

Supporting Information for *CrystEngComm*,

Dehydrated Prussian Blue's for CO₂ Storage and Separation Applications

Radha Kishan Motkuri,[†] Praveen K. Thallapally^{†,*}, B. Peter McGrail,[†] and S. Behrooz Ghorishi[‡]

Energy and Environment Directorate, Pacific Northwest National Laboratory, Richland, WA 99352, USA.

Fax: 509 3765368; Tel: +1 509 371 7183; [‡] The Babcock and Wilcox Company, Barberton, Ohio 44203

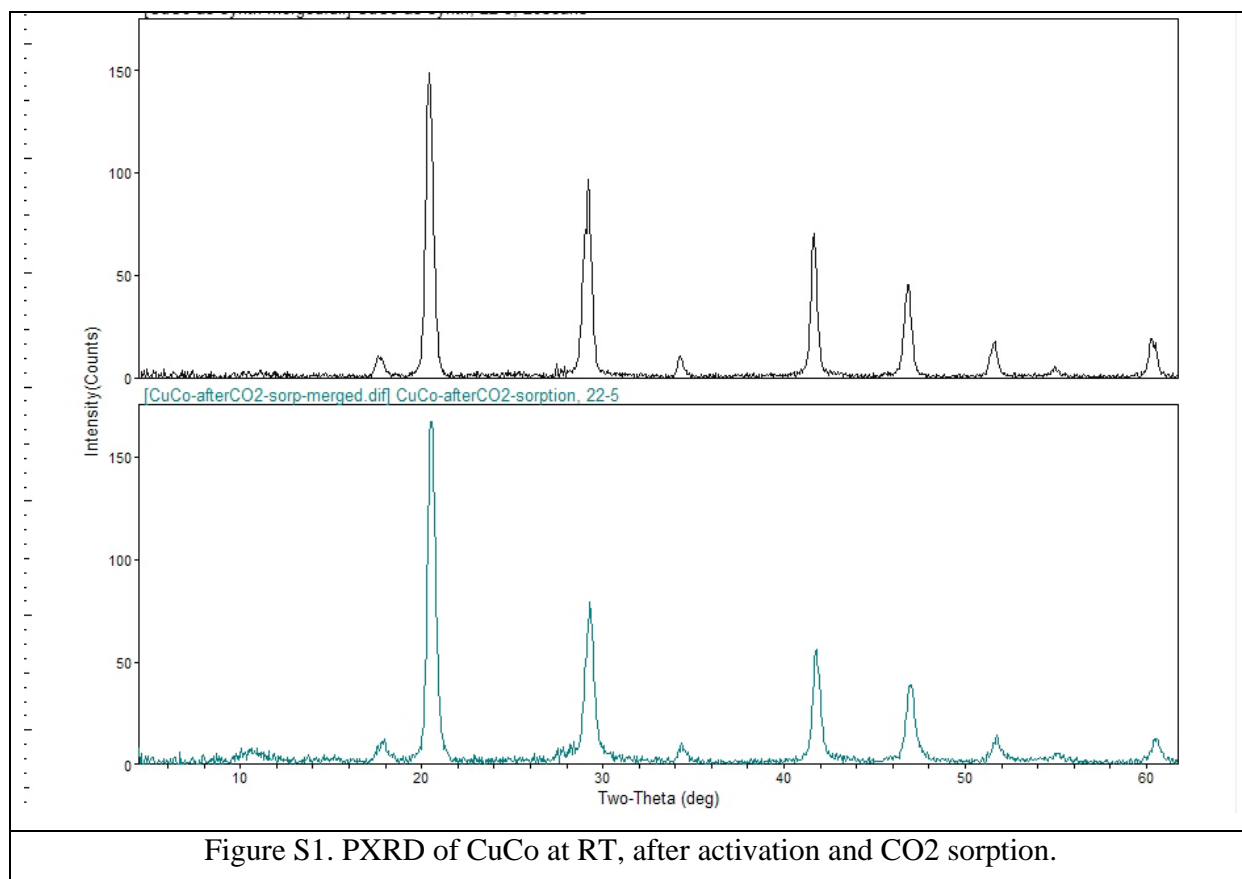
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Figure S1-S4. PXRD's CuCo, NiCo and MnCo

Figure S5-S7. DSC results of MnCo, NiCo and CuCo

Figure S8-S10. TG-MS of three molecular magnets after exposing to air.

Figure S11-S13. Diffuse Reflectance Infrared Fourier Transform Spectroscopy (DRIFTS) spectra of MnCo, NiCo and CuCo.



