

Supporting Information

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Thermal Amorphization of Zeolitic Imidazolate Frameworks**

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Supporting Information

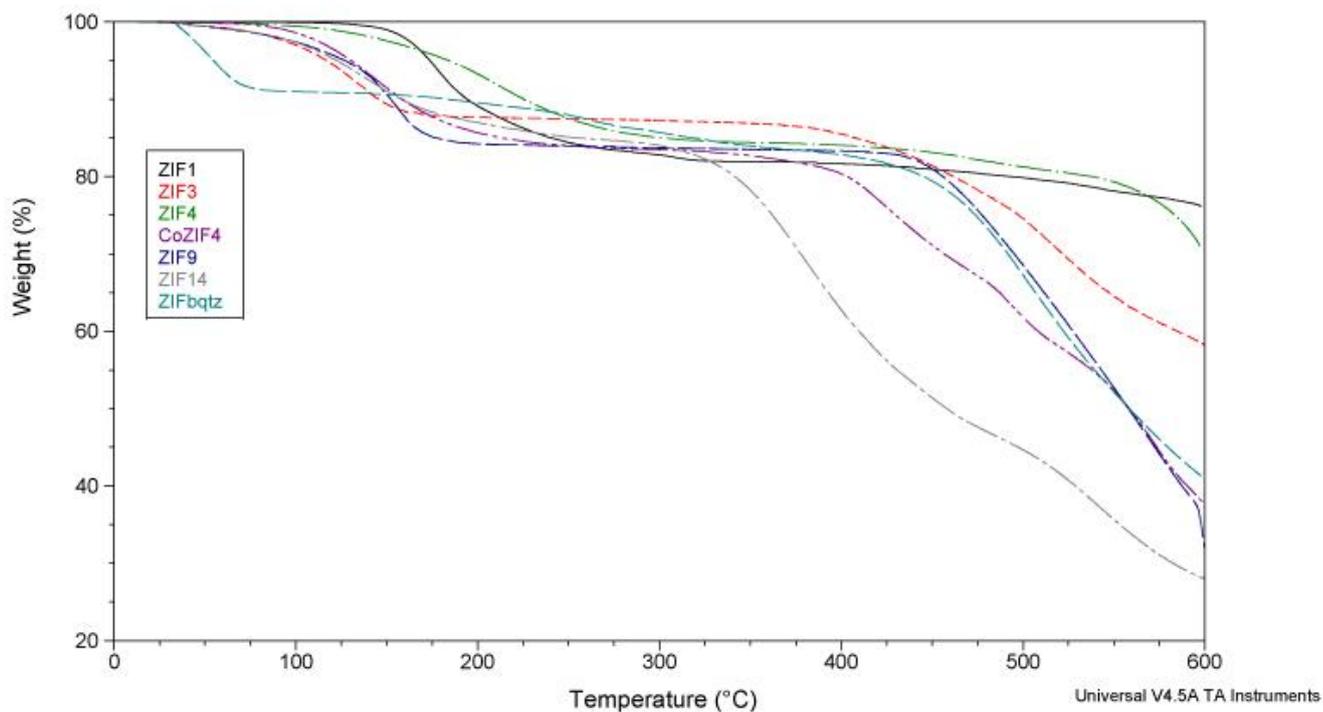
SI-1: Thermogravimetric Analysis

SI-2: Differential Scanning Calorimetry

SI-3: Variable Temperature Powder X-ray Diffraction

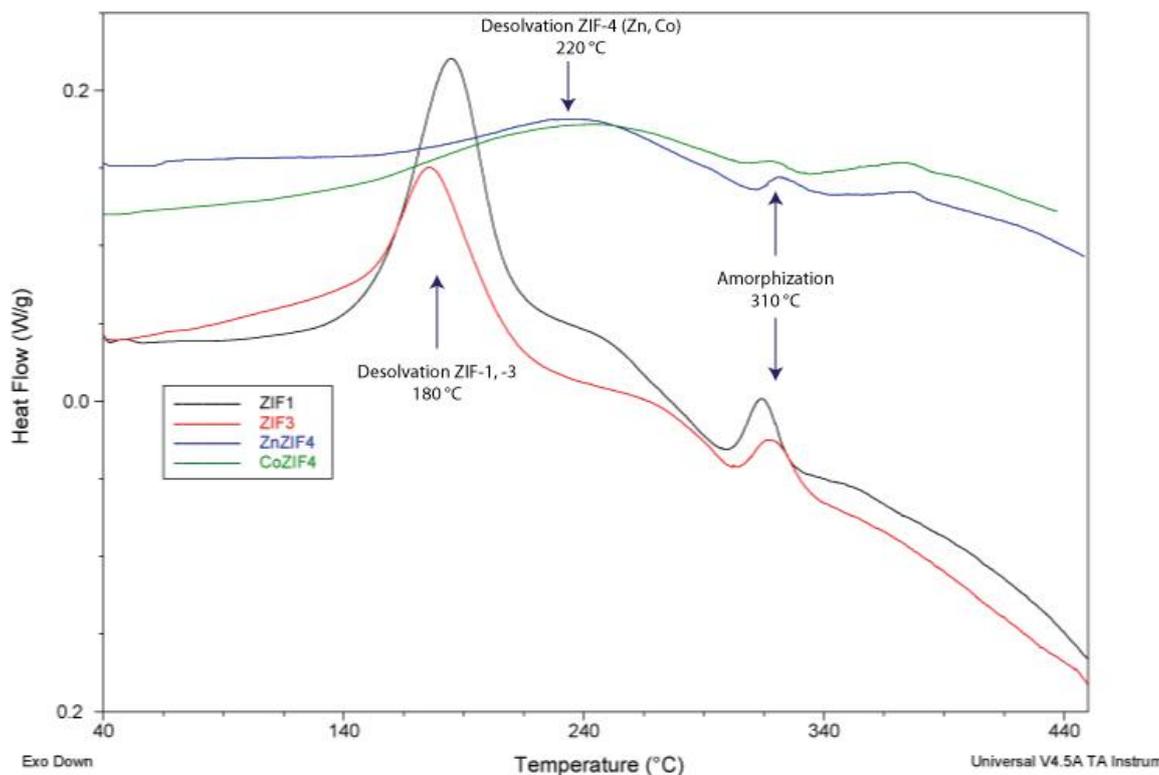
SI-1: Thermogravimetric Analysis

Thermogravimetric analysis (TGA) was performed using a TA instruments Q-500 series thermal gravimetric analyzer, with the sample (~20 mg) held on a platinum pan under a continuous flow of dry