Electronic Supplementary Material (ESI) for Soft Matter
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Electronic Supplementary Information for Soft Matter manuscript:

Phase Equilibrium and Structure Formation in Gold Nanoparticles – Nematic Liquid Crystals Composites: Experiments and Theory

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This two figures shows the formation of the network structure for two cases, illustrating the weak network of low contrast branches for the case of 1%wt of NP-70 (Fig. S1), and a well defined network of high contrast branches for 15% of NP-49 (Fig. S2).

In addition, these figures clearly show that the nucleation rate depends on the type of nanoparticles and on the concentration of the dispersion

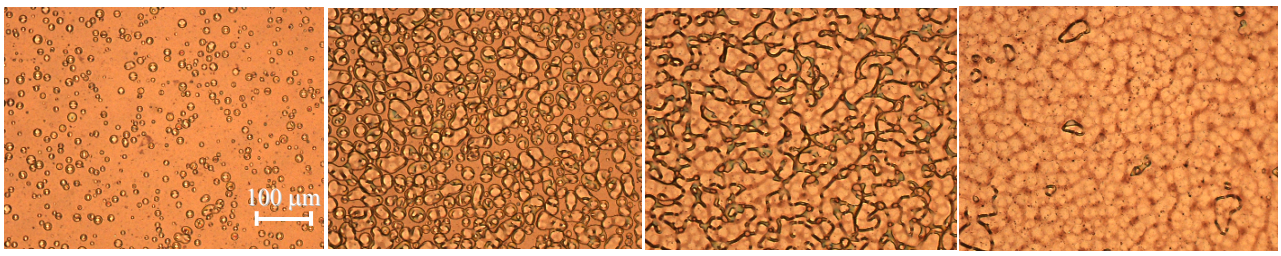

Fig. S1 POM micrographs under parallel polarizers, showing the isotropic to nematic phase transition, cooling at 1°C/min, for dispersions of 1% wt NP-70.

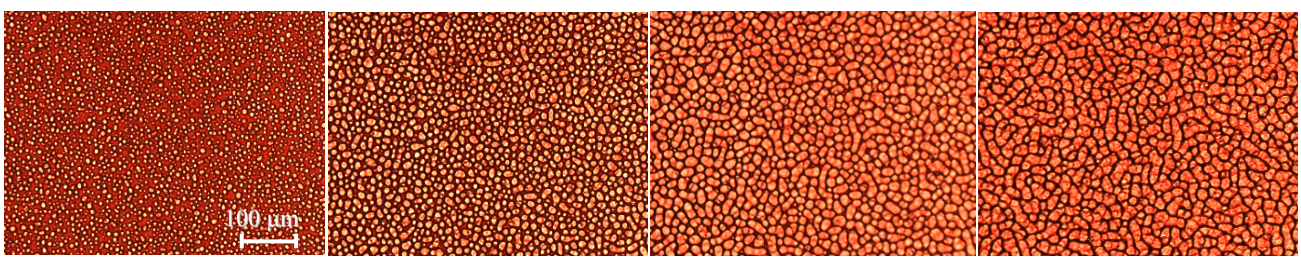

Fig. S2 POM micrographs under parallel polarizers, showing the isotropic to nematic phase transition, cooling at 1°C/min, for dispersions of 15% wt NP- 49.