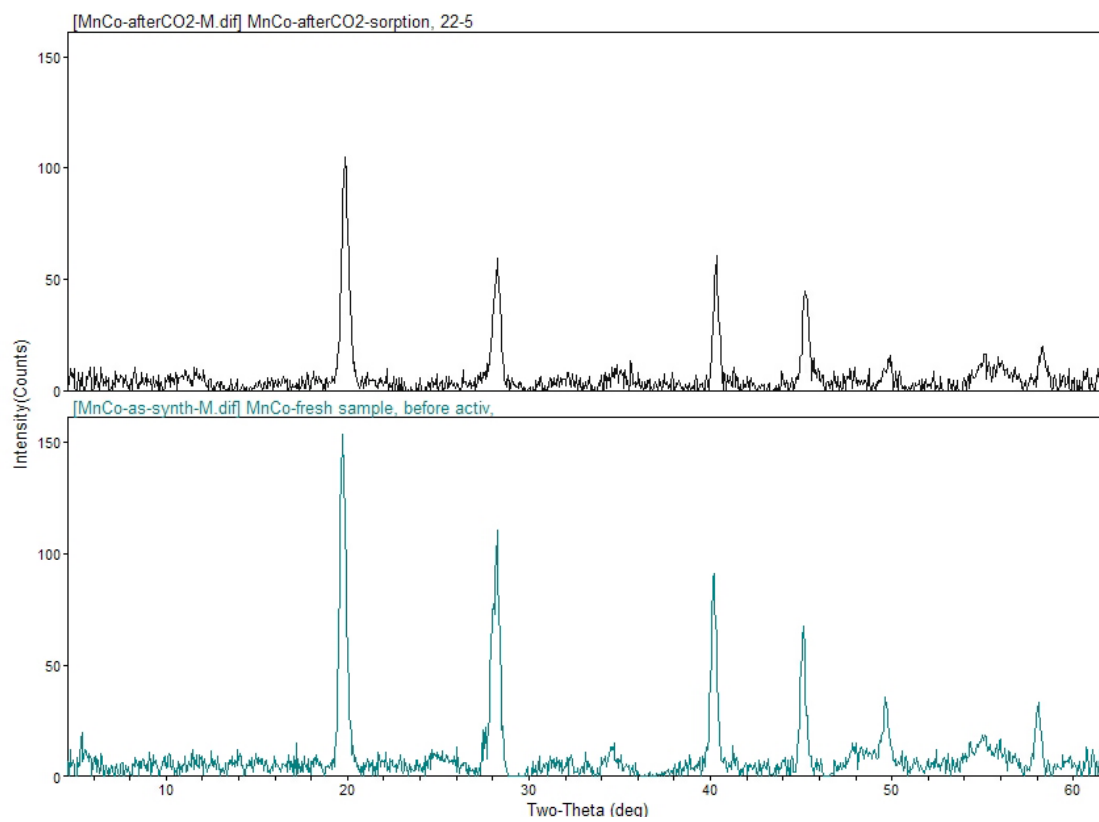


Figure S2. PXRD of MnCo at RT, after activation and CO₂ sorption.

