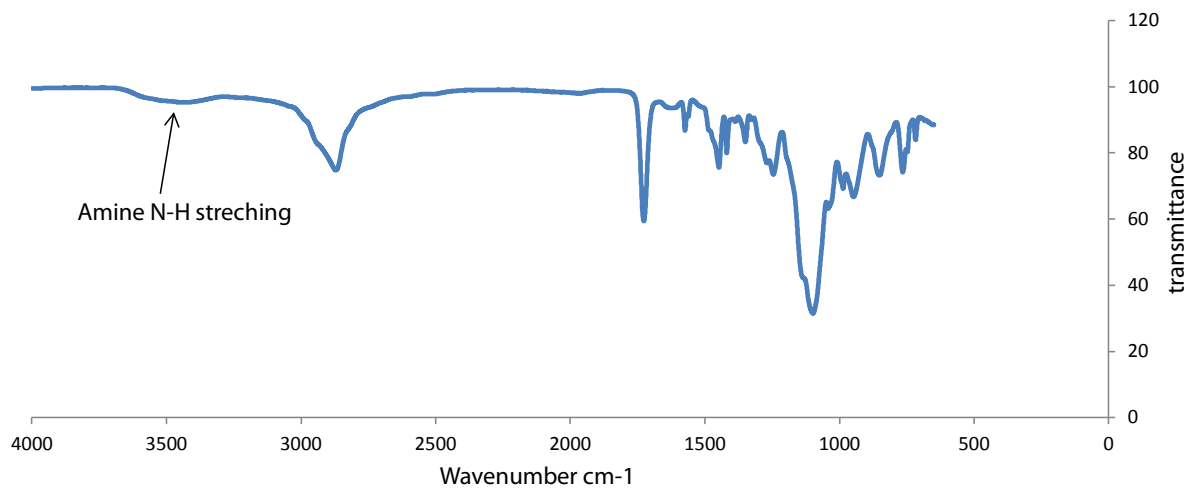


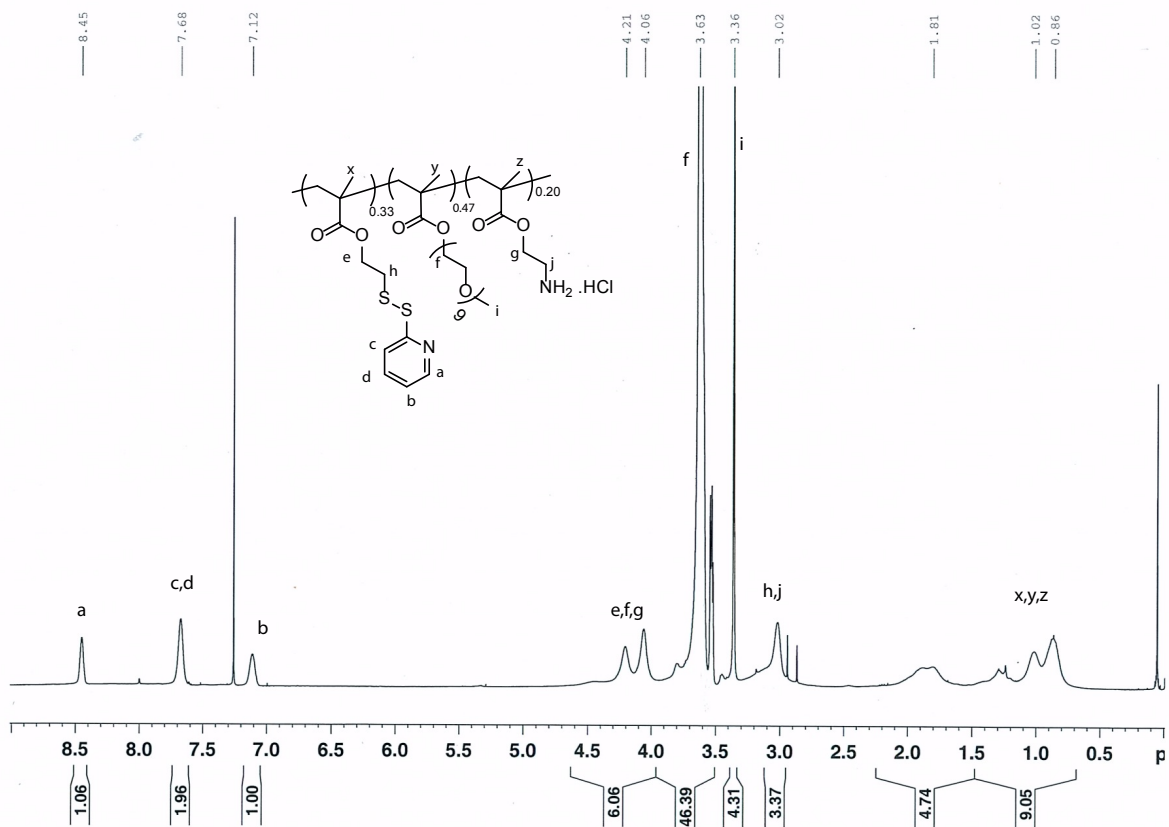
Supporting Information for:
**pH Responsive soft nanoclusters with size and
charge variation features**

