

Enzyme degradable star polymethacrylate/silica hybrid inks for 3D printing of tissue scaffolds

^{1,2} Anna Li Volsi, ²Francesca Tallia, ²Haffsah Iqbal, ²Theoni K. Georgiou, ²Julian R. Jones

¹Department of Chemical Engineering, Imperial College London, SW7 2AZ London, UK

² Department of Materials, Imperial College London, SW7 2AZ London, UK

*Corresponding author: julian.r.jones@imperial.ac.uk

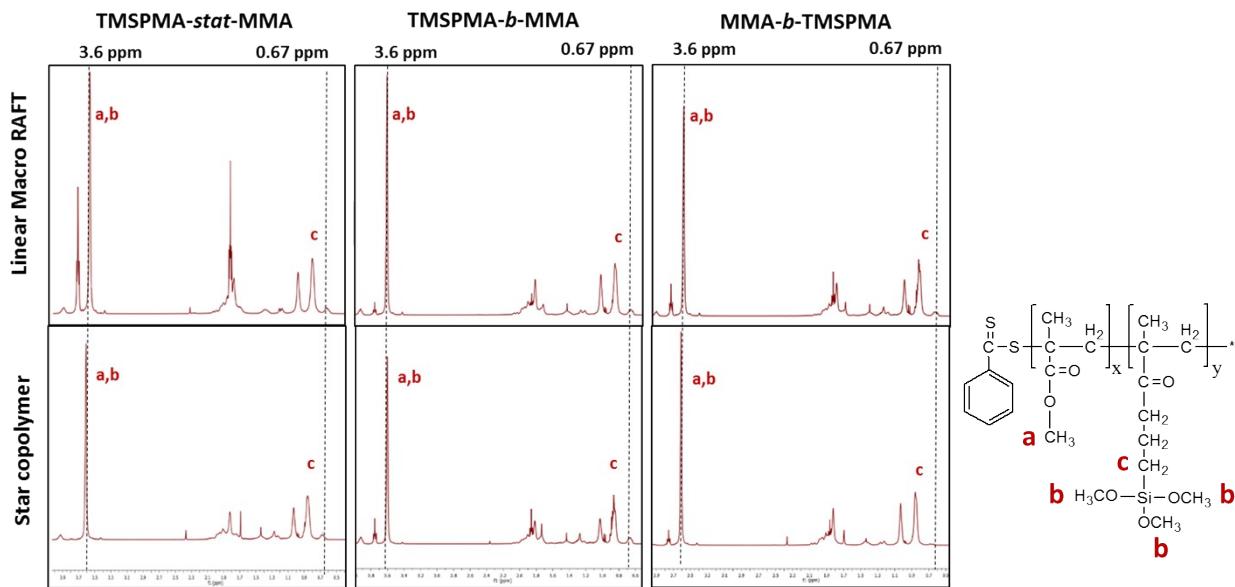
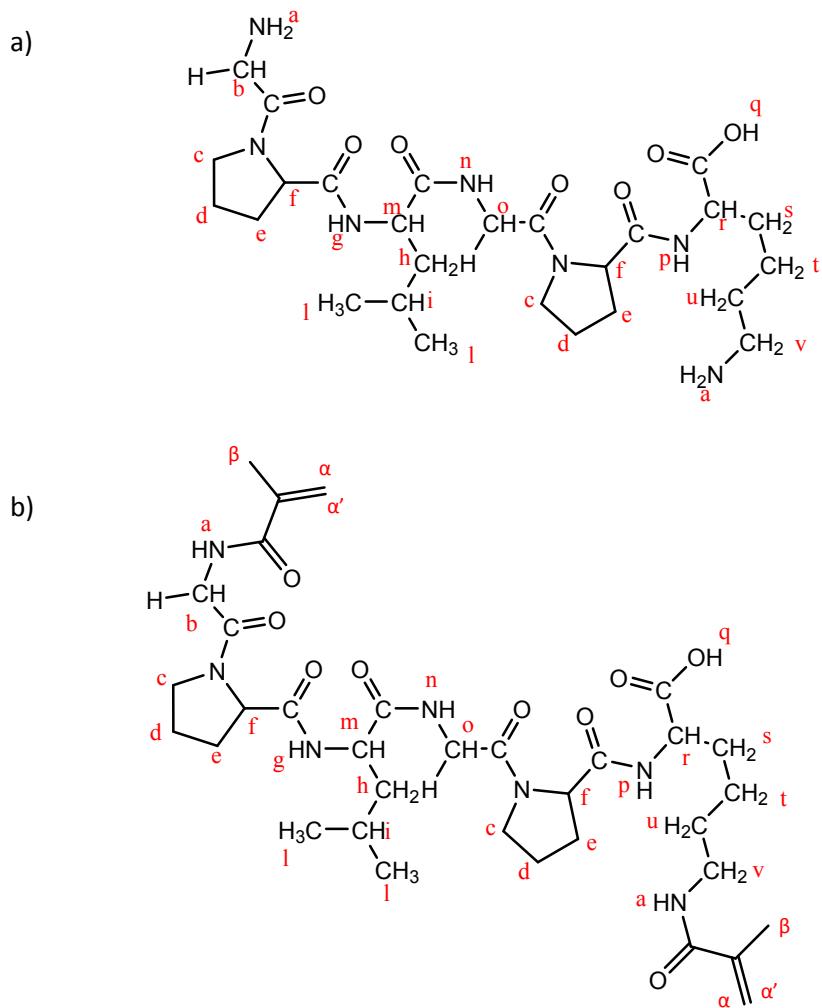


