Supporting Information







Figure 6. High resolution mass spectrum of LAMA monomer obtained using the electrospray ionization technique (Bruker Daltonics APE III ESI spectrometer)



Figure 7. Kinetic plot for the homopolymerization of LAMA (target degree of polymerization = 50) at 20 C in 3:2 methanol/water mixture using the Ald-Br initiator and CuBr/2bpy as catalyst, respectively. The reaction conditions are the same as those stated in the experimental section.

Table 2. Synthesis parameters and molecular weight data for the block copolymerization of LAMA by ATRP at 20 $^{\rm o}{\rm C}$

Copolymer type	lymer type Solvent composition	M _n of LAMA	M _n of final	M_w/M_n of final
		homopolymer	block copolymer	block copolymer
PEO ₂₃ -LAMA ₃₀ -DEA ₅₀	3:2 MeOH/H ₂ O	11,400	17,950	1.34
Ald-LAMA ₂₅ -DEA ₅₀	3:2 MeOH/H ₂ O	10,600	17,300	1.30
PEO ₂₃ -LAMA ₃₀ -GAMA ₃₀	NMP	-	21,200	1.28
Ald-LAMA ₂₅ -GMA ₆₀	NMP	10,100	18,100	1.29



Figure 8. Variable temperature ¹H NMR studies of a 1.0 w/v % PPO₃₃-LAMA₅₀ diblock copolymer solution in D₂O.



Figure 9. ¹H NMR spectra (D_2O) of a PEO_{23} -LAMA₃₀-DEA₅₀ triblock copolymer at pH 2.5, 7 and 10, respectively. The triblock was initially dissolved molecularly in DCl/ D_2O and then the solution pH was adjusted using NaOD.



Figure 10. Transmission electron micrograph depicting PPO_{33} -LAMA₅₀ diblock copolymer micelles at 20 C. The average particle diameter is around 50 nm, which suggests some spreading of the micelles on the TEM grid.