Kishore Raghupathi, Longyu Li, Judy Ventura, Matthew Jennings, S. Thayumanavan *

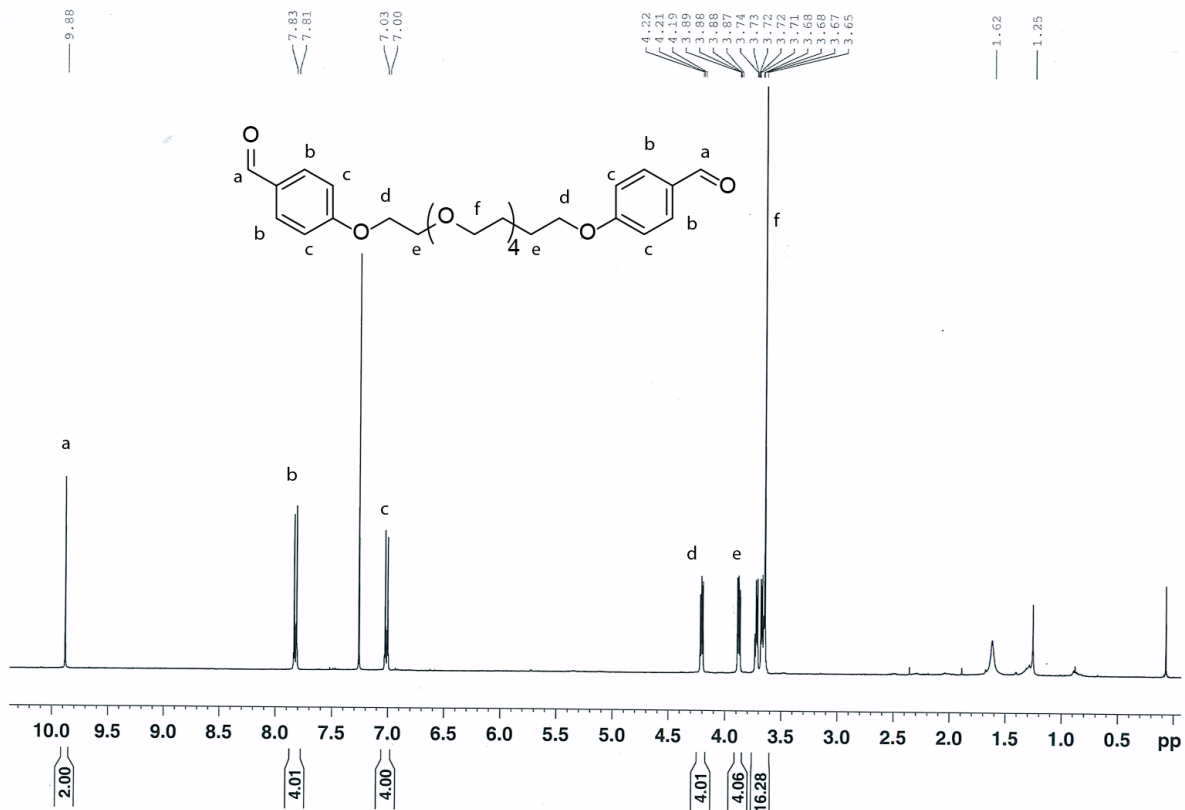
SI-1: IR spectra of PDSMA-co-PEGMA-co- AEMA polymer