Figure S1. ¹H NMR characterization of poly(MMA-*b*-TMSPMA), poly(TMSPMA-*b*-MMA) and poly(MMA-stat-TMSPMA) linear arms (top spectra) and corresponding star copolymers (bottom spectra). The comparison of the peaks at 3.6 ppm (methoxy group, a&b) and 0.67 ppm (Si-CH_2- , c) confirmed that the molar ratios were close to our targeted value (9 mol % of TMSPMA).



Scheme S1. Chemical structures of: (a) the starting di-amino ended peptide ($\{\text{GLY}\}\{\text{PRO}\{\text{LEU}\}\{\text{GLY}\}\{\text{PRO}\{\text{LYS}\}\}$); and (b) MaCh-peptide.

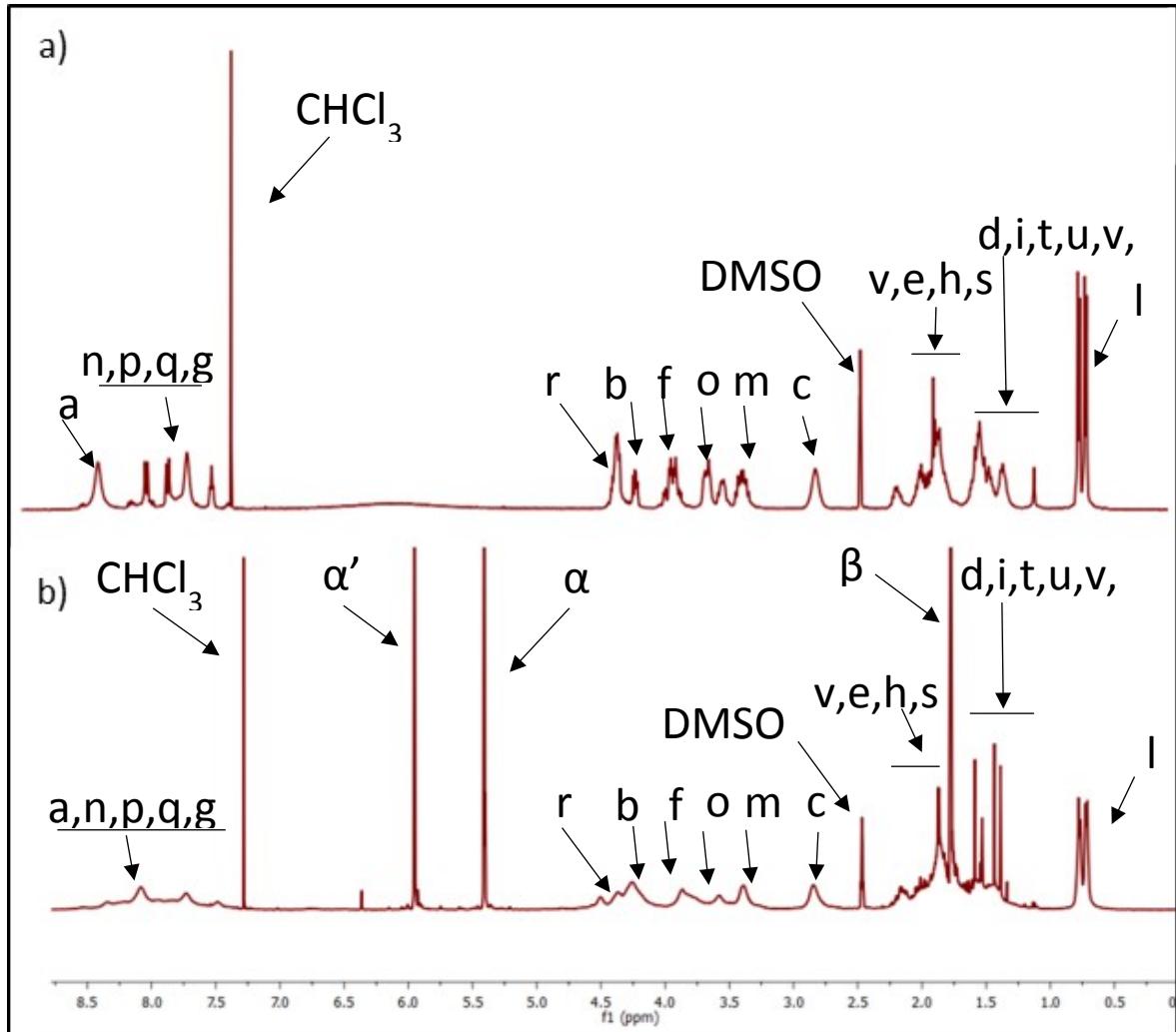


Figure S2. ¹H NMR spectra of starting peptide (a) in CDCl₃/DMSO and of MaCh-peptide (b) in CDCl₃.