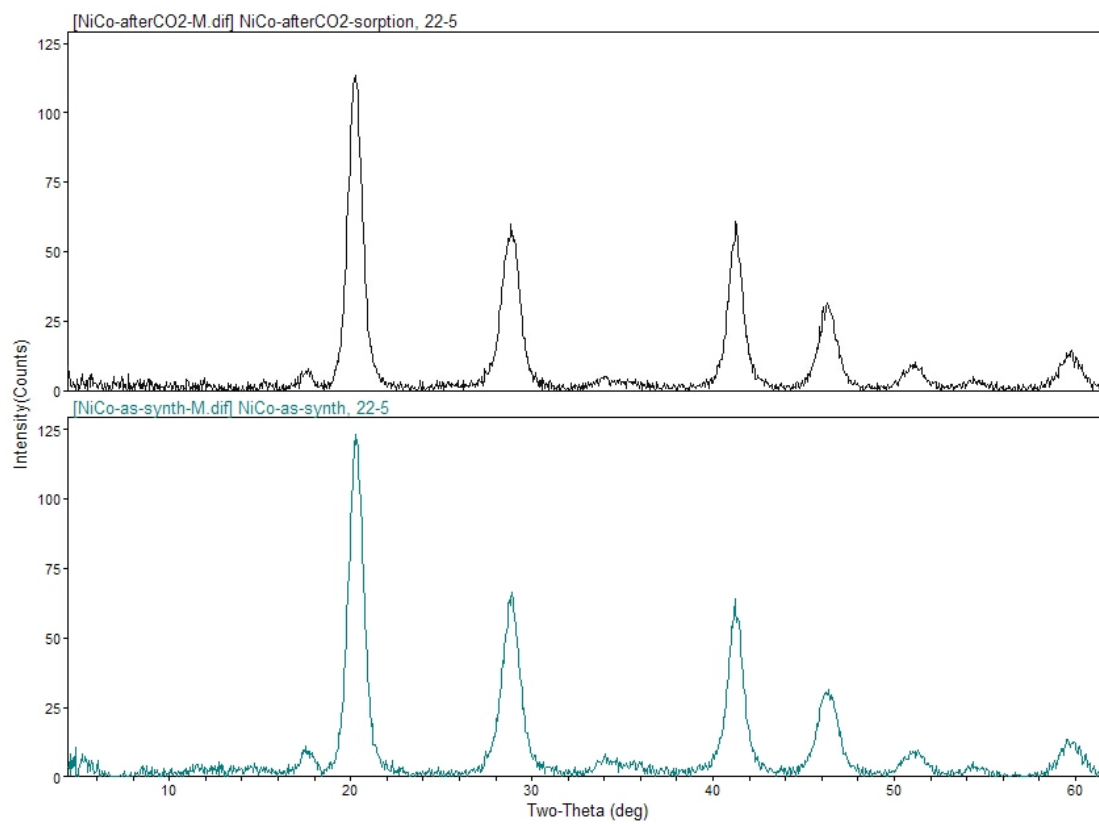


Figure S3. PXRD of NiCo at RT, after activation and CO₂ sorption.

(6) [MnCo-afterCO2-M.dif] MnCo-afterCO2-sorption, 22-5
(5) [MnCo-as-synth-M.dif] MnCo-fresh sample, before activ.
(4) [NiCo-afterCO2-M.dif] NiCo-afterCO2-sorption, 22-5
(3) [NiCo-as-synth-M.dif] NiCo-as-synth, 22-5
(2) [CuCo-afterCO2-sorp-merged.dif] CuCo-afterCO2-sorption, 22-5
(1) [CuCo-as-synth-merged.dif] CuCo-as-synth, 22-5, 20scans

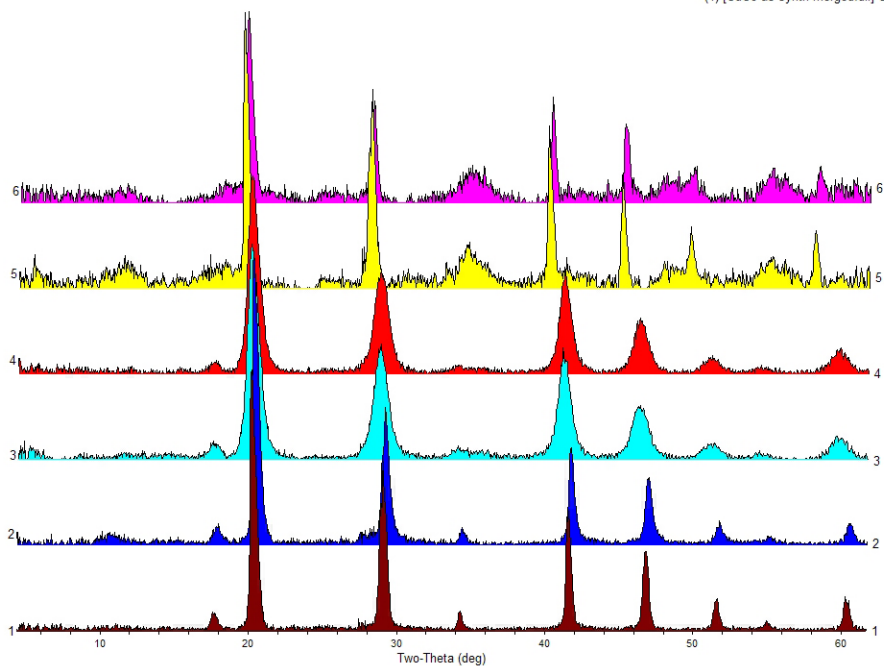


Figure S4. PXRD's of all Prussian blue analogues.

