Supporting Information to “Encapsulating [FeFe]-hydrogenase model compounds in peptide hydrogels dramatically modifies stability and photochemistry”

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Full reference 48:

**Figure S1.** Comparison between a fresh (2 hours) and 13 day-old gel sample containing (μ-
S(CH₂)₃S)Fe₂(CO)₄(PMe₃)₂
**Figure S2.** Comparison of FTIR spectra for ($\mu$-S(CH$_2$)$_3$S)Fe$_2$(CO)$_4$(PMe$_3$)$_2$ in the gel phase, in the pre-gel solution (without Fmoc-LL gelator) and the gel without the metal carbonyl. Dramatic line broadening is observed for the carbonyl stretch region in the pre-gel solution. However, this solution is unstable and precipitates out completely within 20 minutes of preparation by sonication.
**Figure S3.** Peak heights in the amide I (~1600-1700 cm\(^{-1}\)) and CO stretch region (~1850-2050 cm\(^{-1}\)) of the IR spectrum for \((\mu-S(CH_2)_3S)Fe_2(CO)_4(PMe_3)_2\) in the gel phase. The decrease in the CO region occurs at a different temperature from the decrease in the amide I region. The peak at 1590 cm\(^{-1}\) is attributed to COO\(^-\) absorption from the deprotonated C-termini of Fmoc-LL.
**Figure S4.** Fluorescence emission spectra of an Fmoc-LL hydrogel at various temperatures. The dashed line represents the emission in methanol at 20 °C. The inset shows the intensity at 386 nm as function of temperature.