

Article

Unveiling the Role of Capping Groups in Naphthalene N-Capped Dehydrodipeptide Hydrogels

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Supplementary Materials

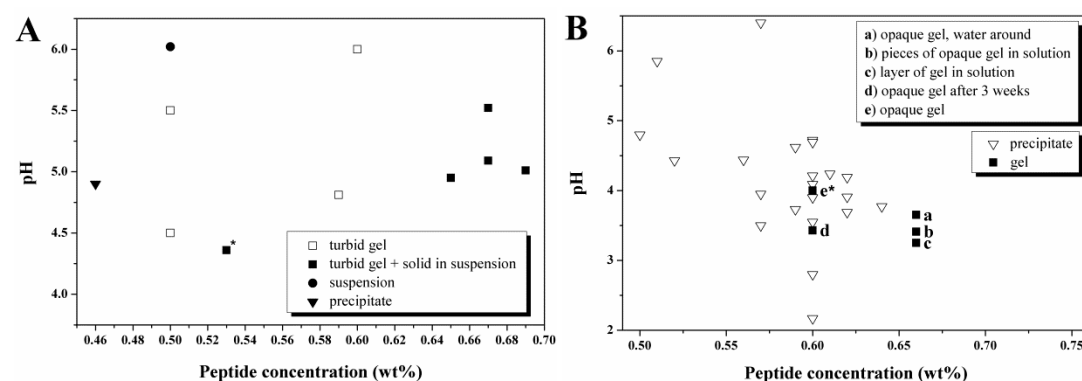


Figure S1. Phase diagrams for hydrogelators obtained by addition of GDL to peptide solutions adjusted to pH circa 10 with NaOH 1M: A) 1b; B) 1c. *approximate pH of the gel (measured with indicator paper).

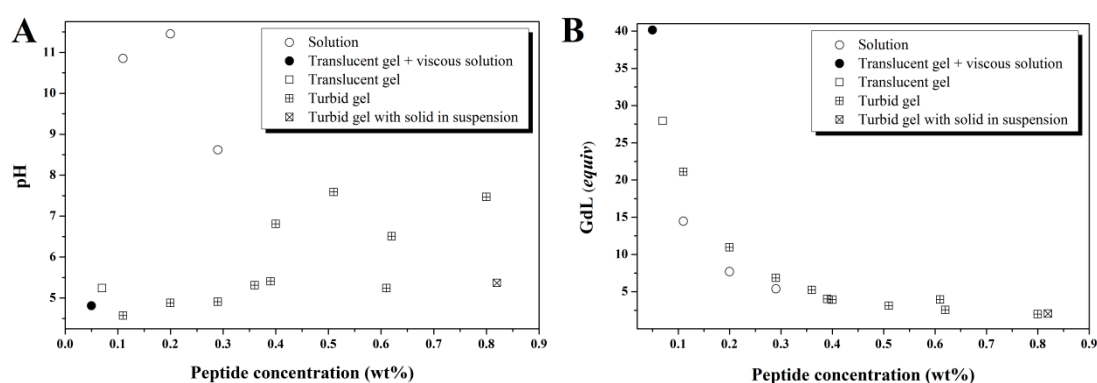


Figure S2. Phase diagrams for dehydridepeptide **2a**, obtained by addition of GdL to alkaline solutions of this peptide (4 % (v/v) of NaOH 1 M); A) Correlation between pH and peptide concentration; B) Correlation between equivalents of GdL and peptide concentration.

