

Supplementary Information Material

Long Range Structural and Textural Changes in [Zn(bdc)(ted)_{0.5}] upon Spontaneous Dispersion of LiCl and Hysteretic Adsorption and Desorption of Carbon Dioxide and Hydrogen

Arturo J. Hernández-Maldonado,*
Jennifer Guerrero-Medina and Valeria C. Arce-González

Department of Chemical Engineering, University of Puerto Rico-Mayagüez Campus
Mayagüez, PR 00681-9000

* To whom correspondence should be addressed:
Phone: 787-832-4040 x3748; Fax: 787-834-3655; E-mail: arturoj.hernandez@upr.edu

Content:

ICP Compositional Analysis

Additional Adsorption Data

1. Compositional Data

The ICP-MS tests yielded the following (in wt.%):

- [Zn(bdc)(ted)0.5]: C 42.5, H 5.41, N: 7.57 and Zn 16.0
- (LiCl)[Zn(bdc)(ted)0.5]: C 36.8, H 3.33, N: 3.21, Zn 19.1 and Li 1.99

2. Additional Adsorption Data

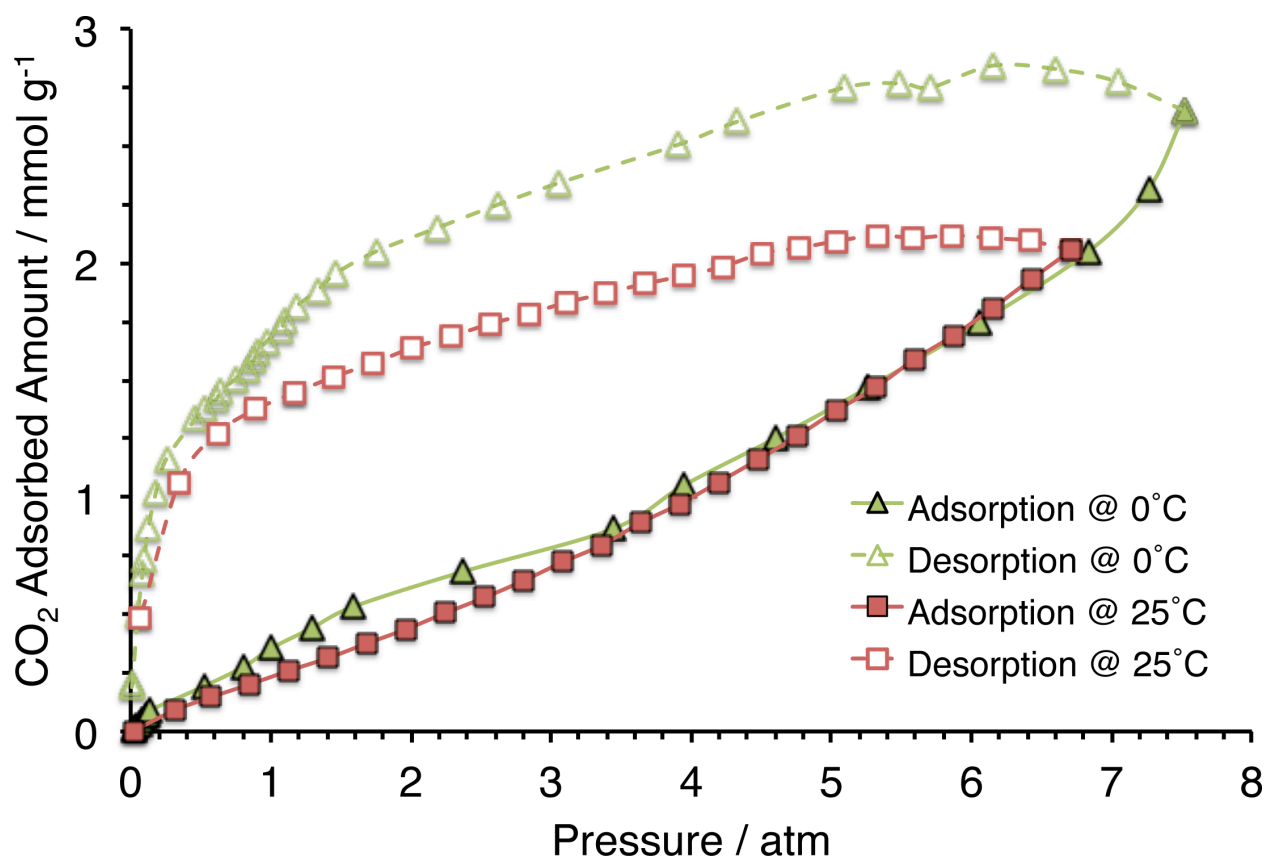


Figure S1. Carbon dioxide adsorption-desorption isotherms at different temperatures in (LiCl)[Zn(bdc)(ted)0.5].

