Electronic Supplementary Information for Dalton Transactions

Supporting Information

A 2D Cobalt based coordination polymer constructed from benzimidazole and acetate ion exhibiting spin-canted antiferromagnetism

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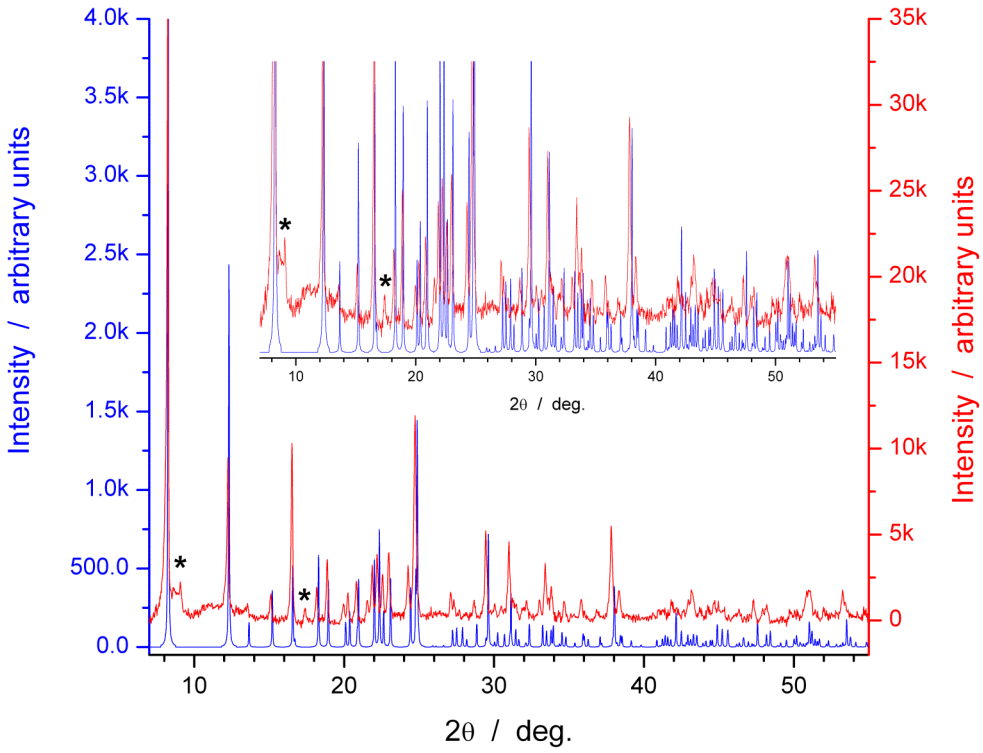
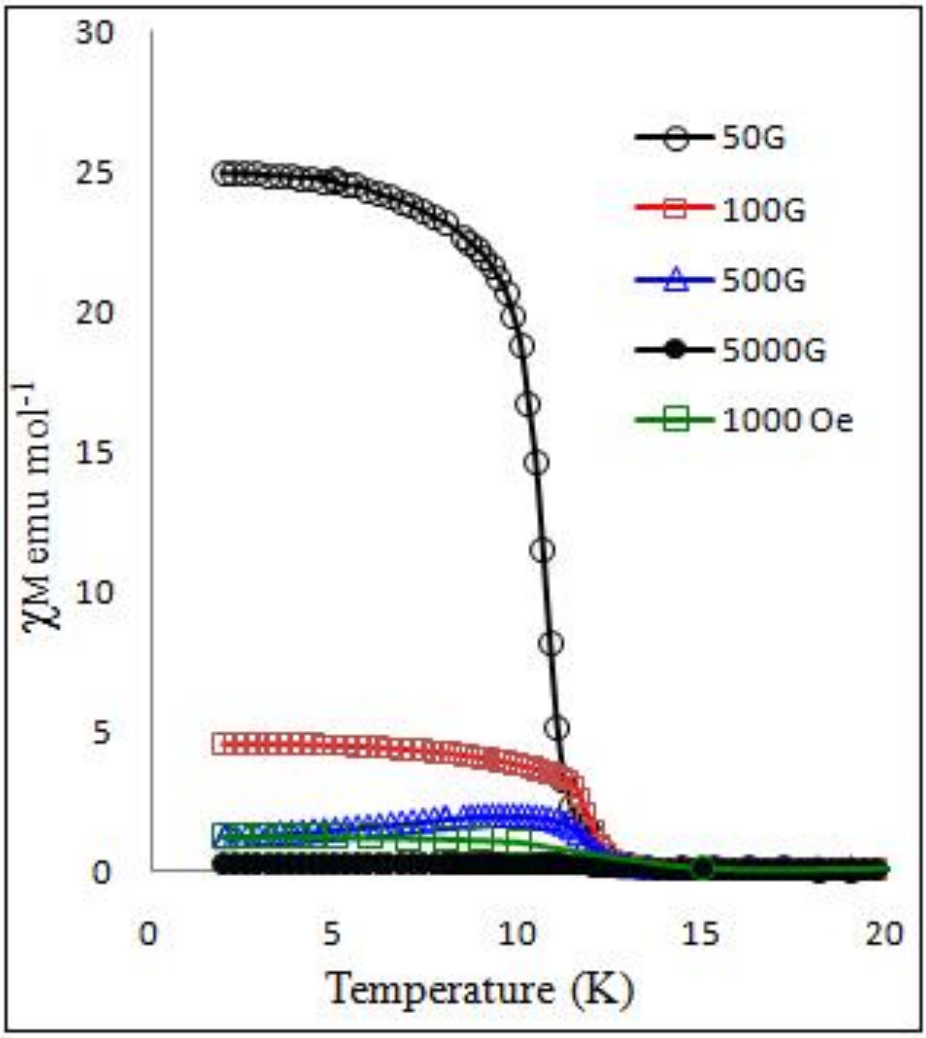
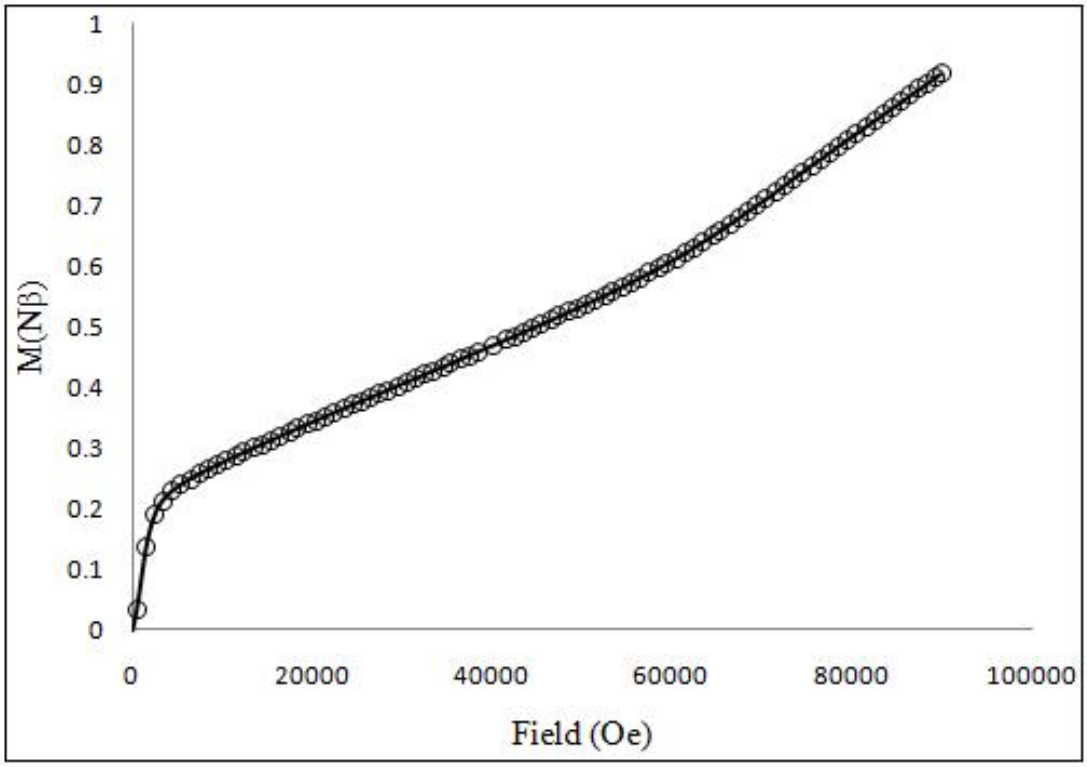