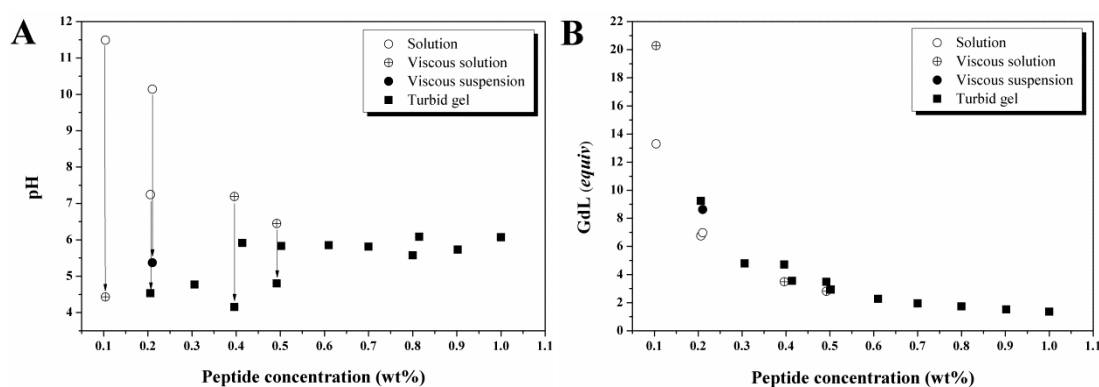


Figure S3. Phase diagrams for dehydridepeptide **2b**, obtained by addition of GdL to alkaline solutions of this peptide (4 % (v/v) of NaOH 1 M); A) Correlation between pH and peptide concentration (arrows represent the drop in pH by addition of more GdL to the same solution); B) Correlation between equivalents of GdL and peptide concentration.

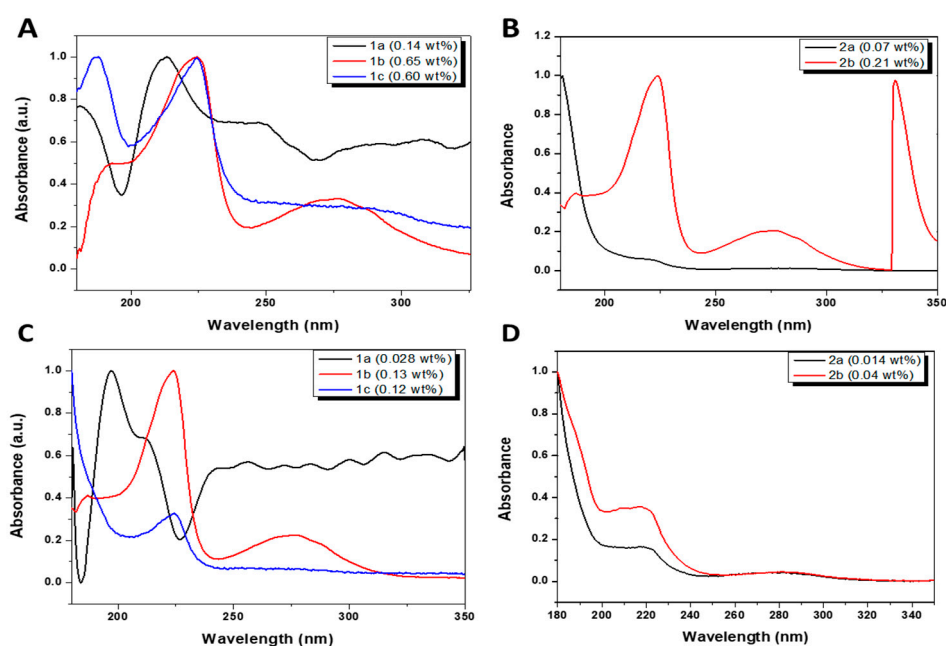


Figure S4. UV-VIS absorption spectra for hydrogelators **1a-c** and **2a,b** in gel phase at the same concentration and pH as that deployed for the CD measurements: A) gels **1a-c**; B) gels **2a,b**. UV-VIS absorption spectra for hydrogelators **1a-c** and **2a,b** in solution, at concentrations well below the CGC: c) gels **1a-c**; D) gels **2a,b**.