N₂ gas. The TGA curves were obtained using a heating rate of 10 °C min⁻¹. The TGA curves for ZIFs 8 and 11 have already been reported in the literature.^[3]



SI-2: Differential Scanning Calorimetry

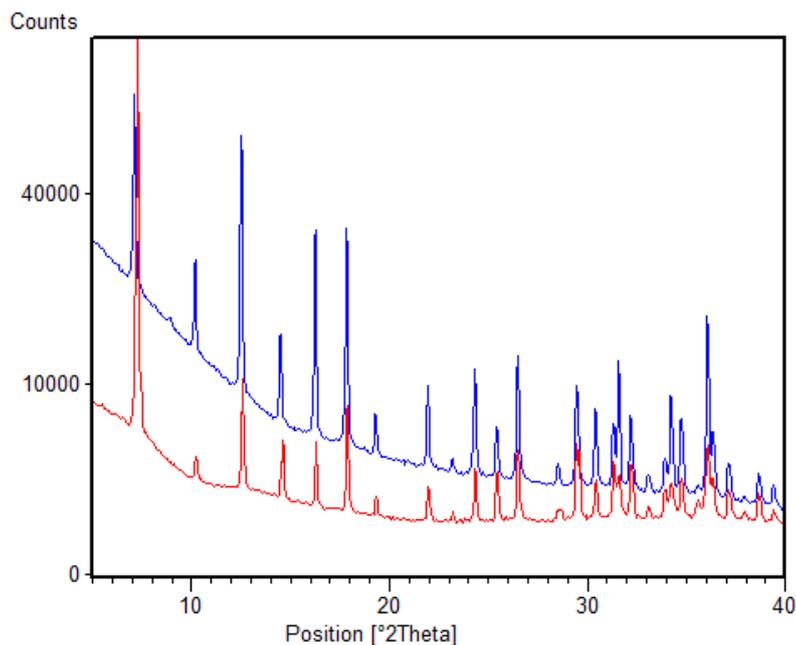
Differential scanning calorimetry (DSC) was performed using a TA instruments Q-2000 series differential scanning calorimeter, with the sample (~7 mg) held on an aluminium pan under a continuous flow of dry He gas. The DSC data was obtained using a heating rate of 5 °C min⁻¹.



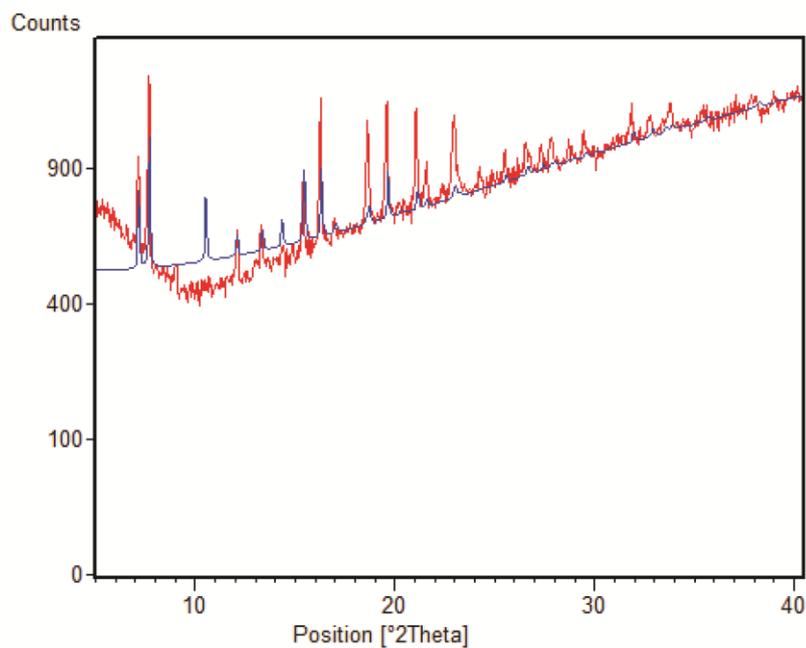
SI-3: Variable Temperature Powder X-ray Diffraction for ZIFs with substituted imidazolates

