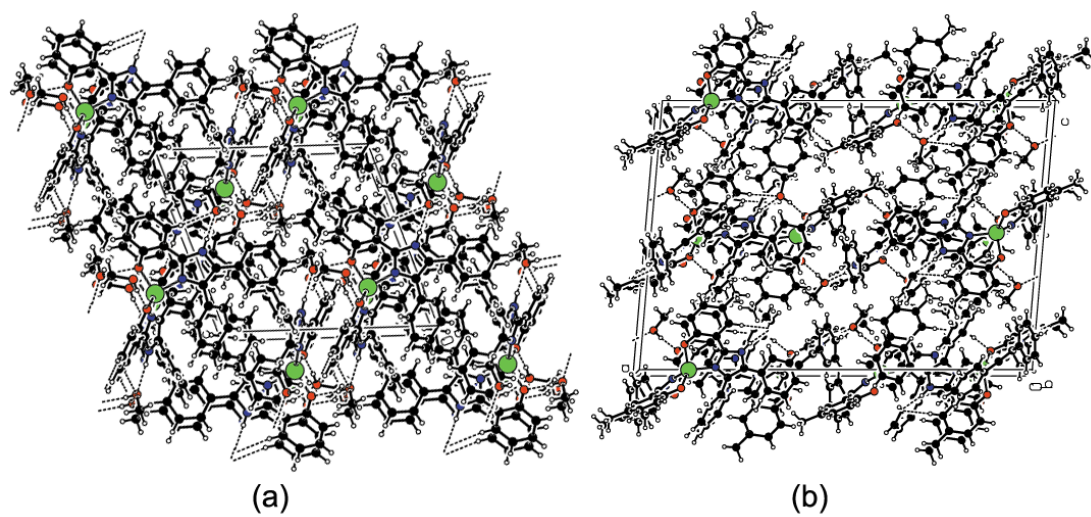


Figure S1. Packing of (a) C₁ and (b) C₅ in the solid state (green = Zn, blue = N, red = oxygen, white = H, and black = C).