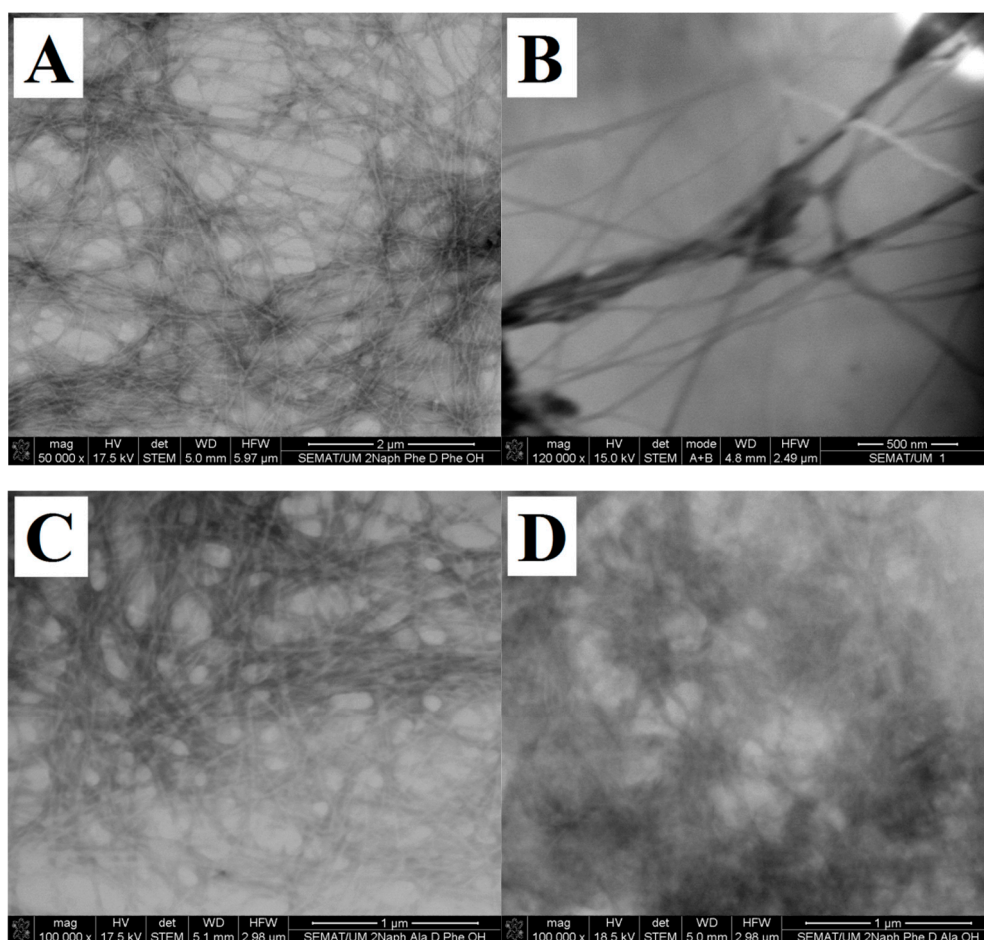


Figure S5. STEM images: A,B) **1a** (gel at 0.5 wt% in phosphate buffer, pH 8), scale A) 2 μ m, B) 500 nm; C) **1b** [gel at 0.77 wt%] scale 1 μ m; D) **1c** [gel at 0.6 wt%], scale 1 μ m.