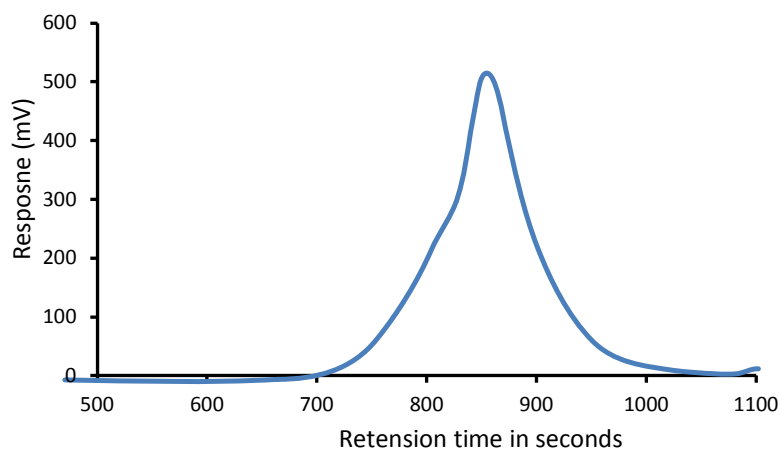
SI-2: ^1H NMR of PDSMA-co-PEGMA-co- AEMA polymer:



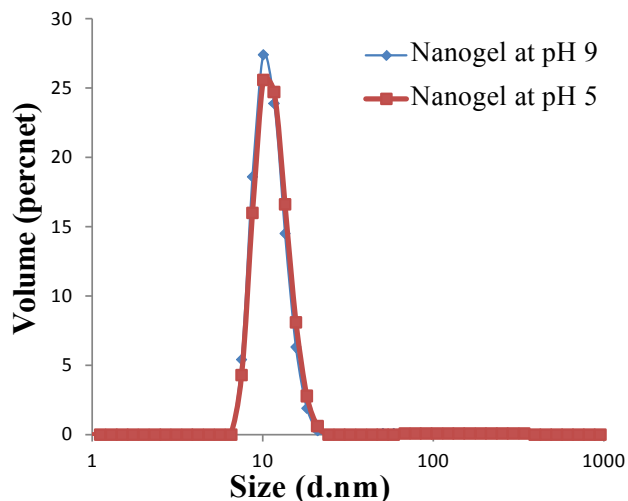
SI-3: ^1H NMR of Hexaethylene glycol dibenzaldehyde (crosslinker)



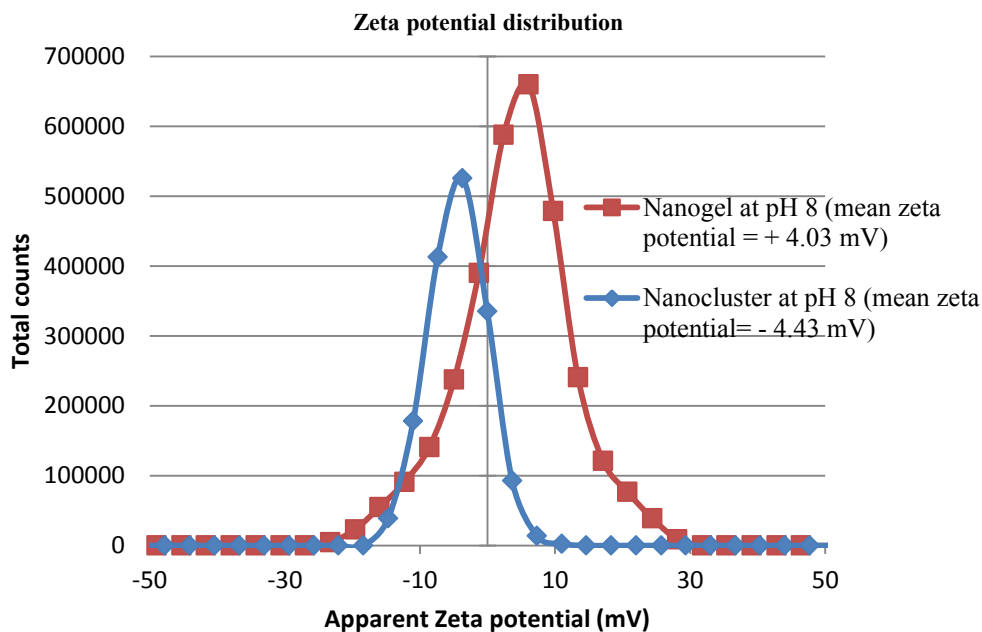
SI-4: GPC chromatogram for the PDSMA-co-PEGMA-co- AEMA polymer:



SI-5: Hydrodynamic sizes of nanogel at acidic and basic pH.