The PXRD traces of the as synthesized ZIFs (blue), are shown superimposed on those of the ZIFs after heating (red). It is clear that ZIF-9 is in the advance stages of decomposition, whilst excessive peak broadening due to desolvation is seen in the case of ZIF-11.

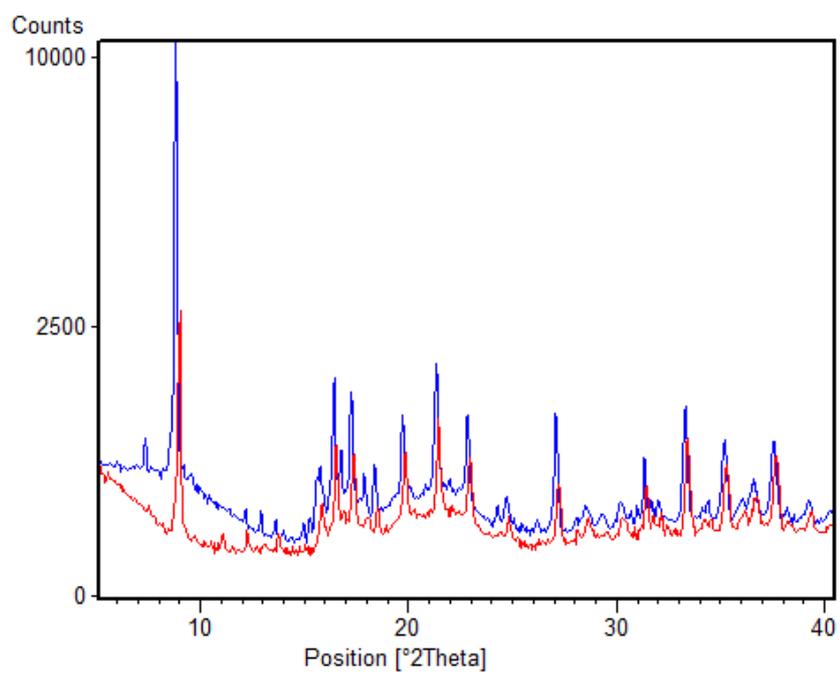
ZIF-8



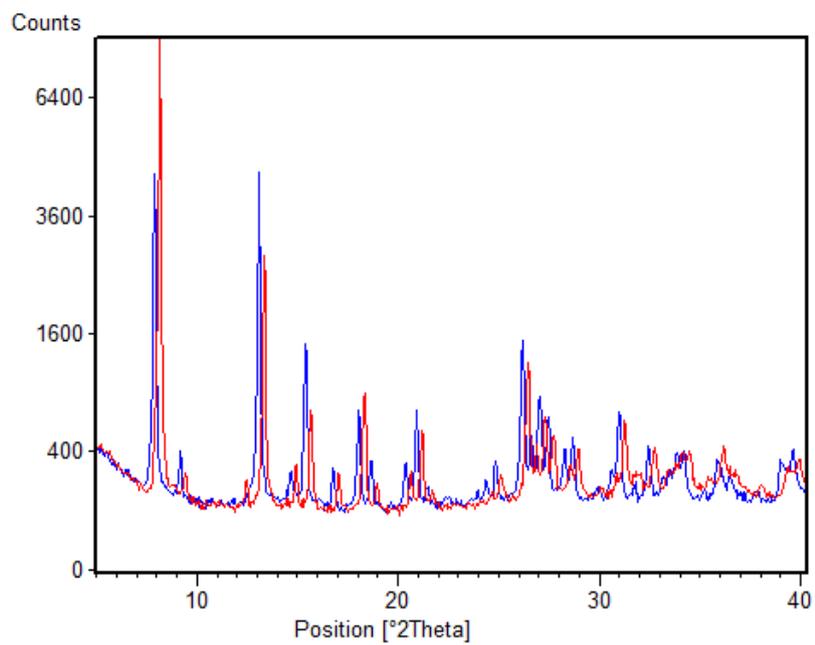
ZIF-9



ZIF-11



ZIF-14



ZIF-βQtz

