Supporting Information

pH-Triggered reversible morphological inversion of orthogonally-addressable poly(3-acrylamidophenylboronic acid)-*block*-poly(acrylamidoethylamine) micelles and their shell crosslinked nanoparticles

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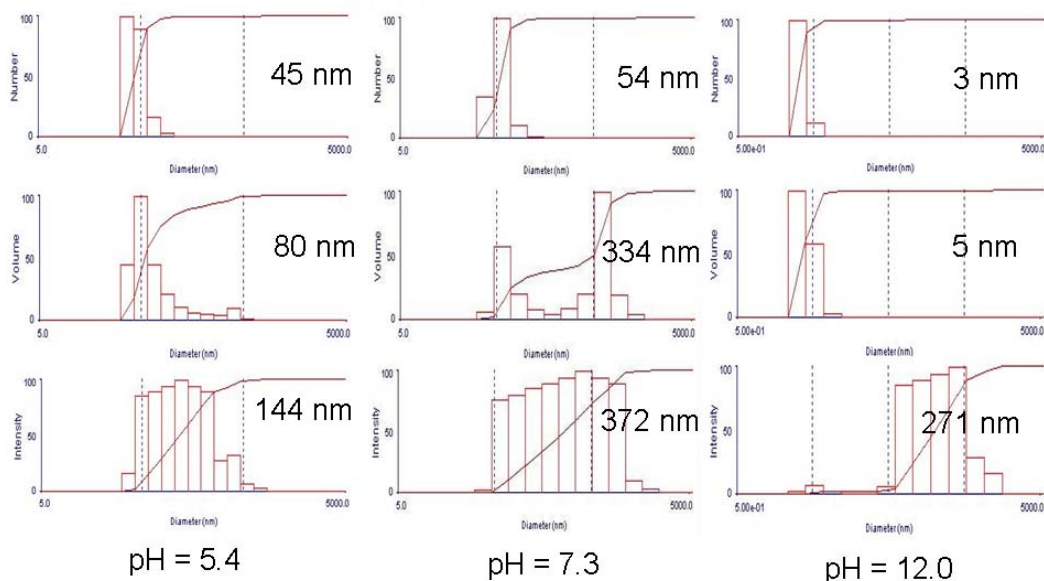
Figure S1. Number-, volume- and intensity-averaged DLS distribution profiles of micelles of **1** in nanopure water as a function of pH, adjusted by the addition of NaOH to the initial micelle solution. A range of pH values from 2 to 12 was studied, with three sets of data shown here, representative of the micellar assemblies at acidic, neutral and basic conditions.
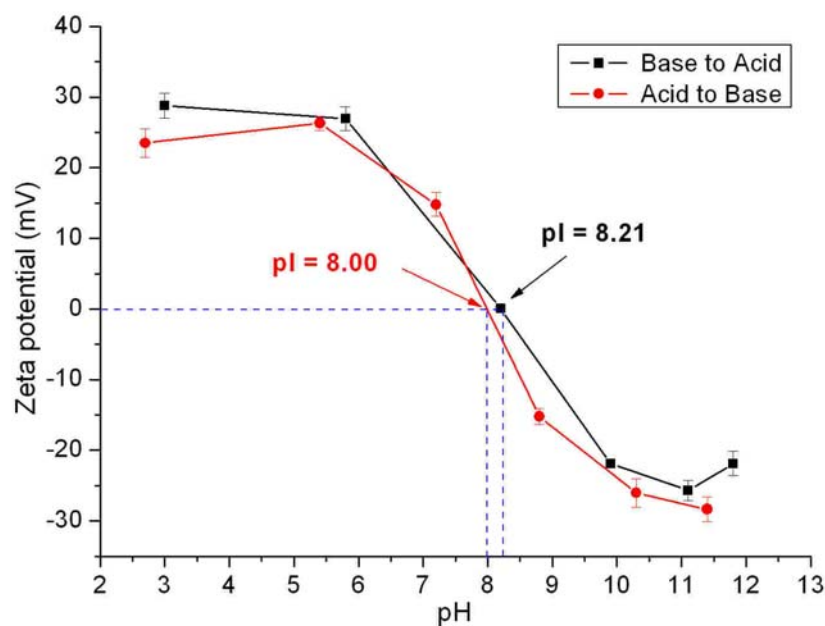
Figure S2. Zeta potential change for micelles/reverse micelles of **1** as a function of pH with 15 eq of D-glucose, giving an isoelectric point of 8.00 from acid to base change; and giving an isoelectric point of 8.21 from base to acid change.   Error bars were made by standard deviation of 5 runs.   pH change of each data point during the measurements was less than ±0.1.
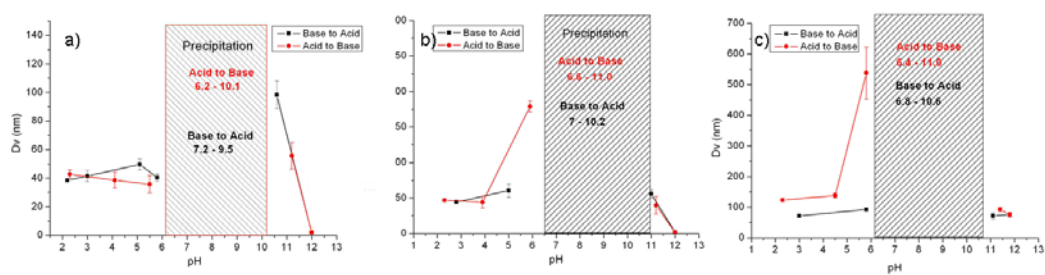
Figure S3. $(D_h)_v$ changes for micelles/reverse micelles of **1** as a function of pH (a): with 5 eq of D-glucose; (b): with 15 eq of D-glucose. C): 10 % zSCKs with 15 eq of D-glucose. Error bars represent standard deviation of 5 runs.   pH change of each data point during the measurements was less than ± 0.1.