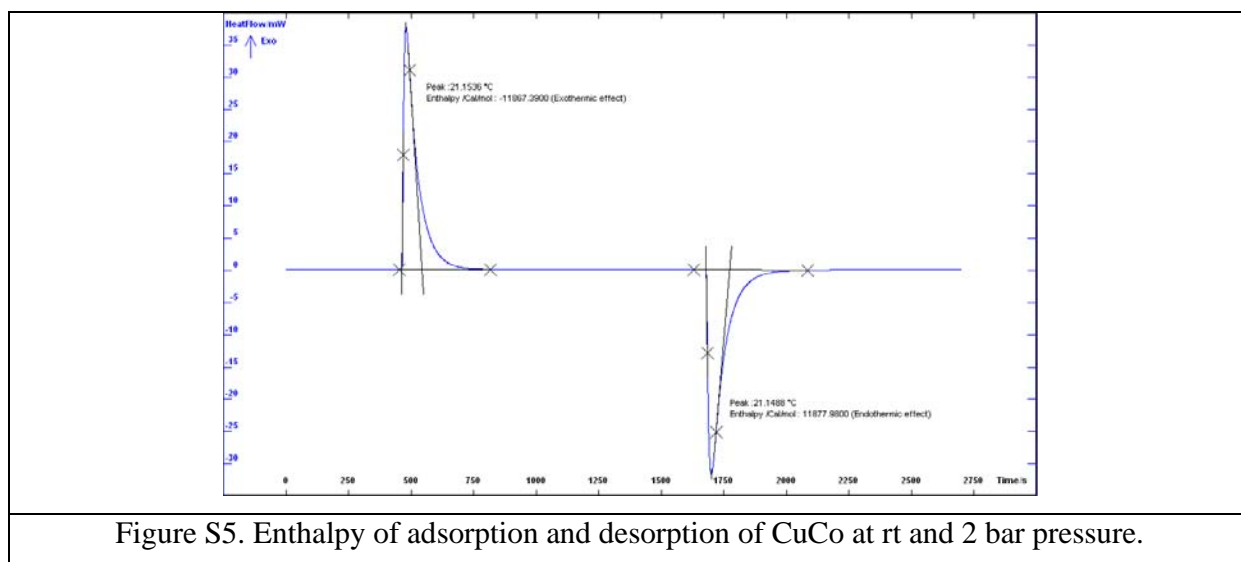
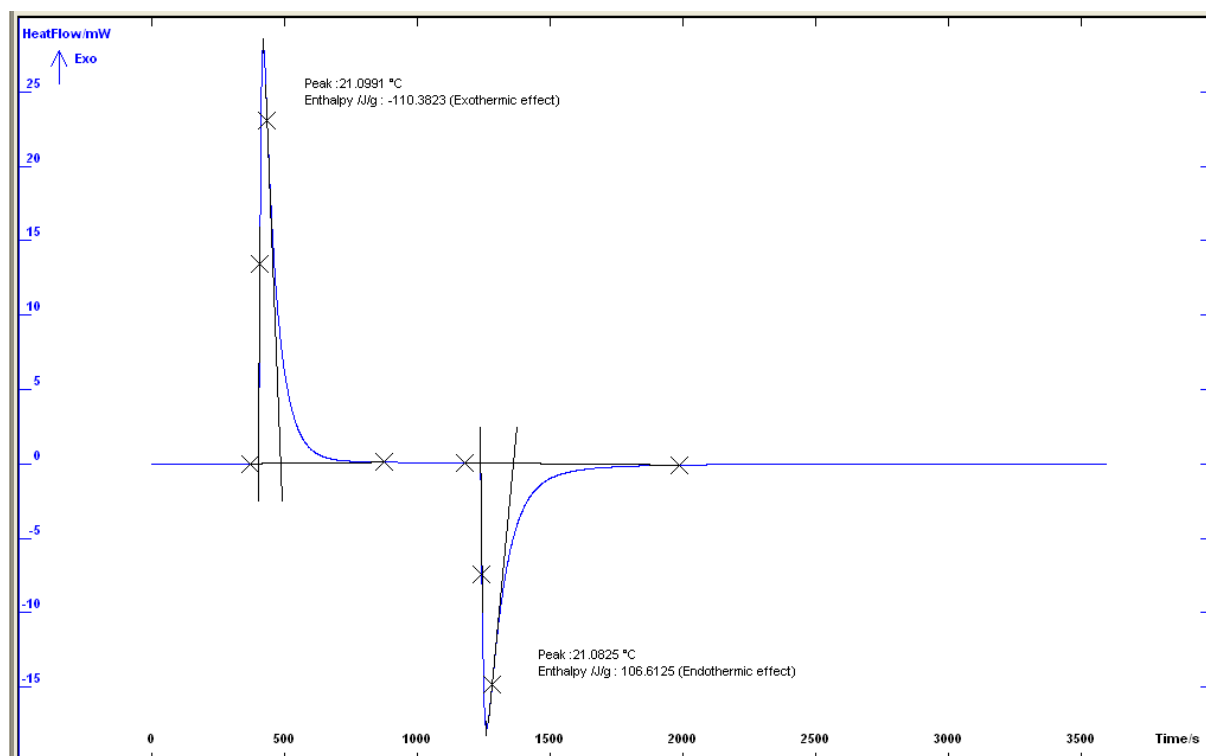
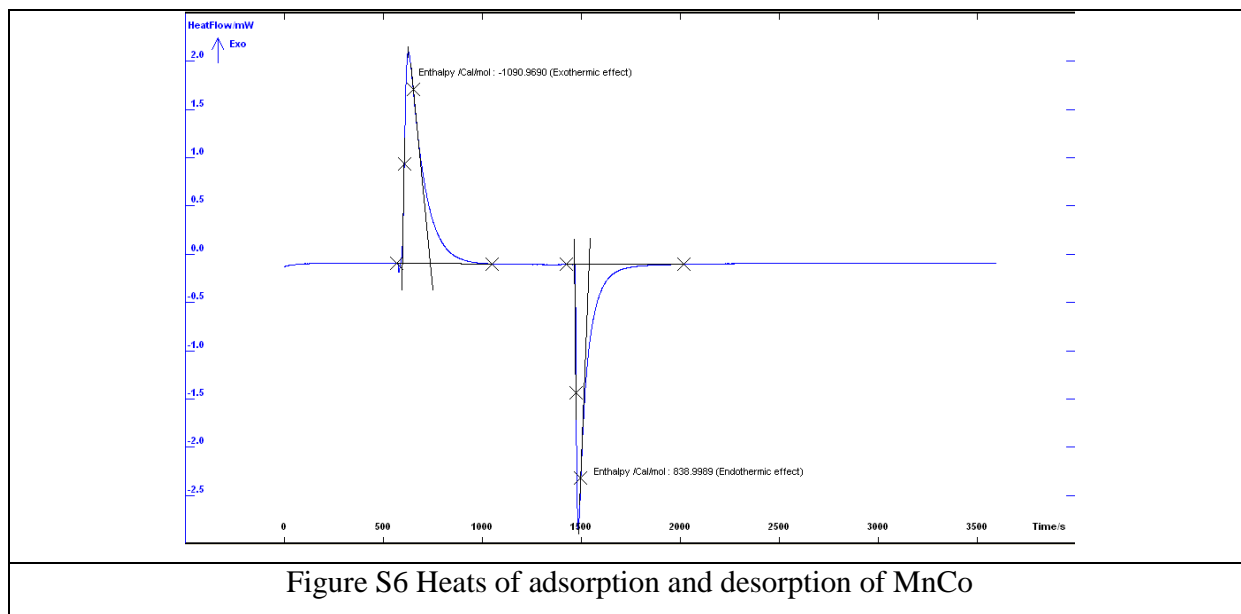


