

Supplementary Materials for
Lattice Expansion and Ligand Twist during CO₂ Adsorption in Flexible Cu
Bipyridine Metal-Organic Frameworks

Samuel D. Marks,^{1*} Karina Riascos-Rodriguez,² Rodinson R. Arrieta-Pérez,² Andrey A. Yakovenko,³ Jason Exley,⁴ Paul G. Evans,¹ and Arturo J. [Hernández-Maldonado](#)²

¹ *Department of Materials Science and Engineering, University of Wisconsin, Madison, WI 53706*

² *Department of Chemical Engineering, University of Puerto Rico, Mayaguez, PR 00681*

³ *Advanced Photon Source, Argonne National Laboratory, Argonne, Illinois 60439*

⁴ *Micromeritics Instrument Corporation, Norcross, GA 30093*

This PDF file includes whole pattern profiles from Rietveld refinement of CPL-2 (P. 2-25) and CPL-5 (P. 26-48). The title of each plot includes the name of the compound and CO₂ gauge pressure at which the powder x-ray diffraction profile was acquired. The refinement residuals are plotted below each pattern.





























































































