Effects of Chain Length on Oligopeptide Hydrogelation

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Figure S1. Tryptophan isotropic emission intensity $I_{cum}$ (A) and tryptophan anisotropy $r$ (B) for the EAW6:OAW6 peptide pair. (A) OAW6 solution (red dots); immediately after mixing (blue); 12 hours after mixing (cyan). (B) OAW6 solution (red dots); immediately after mixing (blue); 12 hours after mixing (cyan). No significant decrease in tryptophan’s emission intensity or anisotropy was observed even after 12 hrs of mixing at 25°C. Anisotropy did not change significantly, but there was slight increase in Rayleigh scattering at lower wavelength after mixing.
Figure S2. Tryptophan anisotropy $r$ upon gelation of 6:6 (blue), EAW10:OAW10 (black), and EAW14:OAW14 (red) pairs at 25 °C. (A) Initial anisotropy immediately after mixing; (B) Anisotropy after the completion of the gelation. Equilibrium values after 12 hrs for EAW6:OAW6, 7 hrs for EAW10:OAW10 pair; equilibrium values for EAW14:OAW14 have been reached after 2 hrs (see also Figs. 1, 4 and 5). Rayleigh scattering was very high at lower wavelengths (below 315 nm).
Figure S3. \( I(q) \) vs \( q \) over time during the gelation process of (A) EAW6:OAW6 pair (15 min, purple; 30 min, black; 6 hours, green; 12 hours, red); (B) EAW10:OAW10 pair: (15 min, purple; 1 hour, black; 5 hours, green; 8 hours, red; 24 hours, blue); (C) EAW14:OAW14 pair (15 min, purple; 1 hour, black; 7 hours, green; 24 hours, red).