Figure S5. Enthalpy of adsorption and desorption of CuCo at rt and 2 bar pressure.



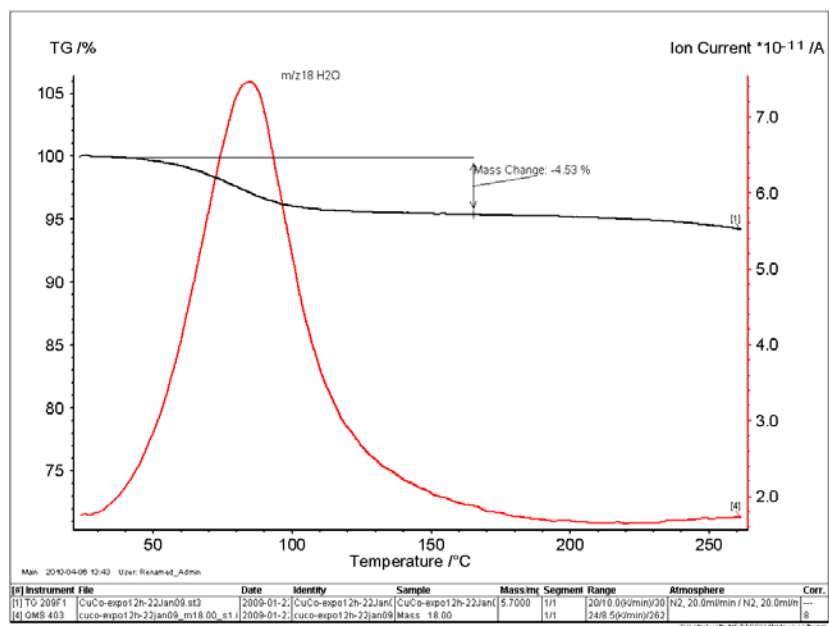


Figure S8. CuCo exposed to air for 12 hrs (after activation at 200C).