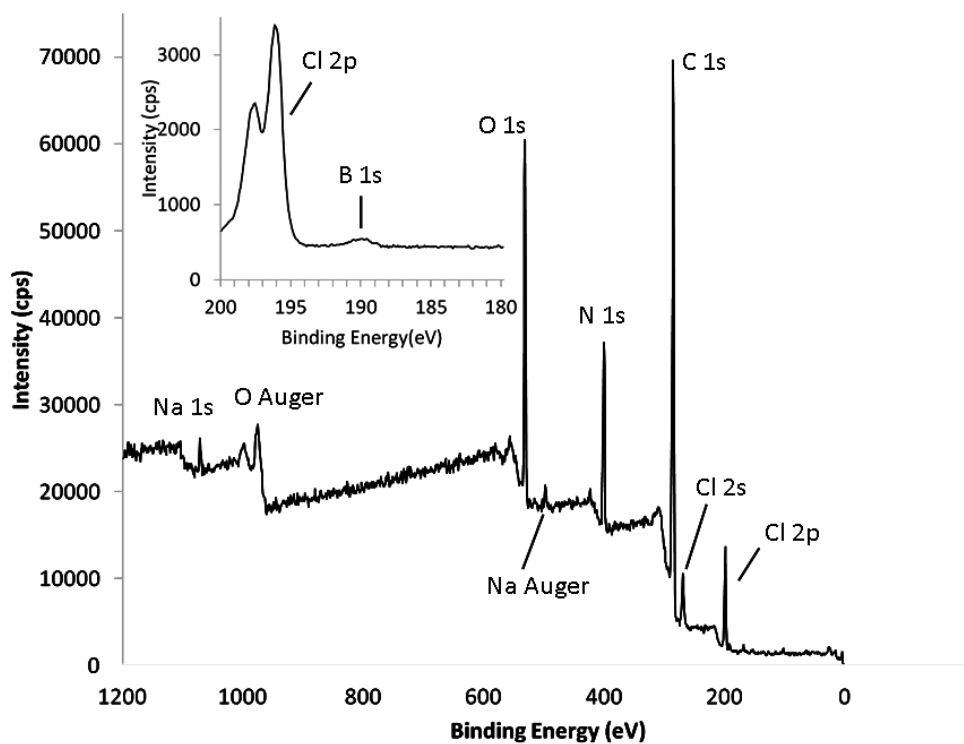
Figure S4. XPS wide-scan spectra of non-cross-linked czaSCKs at pH 2 (Table 1 Entry 1). Inset presents enlarged part for boron signal.
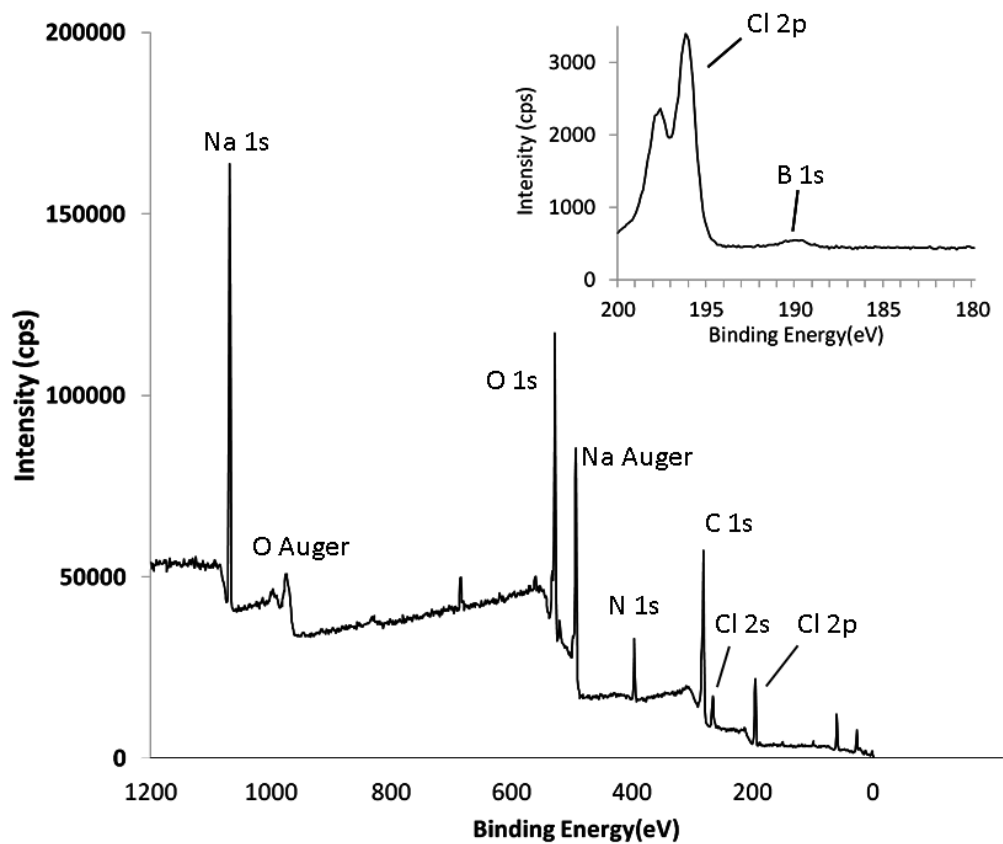
Figure S5. XPS wide-scan spectra of 10 % cross-linked czaSCKs at pH 12 (Table 1 Entry 8). Inset presents enlarged part for boron signal.