

Supplementary Information

Thermoresponsive polymer coated gold nanoparticles: From MADIX/RAFT copolymerization of *N*-vinylpyrrolidone and *N*-vinylcaprolactam to salt and temperature induced nanoparticle aggregation

Samarendra Maji,^a Zhiyue Zhang,^b Lenny Voorhaar,^a Sophie Pieters,^c Birgit Stubbe,^c Sandra Van Vlierberghe,^c Peter Dubruel,^c Bruno G. De Geest^{b*} and Richard Hoogenboom,^{a*}

^a Supramolecular Chemistry Group, Department of Organic and Macromolecular Chemistry, Ghent University, Krijgslaan 281 S4, 9000 Ghent, Belgium.

^b Faculty of Pharmaceutical Sciences, Department of Pharmaceutics, Ghent University, Ottergemsesteenweg 460, 9000 Ghent, Belgium.

^c Polymer Chemistry and Biomaterials Group, Department of Organic and Macromolecular Chemistry, Ghent University, Krijgslaan 281 S4, 9000 Ghent, Belgium.

* E-mail: richard.hoogenboom@ugent.be (R.H.); br.degeest@ugent.be (B.G.D.G.)

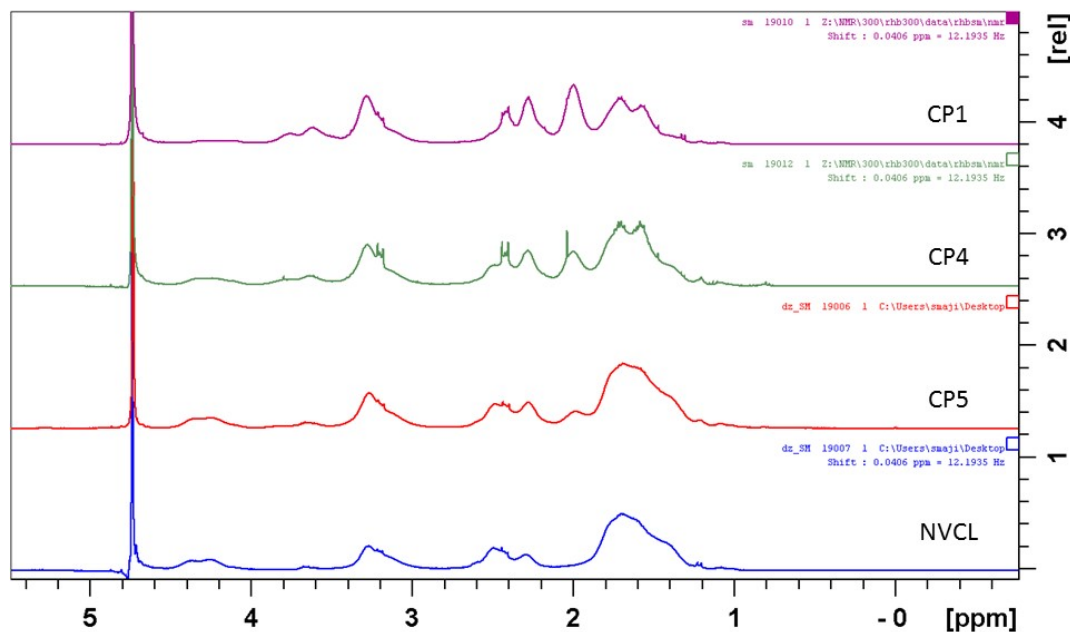


Fig. S1 ¹H NMR spectra of PNVL (bottom) and P(NVL-*stat*-NVP) (CP5) (top), measured in D₂O.

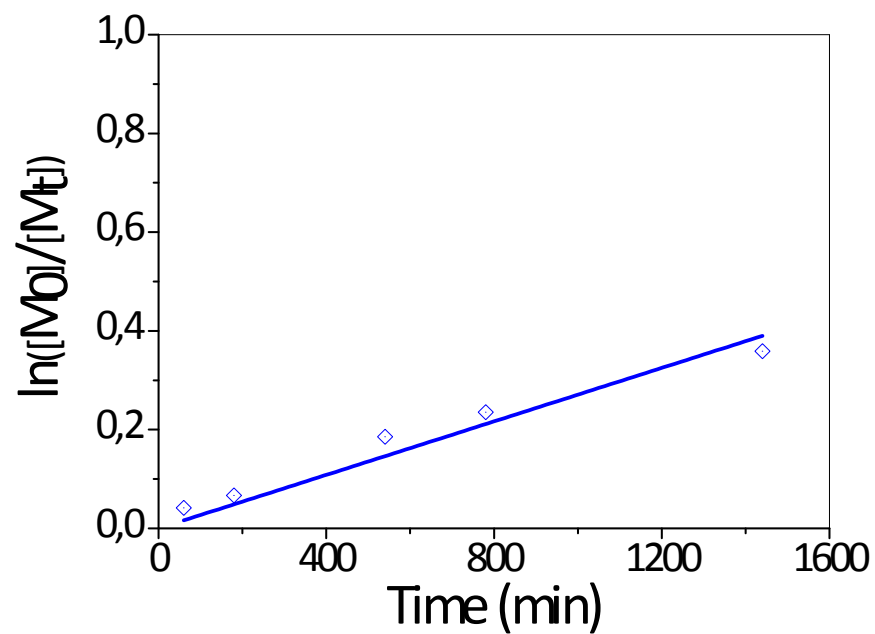


Fig. S2 Kinetic plot of $\ln([M]_0/[M]_t)$ vs. time in the MADIX/RAFT homo-polymerizations of *N*-vinylcaprolactam (NVCL)

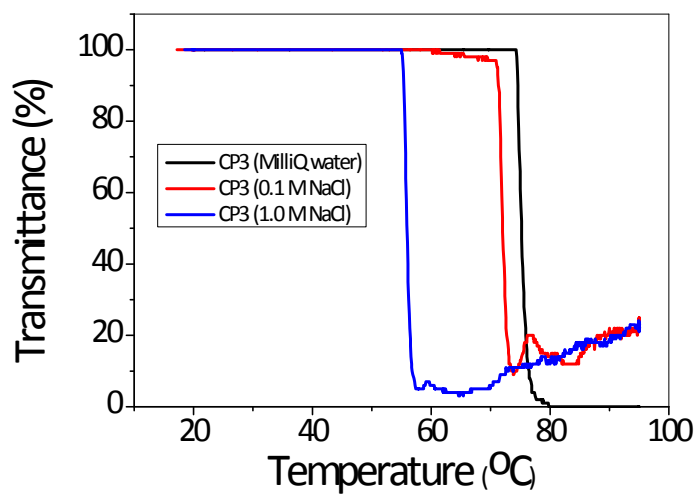


Fig. S3 Transmittance versus temperature of solutions of CP3 in MilliQ water, 0.1 M NaCl and 1 M NaCl (heating rate 1 °C/min).