

Electronic Supporting Information

Chromium-assisted Immobilization of N-isopropylacrylamide-based Methacrylic acid Copolymers to Collagen and Leather Surfaces: the Thermo-responsive Behaviour

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Characterization of NIPAM-co-Methacrylic acid polymer by spectroscopic study

Success of the polymerization reaction was confirmed by spectroscopic study such as ^1H NMR and FTIR spectra. Fig. 1 (A) presents the ^1H NMR spectrum after polymerization of NIPAM and methacrylic acid. Fig. (B) presents the ^1H NMR of NIPAM monomer. After the polymerization reaction, the peak for olefin proton at 5.5 ppm and 6 ppm disappeared and characteristic new broad peaks for aliphatic protons of the polymer appeared at 1.4 – 2.2 ppm. In FTIR spectra (Fig. – inset), the peak for carboxylate and amide groups of the polymer appeared at 1734 and 1637 cm^{-1} respectively.

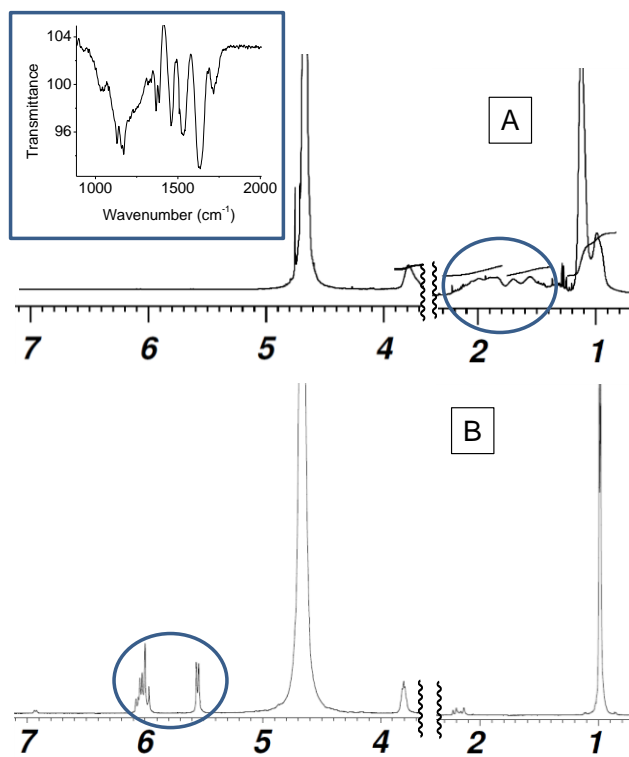


Fig.S 1. (A) ^1H NMR spectrum after polymerization of NIPAM and methacrylic acid, (B) ^1H NMR spectrum of NIPAM monomer. Inset: FTIR spectrum of NIPAM-co-methacrylic acid polymer.