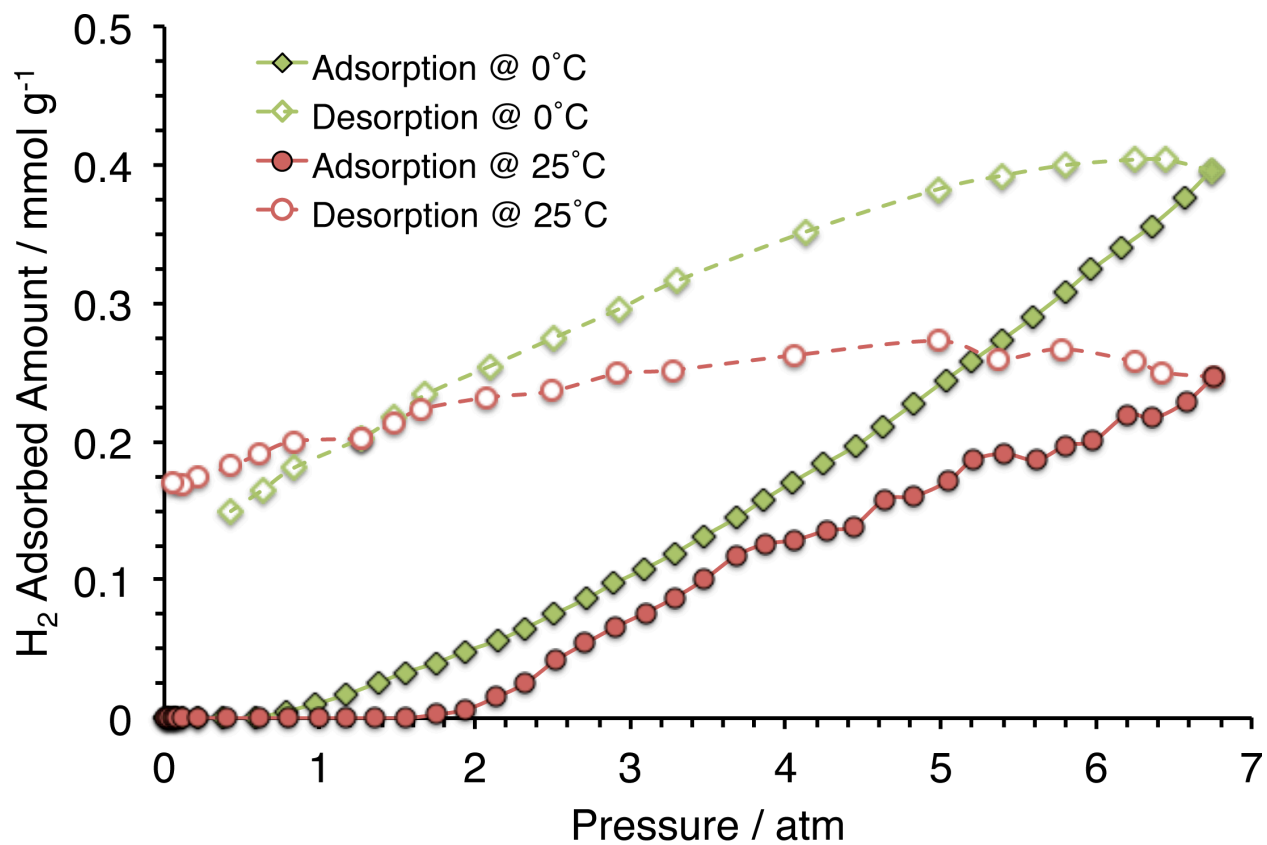


Figure S2. Hydrogen adsorption-desorption isotherms at different temperatures in $(\text{LiCl})[\text{Zn}(\text{bdc})(\text{ted})_{0.5}]$.