

NMR studies into colloidal stability and magnetic order in fatty acid stabilised aqueous magnetic fluids

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Supplementary Information

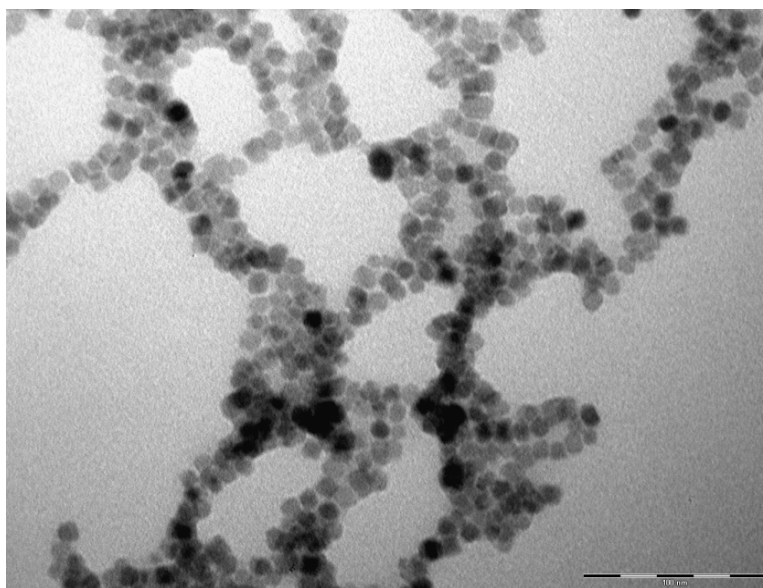


Figure s1. Typical TEM image of a BPC suspension. $d_{\text{TEM}} = 10.6 \pm 1.4$ nm. The scale bar is 100 nm.

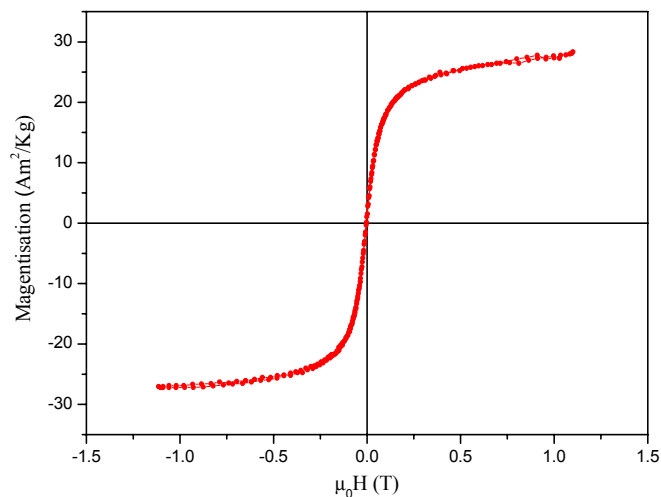


Figure s2. Magnetisation curve of a dried BPC suspension. The data was recorded for a 4.2 mg dry sample using a vibrating sample magnetometer (VSM). $M_s = 27 \text{ emu.g}^{-1}$.

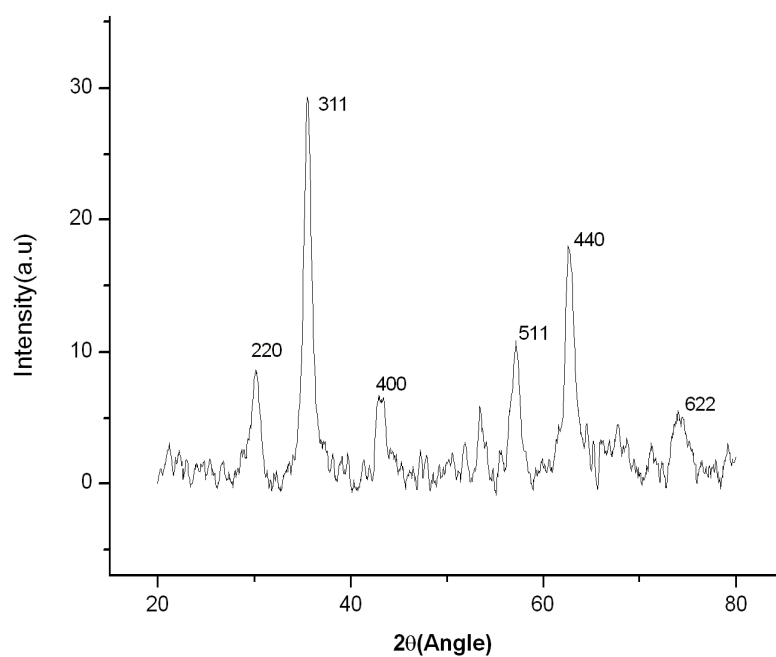


Figure s3. Powder XRD pattern (using Cu K α line) of a dried sample of BPCs.

