Supplementary Material (ESI) for *Soft Matter*

Supporting information for: Polymersomes hydrophilic brush scaling relations.

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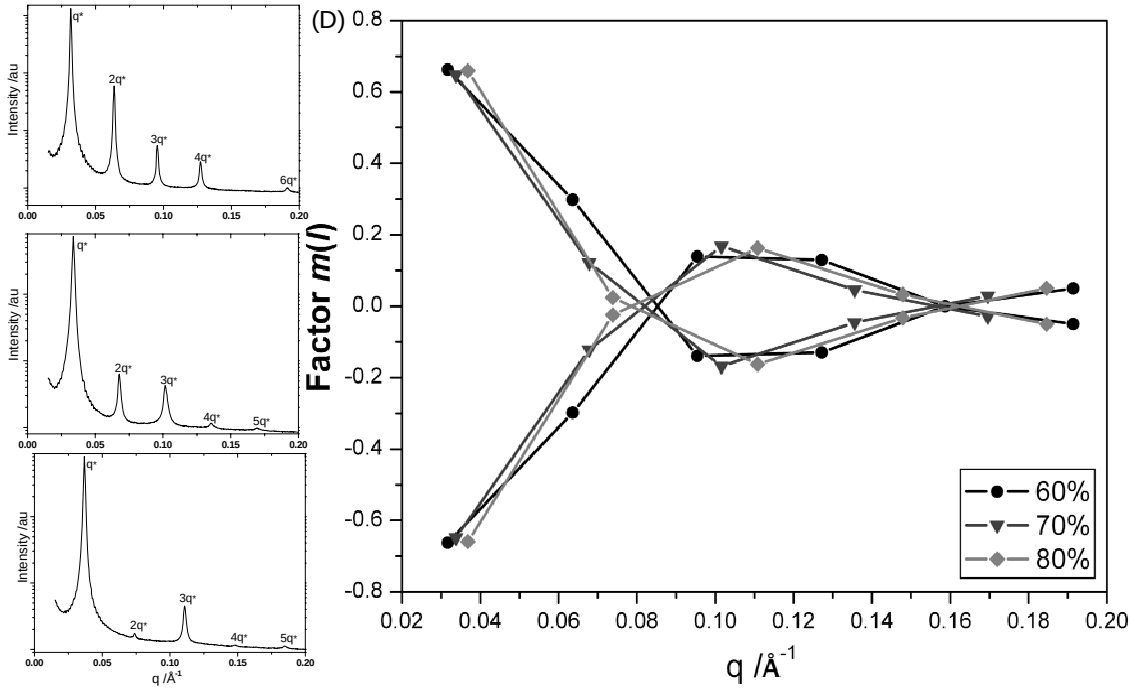

Figure S1. Raw SAXS data of $B_{37}E_{77}B_{37}$ showing lamellae structures formed at 60% (A) 70% (B) and 80% (C) w/w concentrations in water collected at Daresbury Laboratories SRS, Warrington UK, using a sample-detector distance of 3.25 m and an x-ray wavelength of 1.4Å. The graph (D) shows how the phase changes over the q-range of the data gathered for the same copolymer, which was subsequently used in the construction of the electron density profiles (see figure 2).

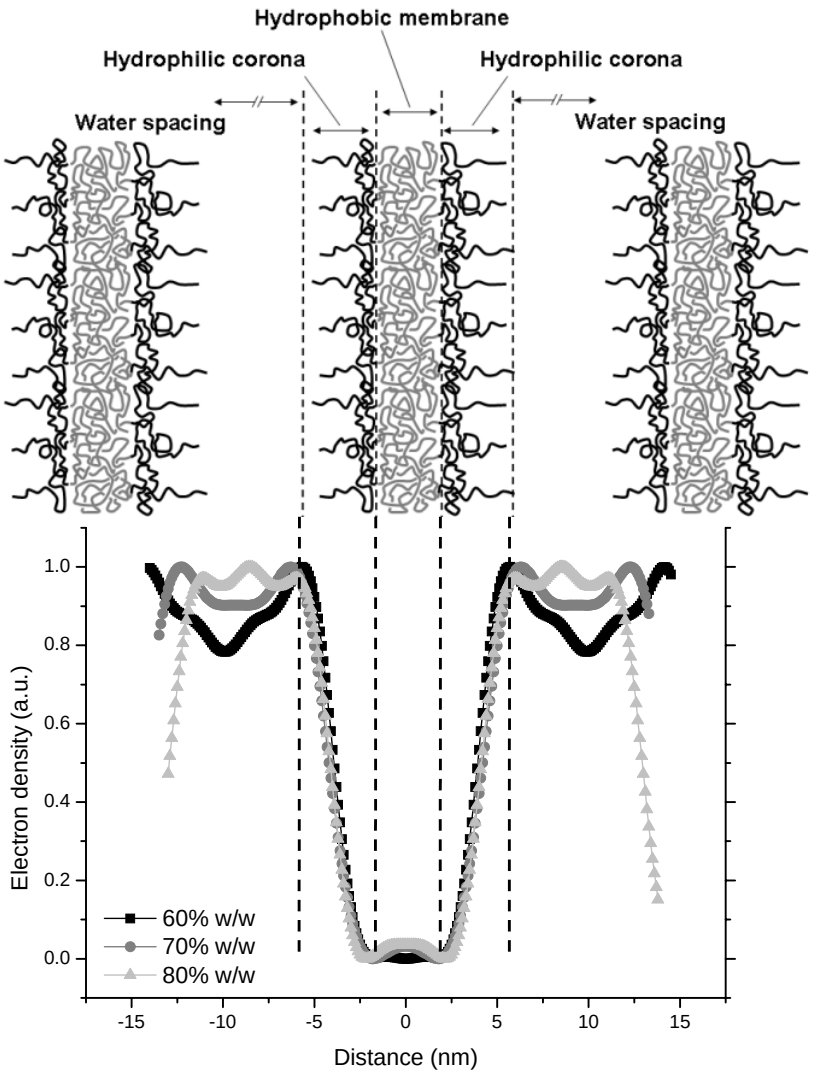

Figure S2. $B_{37}E_{77}B_{37}$ lamellae phase electron density calculated from SAXS patterns. The cartoon shows the different structural characteristics: the hydrophobic membrane, the hydrophilic corona, and the water spacing that comprise the lamellae.