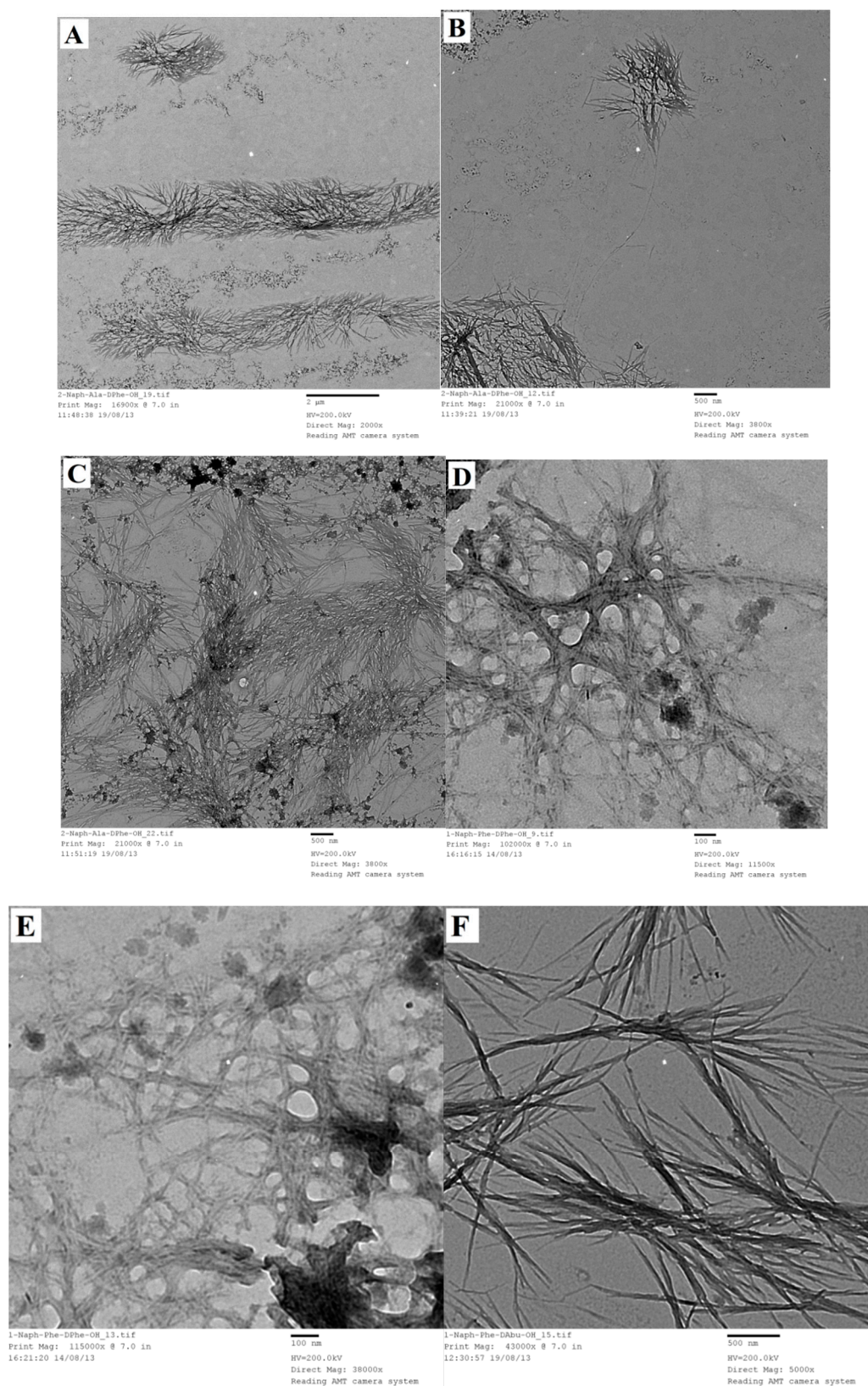


Figure S6. TEM images: A,B,C) **1b** (0.65 wt%), scale A) 2 μm; B,C) 500 nm; D,E) **2a** (0.014 wt%), scale 100 nm; F) **2b** (0.040 wt%), scale 500 nm.

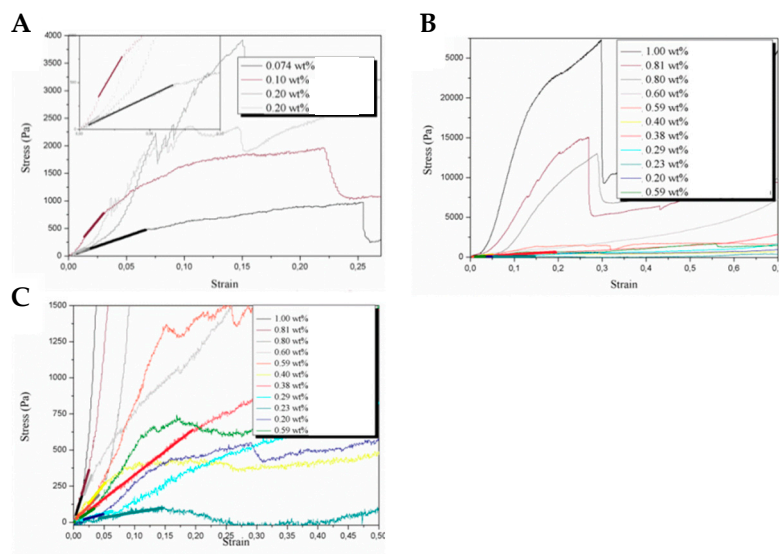


Figure S7. Stress-strain response curves for penetration tests for hydrogels at $25 \mu\text{m s}^{-1}$ plunger speed.: A) gel **2a**; B) gel **2b**; C) Zoom of the linear regime of the stress-strain response curve of compounds **2b**.