

Supporting Information

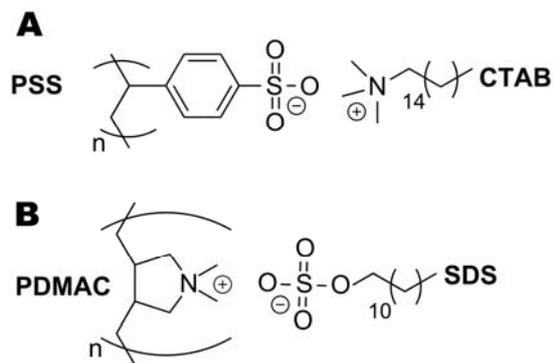


Figure S1. Functional groups engaged in charge interactions for the two polyelectrolyte-surfactant systems studied here.

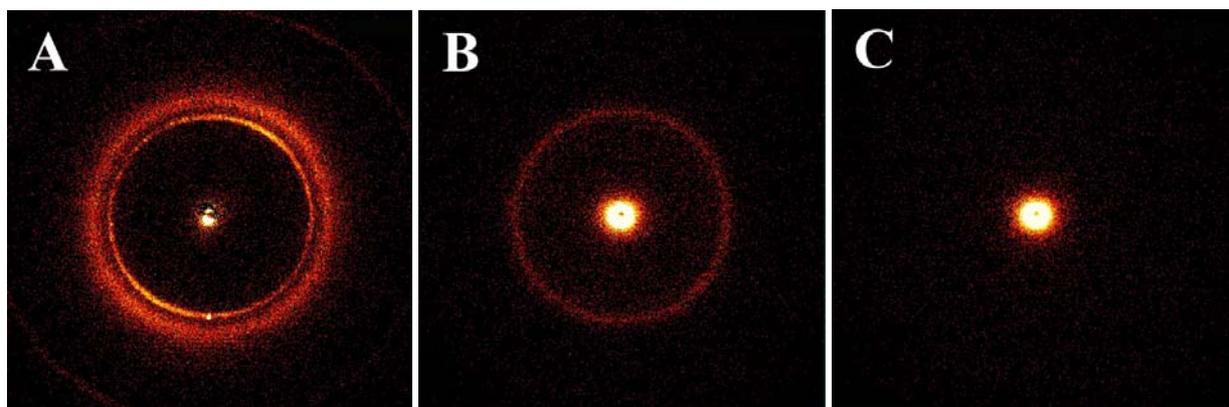


Figure S2. SAXS diffractograms of membrane A) PDMAC-SDS, B) PDMAC-SDS-TEOS uncalcined, C) PDMAC-SDS-TEOS calcined.

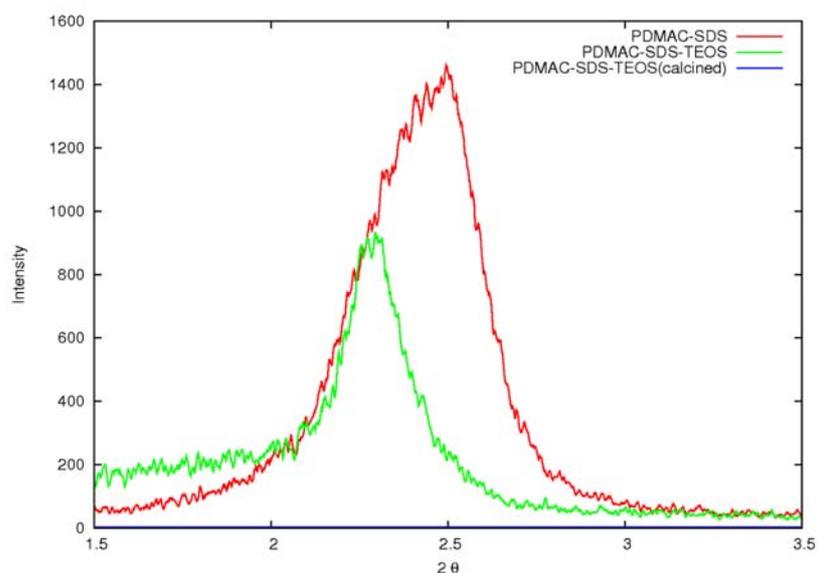


Figure S3. Integrated results for SAXS diffractograms of PDMAC-SDS membranes.