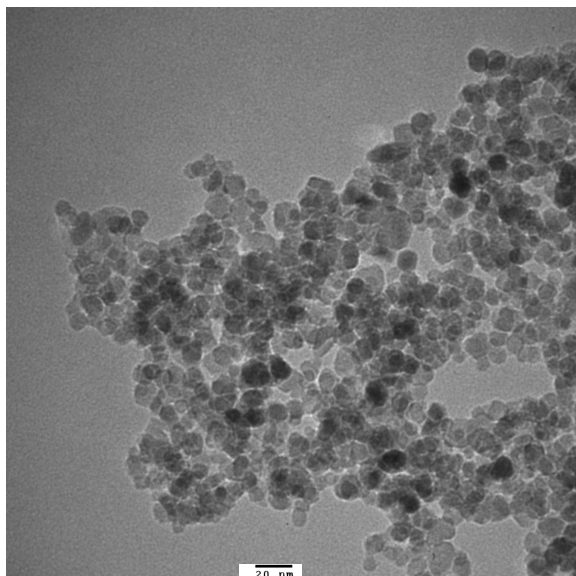


Figure s4. Typical TEM image of the nanoparticles used in the preparation of SPCs. $d_{\text{TEM}} = 11.4 \pm 1.6$ nm. The scale bar is 20 nm.

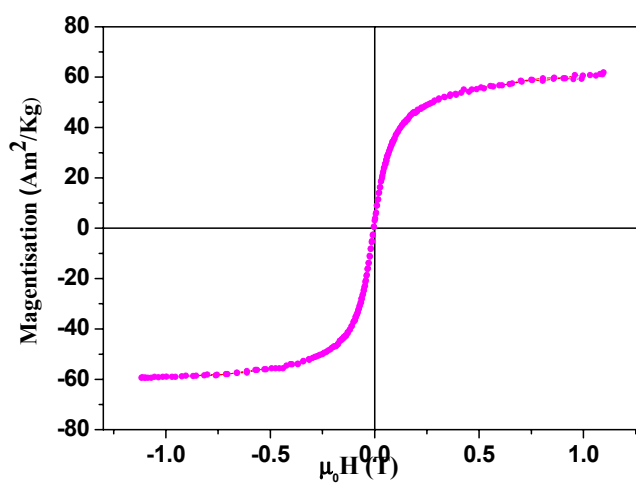


Figure s5. Magnetisation curves of the nanoparticles used in the preparation of SPC suspensions, $d_{\text{TEM}} = 11.4 \pm 1.6$ nm. The data was recorded for a 4.6 mg dry sample using a vibrating sample magnetometer (VSM). $M_s = 58 \text{ emu.g}^{-1}$.

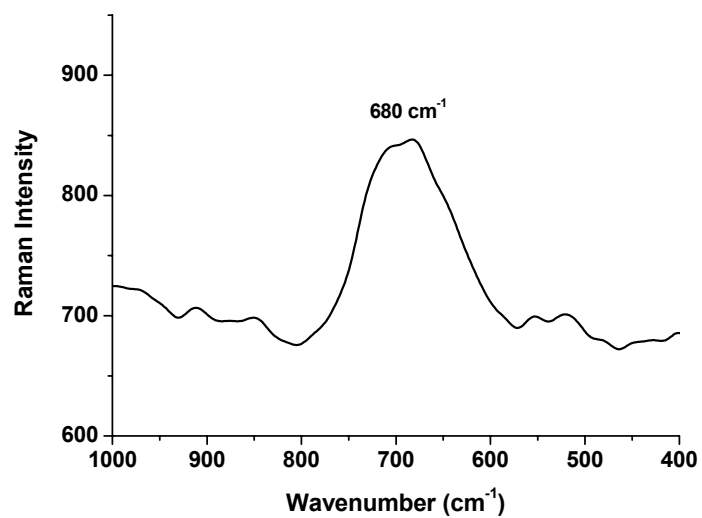


Figure s6. Raman spectrum of nanoparticles used in the preparation of SPC suspensions.