Supplementary Information – Controlling Nickel Nanoparticle Size in an Organic/Metal-Organic Matrix Through the Use of Different Solvents



S1: A:Magnetization vs. applied field for sample 2 (solvent: THF/DCM). **B**: M vs. B/T where once the magnetization from the Langevin component has been subtracted the low temperature data can be scaled onto the 2 K curve. *inset:* Langevin function and a linear component fit to the 290 K data when plotted as M vs. B/T



S2: A:Magnetization vs. applied field for sample 4 (solvent: THF/DCB). **B**: M vs. B/T where once the magnetization from the Langevin component has been subtracted the low temperature data can be scaled onto the 2 K curve. *inset:* Langevin function and a linear component fit to the 290 K data when plotted as M vs. B/T



S3: **A:** Magnetization vs. applied field **B:** A scaled M vs. B/T plot for sample 5 (solvent: THF/PhCN). The fit to the data is a two-term Langevin function.



S4: High Resolution TEM image of Sample 1 showing ordered regions but with no distinct particles observed. *Inset:* Diffraction pattern of the imaged area.



S5: High-resolution TEM image of Sample 1 illustrating that crystalline regions exist but no detailed particle sizes can be calculated.

Electronic Supplementary Material (ESI) for Nanoscale This journal is The Royal Society of Chemistry 2013