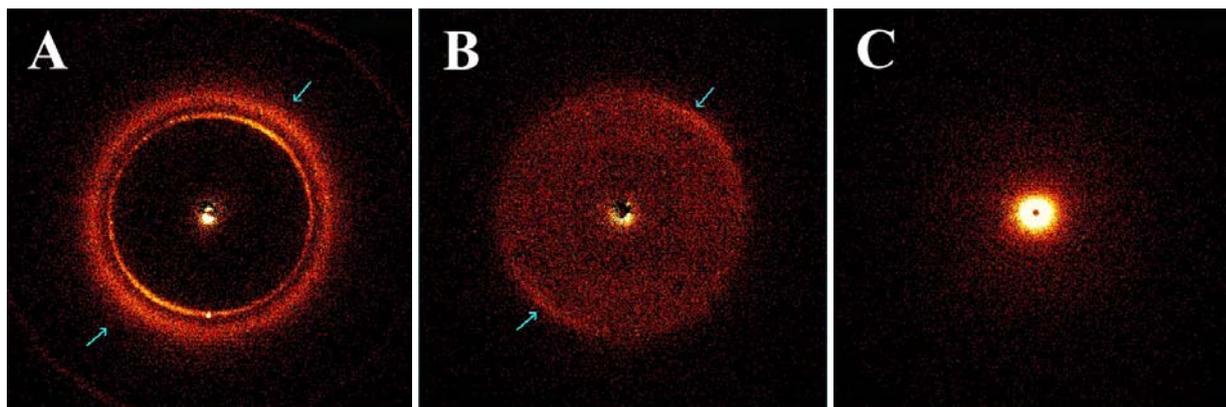


Figure S4. SAXS diffractograms of membrane A) PSS-CTAB, B) PSS-CTAB-TEOS uncalcined, C) PSS-CTAB-TEOS calcined. Blue arrows point to high intensity regions indicative of columnar ordering.

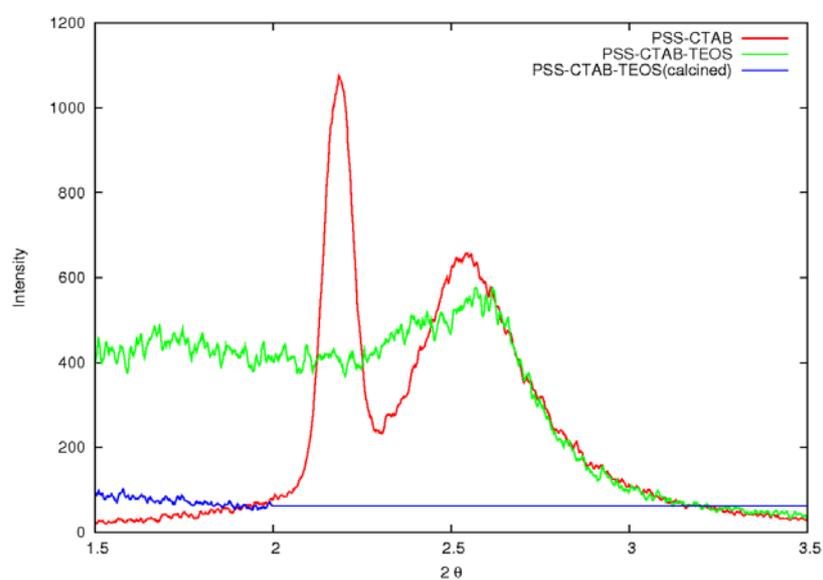


Figure S5. Integration results for SAXS diffractograms of PSS-CTAB membranes.

