Supplementary information

Colloidal Stability of Imogolite Nanotube Dispersions: A Phase Diagram Study

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Figure S1. Optical observations of aqueous suspensions of Ge-DWINTs prepared at different volume fractions $\phi$ and observed between crossed polarizers. (a) IS = $10^{-3}$ mol.L$^{-1}$; (b) IS = $10^{-4}$ mol.L$^{-1}$. 
Figure S2. Optical observations of concentrated gel suspensions of Ge-DWINTs prepared at IS = $10^{-1}$ mol.L$^{-1}$.
Figure S3. Effect of volume fraction on the WAXS diagram of Ge-DWINTs suspensions prepared at IS = 10^{-4} mol.L^{-1}. (blue) isotropic liquid (ϕ = 0.26 %); (red) birefringent gel phase (ϕ = 0.99%). Dotted line corresponds to calculated WAXS diagram using eq. 3 (see main text for details) with $N_b = 1$ and $p = 1$. 
Figure S4. WAXS diagram of Ge-DWINTs samples obtained at IS = 10^{-1} \text{ mol.L}^{-1} (\phi = 1.74\%, black curve) and comparison with calculations for different lattice parameters $a$. The dotted line corresponds to the calculated WAXS diagram of individual nanotubes $DW_{1}^{sim}$ ($N_b = 1; p = 1$). (a) $N_b = 2$; (b) $N_b = 3$; (c) $N_b = 4$. All curves have been translated vertically for the sake of clarity. (d) Best fits obtained with $a = 4.5$ nm: $DW_{1-3}^{sim}$ ($N_b = 1, p = 0.1; N_b = 2, p = 0.6; N_b = 3, p = 0.3$); $DW_{1-4}^{sim}$ ($N_b = 1, p = 0.1; N_b = 2, p = 0.4; N_b = 3, p = 0.4; N_b = 4, p = 0.1$).