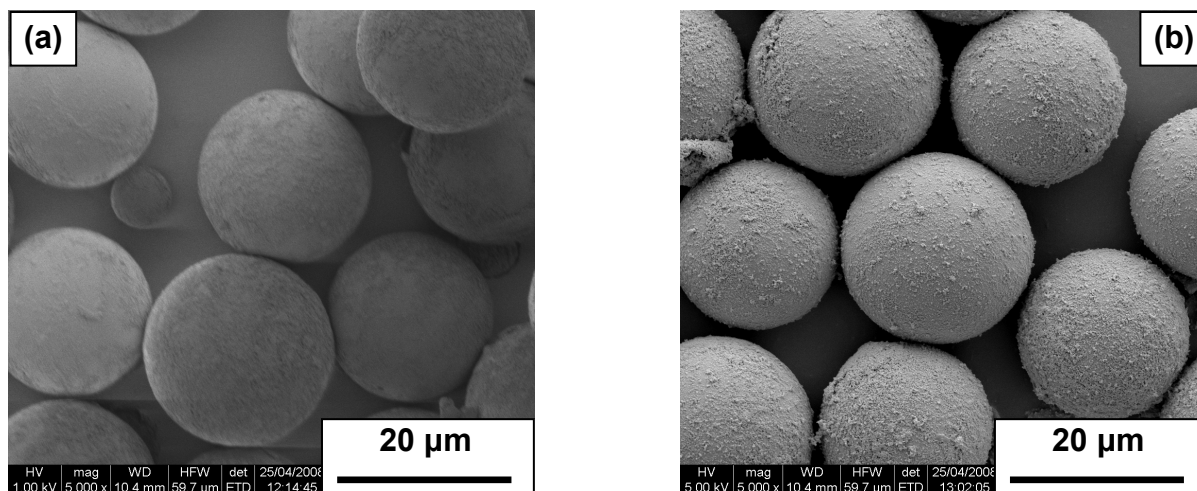


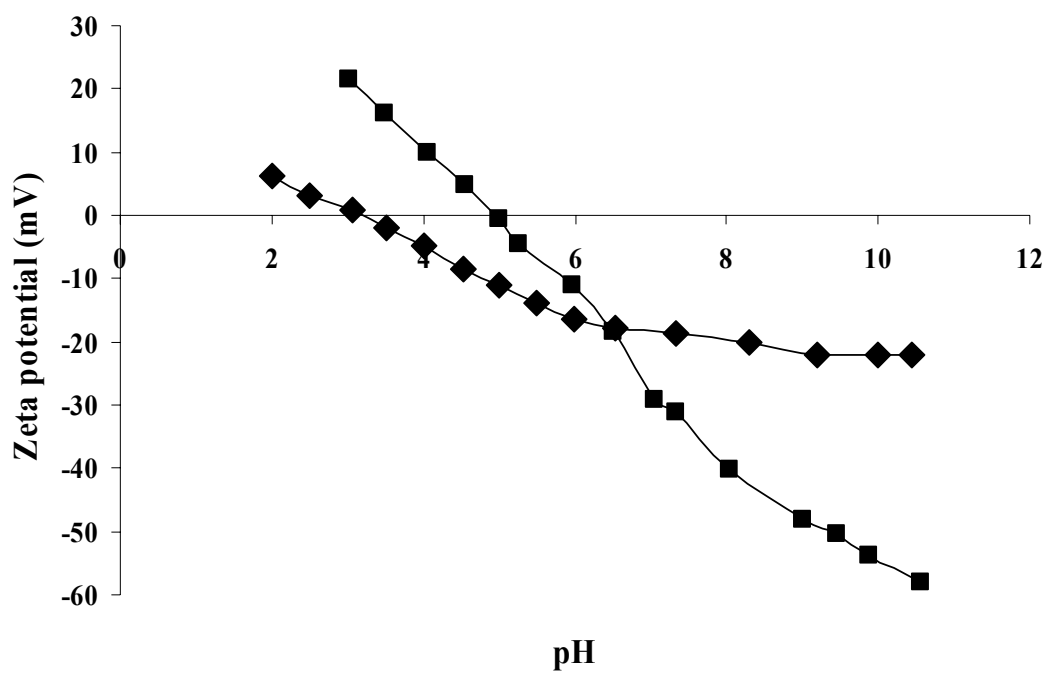
**Supporting Information: J. Ormond-Prout et al., *J. Mater. Chem.* manuscript B816839C**



**Figure 1S.** Scanning electron microscopy images obtained for (a) pristine 20  $\mu\text{m}$  PMMA latex and (b) the same latex coated with a 20 nm overlayer of chloride-doped polypyrrole. Note the increased surface roughness due to the presence of the conducting polymer coating.

**Table 1S:** Summary of Raman band positions and peak-widths observed for uncoated poly(methyl methacrylate) [PMMA], polypyrrole chloride bulk powder (PPyCl) and PPyCl-coated PMMA latex.

Raman peak position and width ( $\text{cm}^{-1}$ )		
PMMA	PPyCl	PPyCl-coated PMMA
299, 35 (very weak)	-	-
365, 14	-	369, 30
485, 11	-	486, 24
600, 18	-	600, 27
813, 9	-	813, 8
-	935, 69	943, 48
967, 28	-	969, 10
990, 16	-	988, 26
-	1050, 30	1054, 30
-	1083, 38	1088, 25
1122, 21	-	1119, 19
1188, 69 (very weak)	-	-
-	1235, 91	1232, 116
-	1316, 51	1314, 41
-	1382, 163	1382, 85
1455, 27	-	1453, 25
-	1591, 75	1595, 74
1641, 12 (very weak)	-	-
1730, 11	-	1728, 29
2843, 18	-	2843, 31
2934, 60	-	2933, 71
2952, 19	-	2952, 23
3007, 46	-	3006, 57



**Figure 2S.** Zeta potential vs. pH curves obtained for 0.01 wt. % aqueous solutions of (◆) uncoated 1.19  $\mu\text{m}$  PMMA latex and (■) PPyCl (17.6 %)-coated 1.19  $\mu\text{m}$  PMMA latex (see entry 8 in Table 1) in the presence of 0.01 M NaCl.