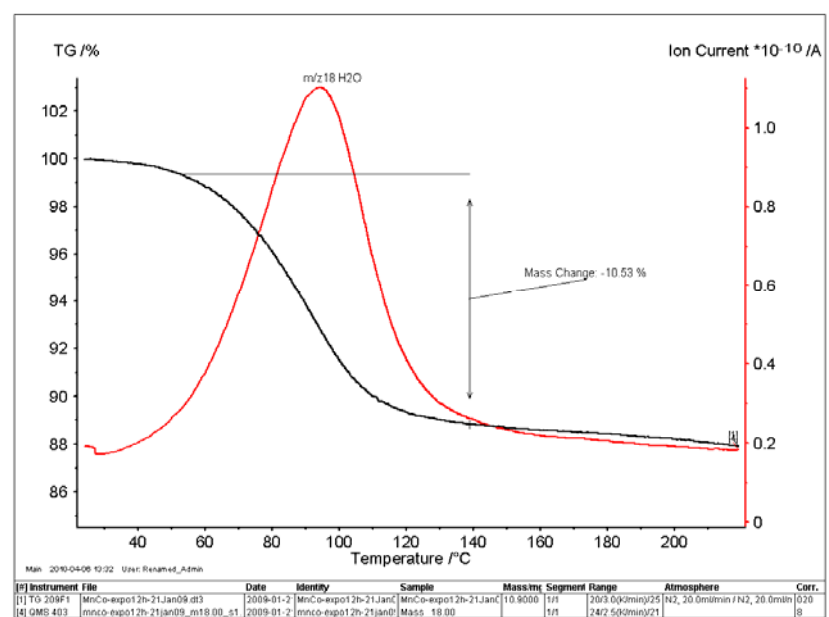


Figure S9. MnCo exposed to air for 12 hrs (after activation at 200C).

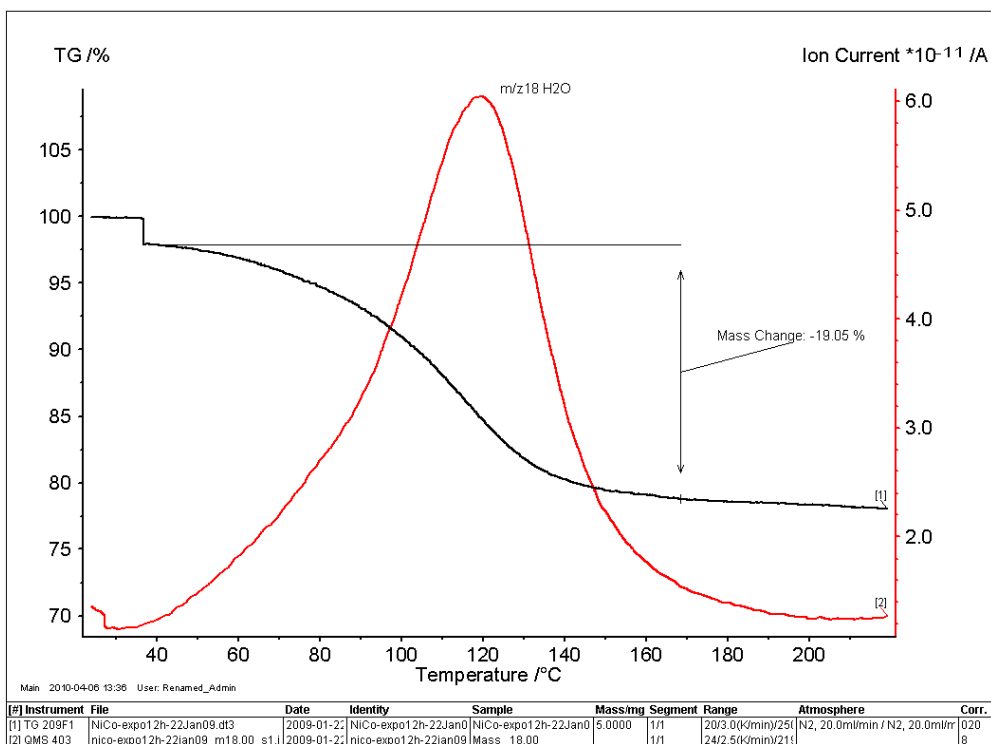


Figure S10. NiCo exposed to air for 12 hrs (after activation at 200C).

