Supplementary Information

## Impact of Gelation Method on Thixotropic Properties of Phenylalanine-Derived Supramolecular Hydrogels

Elena Quigley, Jade Johnson, Wathsala Liyanage, and Bradley L. Nilsson\*

Department of Chemistry, University of Rochester, Rochester, NY 14627-0216, USA.

E-mail: bradley.nilsson@rochester.edu

Fax: +1 585 276-0205; Tel. +1 585 276-3053



**Figure S1.** Strain sweep of Fmoc-3F-Phe hydrogel (5 mM) formed by the solvent exchange method of dilution from DMSO into water.



**Figure S2.** Strain sweep of Fmoc-3F-Phe hydrogel (5 mM) formed by pH adjustment via GdL hydrolysis.



Figure S3. Strain sweep of Fmoc-3F-Phe hydrogel (15 mM) formed by pH adjustment via GdL hydrolysis.



**Figure S4.** Strain sweep of Fmoc-F5-Phe hydrogel (5 mM) formed by the solvent exchange method of dilution from DMSO into water.



Figure S5. Strain sweep of Fmoc-F5-Phe hydrogel (5 mM) formed by pH adjustment via GdL hydrolysis.



Figure S6. Strain sweep of Fmoc-F5-Phe hydrogel (15 mM) formed by pH adjustment via GdL hydrolysis.



**Figure S7.** An image of an Fmoc-F5-Phe 5 mM gel which was set beforehand and transferred to the plate. This image is taken before the foot is lowered and the gap set.



**Figure S8.** Representative frequency sweep data of Fmoc-3F-Phe hydrogel (5 mM) formed by the solvent switch method of dilution from DMSO into water.



**Figure S9.** Representative frequency sweep of Fmoc-3F-Phe hydrogel (5 mM) formed by pH adjustment via GdL hydrolysis



**Figure S10.** Representative frequency sweep of Fmoc-F5-Phe hydrogel (5 mM) formed by the solvent switch method of dilution from DMSO into water.



**Figure S11.** Representative frequency sweep data of Fmoc-F5-Phe hydrogel (5 mM) formed by pH adjustment via GdL hydrolysis.



**Figure S12.** Individual dynamic time sweep date for three separate runs of Fmoc-3F-Phe hydrogels formed from DMSO dilution into water and allowed to form *in situ* on the rheometer statge. Run 1 is pink (dark G', light G''), Run 2 is green (dark G', light G''), Run 3 is blue (dark G', light G'')



**Figure S13.** Time sweep of Fmoc-3F-Phe DMSO gel which was allowed to mature in tube before being transferred to the rheometer stage.



**Figure S14.** Time sweep of Fmoc-F5-Phe DMSO gel which was allowed to mature in tube before being transferred to the rheometer stage.