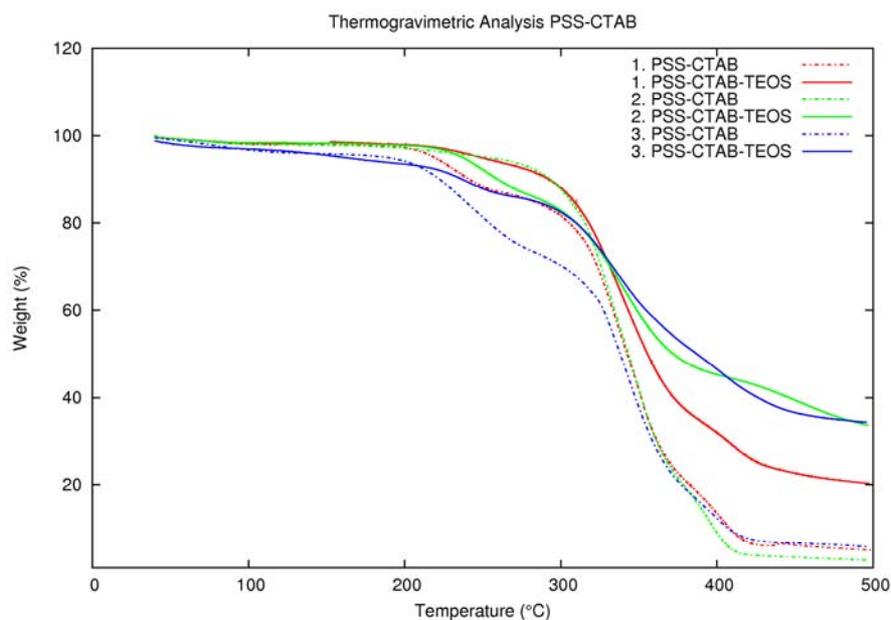


Figure S6. Thermogravimetric analysis of PSS-CTAB composite membranes from three different batches with and without a silica precursor (scan rate of 10 °C per minute).

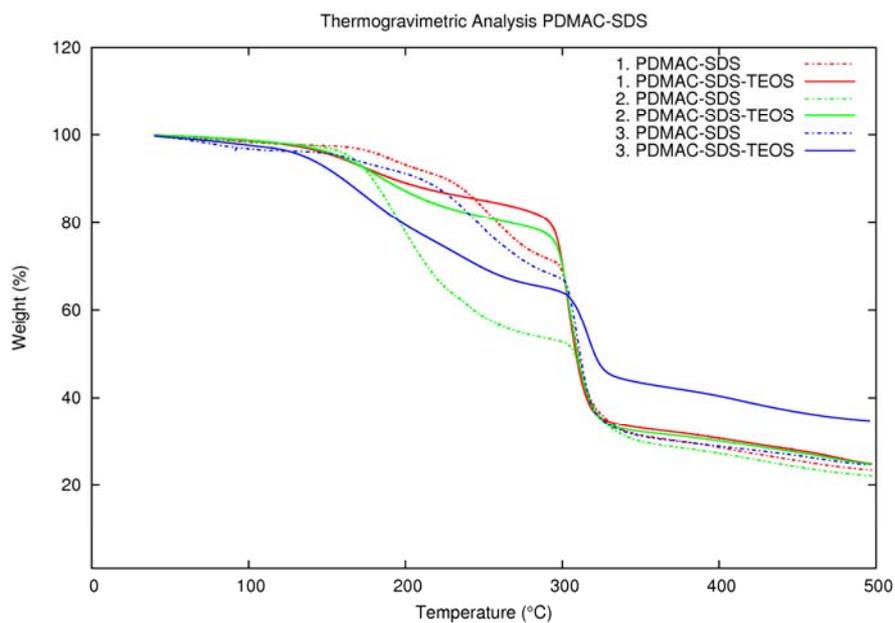


Figure S7. Thermogravimetric analysis of PDMAC-SDS composite membranes from three different batches with and without a silica precursor (scan rate of 10 °C per minute).