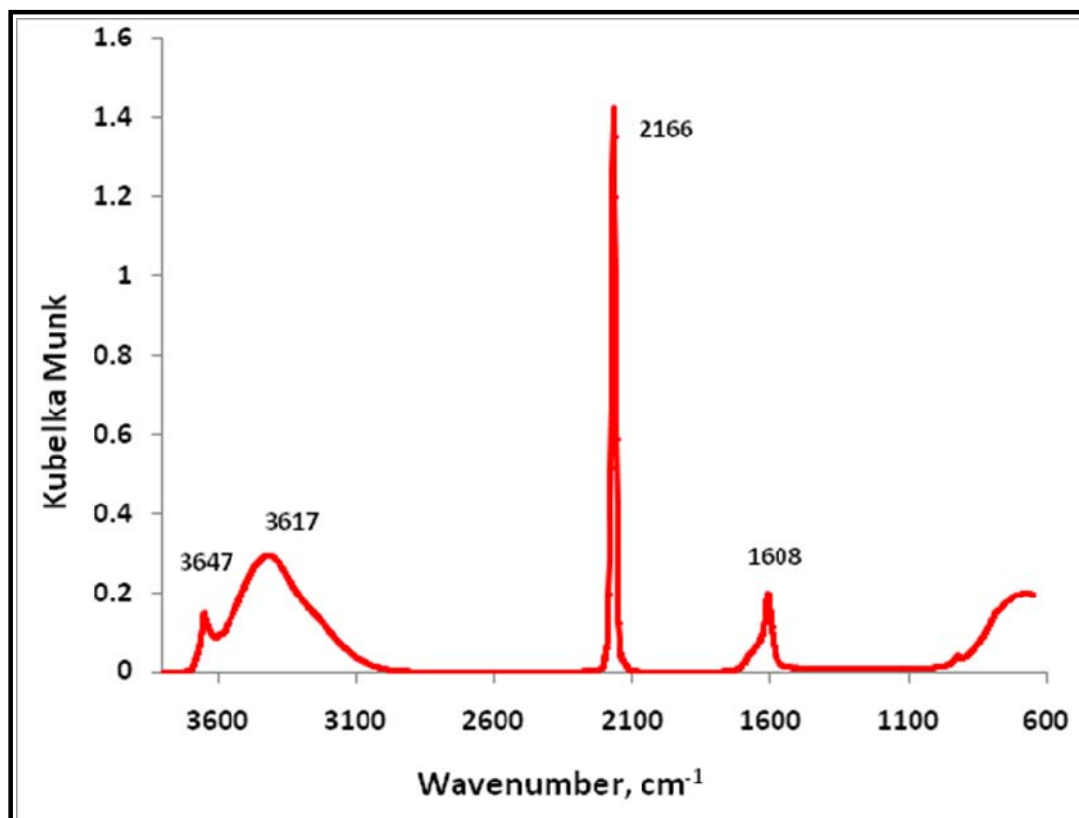


Figure S11. DRIFT spectra of MnCo sample

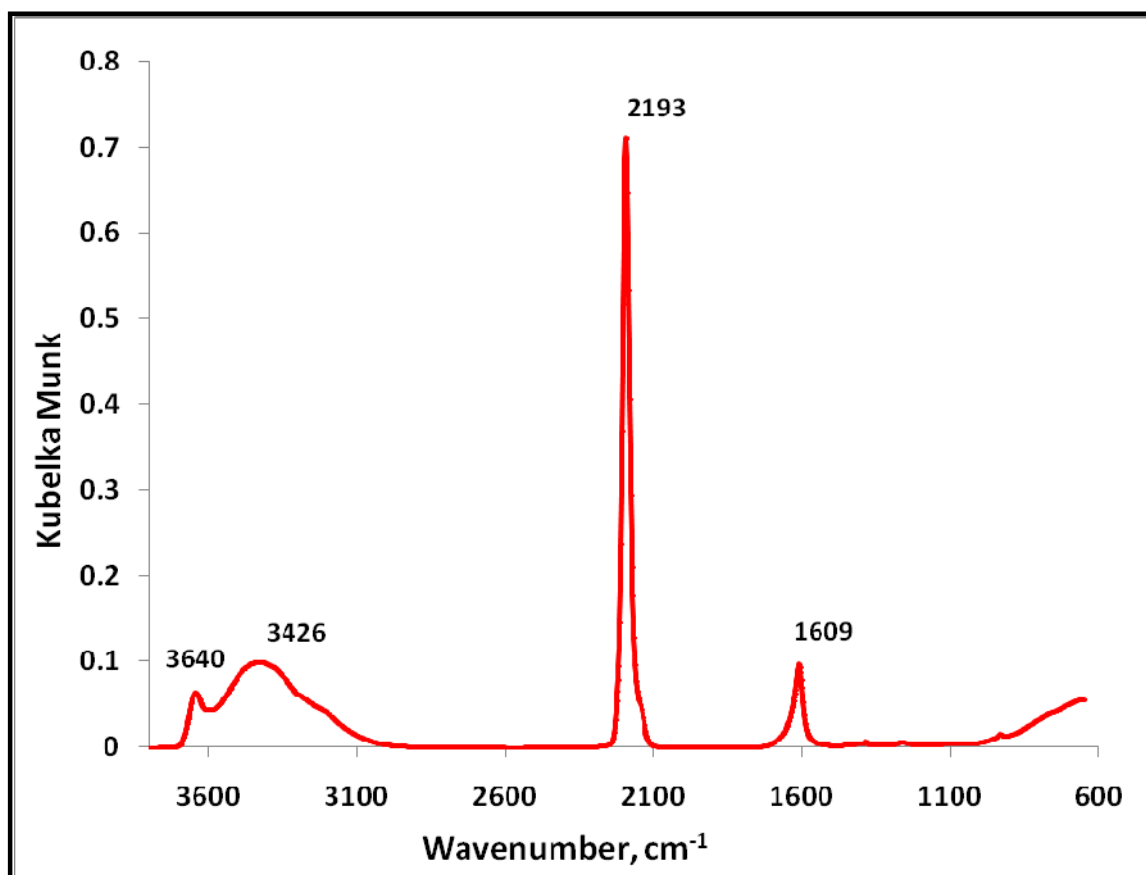