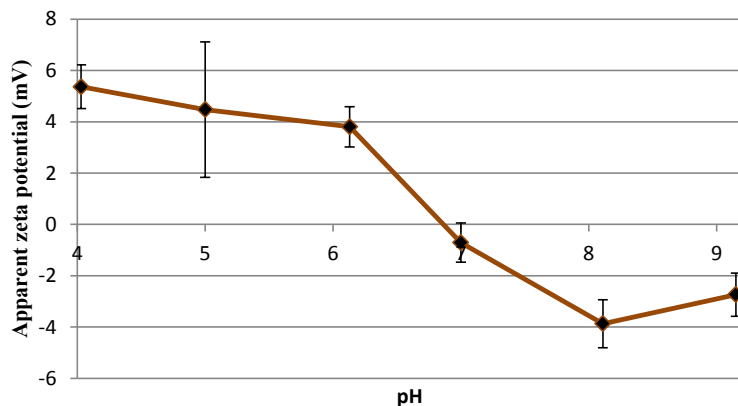


SI-6: Zeta potential study of nanogel and nanoclusters at pH 8



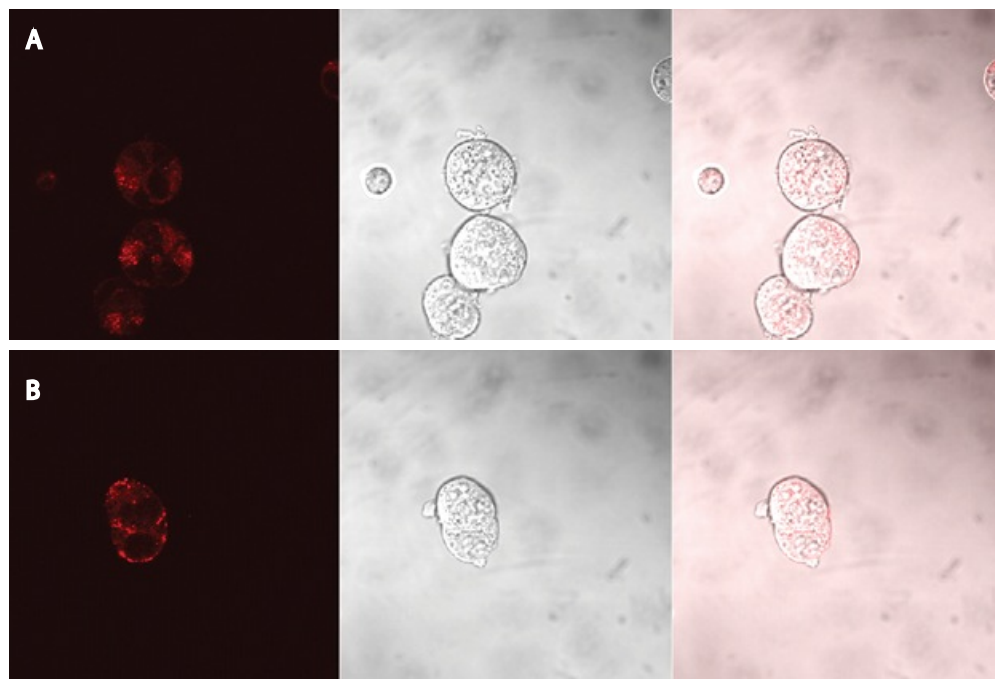
Zeta potential of nanogel and nanogel clusters at pH 8 adjusted using 1uL aliquots of triethyl amine with 5 mg/mL concentration of polymer.

SI-7: Zeta potential study of nanogel clusters at different pH.



Zeta potential measurements of nanogel clusters at different pH in 10 mM buffer with polymer concentration of 0.1 mg_mL. The error bars represent standard deviation with n=2.

SI-8: Control study to see the relative uptake of nanogels at pH 7.4. and pH 6.5.



Confocal images to study relative cell uptake study of nanogels upon 30 min incubation using MCF-7 cell line at A) pH 6.5 B) pH 7.4 ; In each image set left panel shows the Rhodamine emission, middle panel is the DIC image and the right panel is the overlap of both.