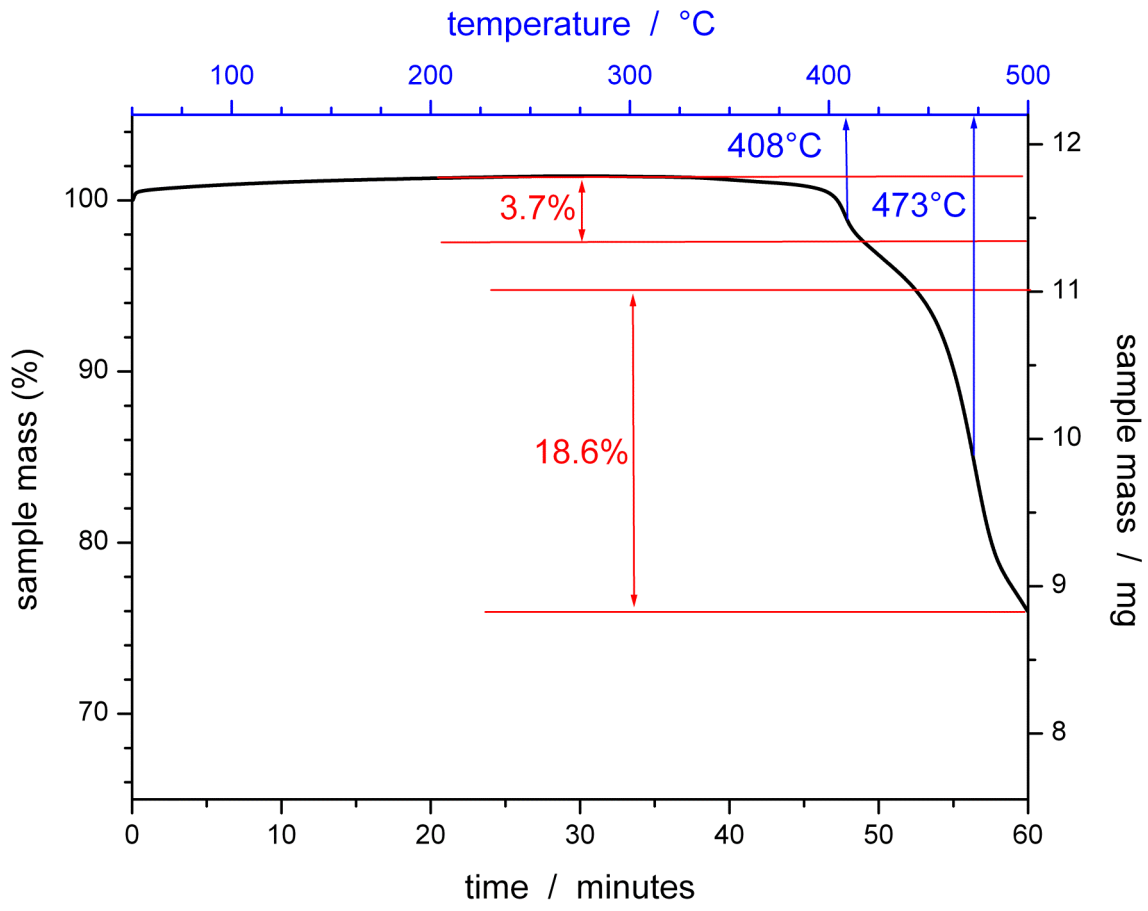
S1. Calculated and experimental powder XRD pattern of **1**. The highlighted peaks at 8º and 17.5º belong to a small amount of impurity present in the sample, estimated to ca. 1-2%.



S2. χ_M vs. T plot at various fields



S3. *M* vs. *H* plot at $T = 2$ K



S4. TGA curve of **1**: two regions of sample decomposition are observed, the first at 408°C which represents a partial degassing of the sample and the second at 473°C which is consistent with the evolution of one molecule of CO_2 per formula unit.