Figure S12. DRIFT spectra of CuCo sample.

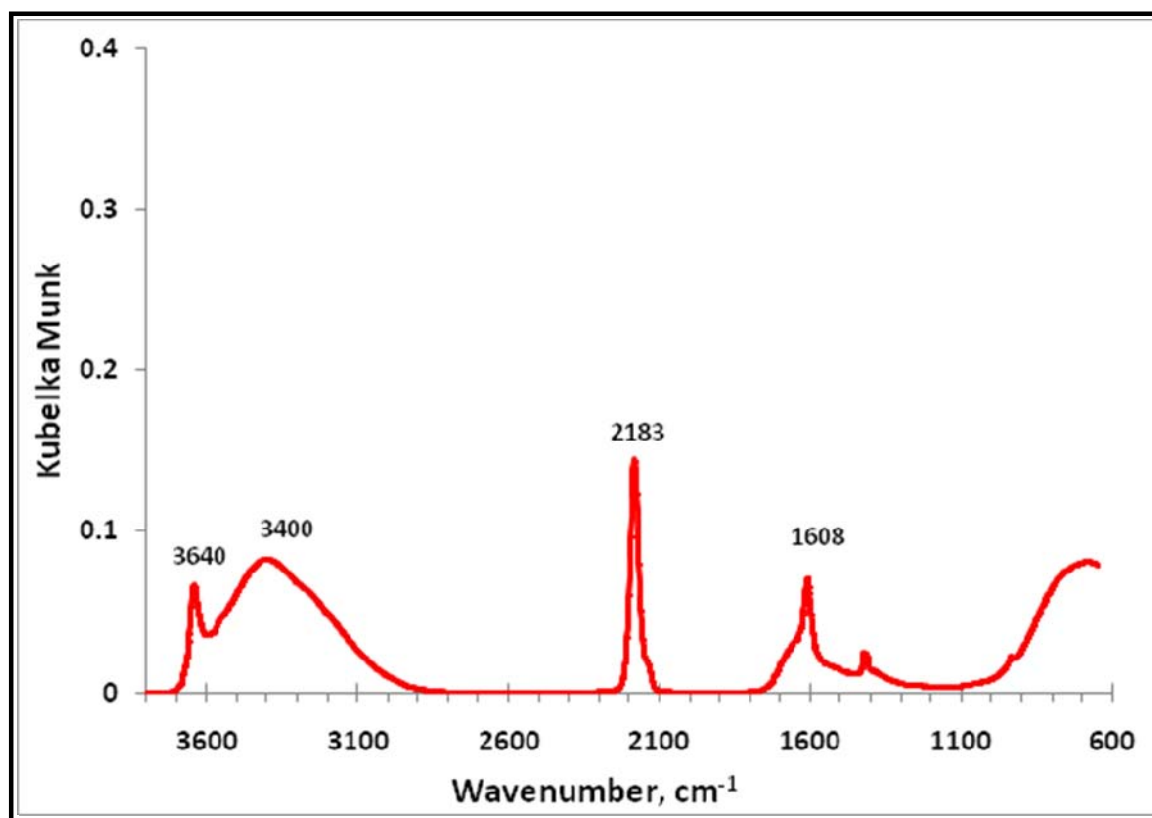


Figure S13. DRIFT spectra of NiCo sample.