Electronic Supplementary Information

Coarse-grained simulation studies of the adsorption of polyelectrolyte complexes upon lipid membranes

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Table S1 Conformational characteristics of the free PECs

β	N_{PA}	N_{PC}	$R_{g,c}$ /nm	$A_{r,c}$
0.83	250	300	2.66±0.02	0.87±0.01
1.0	250	250	2.57±0.01	0.92±0.01
1.2	300	250	2.74±0.03	0.89±0.01
1.4	350	250	2.95±0.03	0.83±0.01

- the average and standard errors are not affected by the initial polyion configurations in the simulation run.

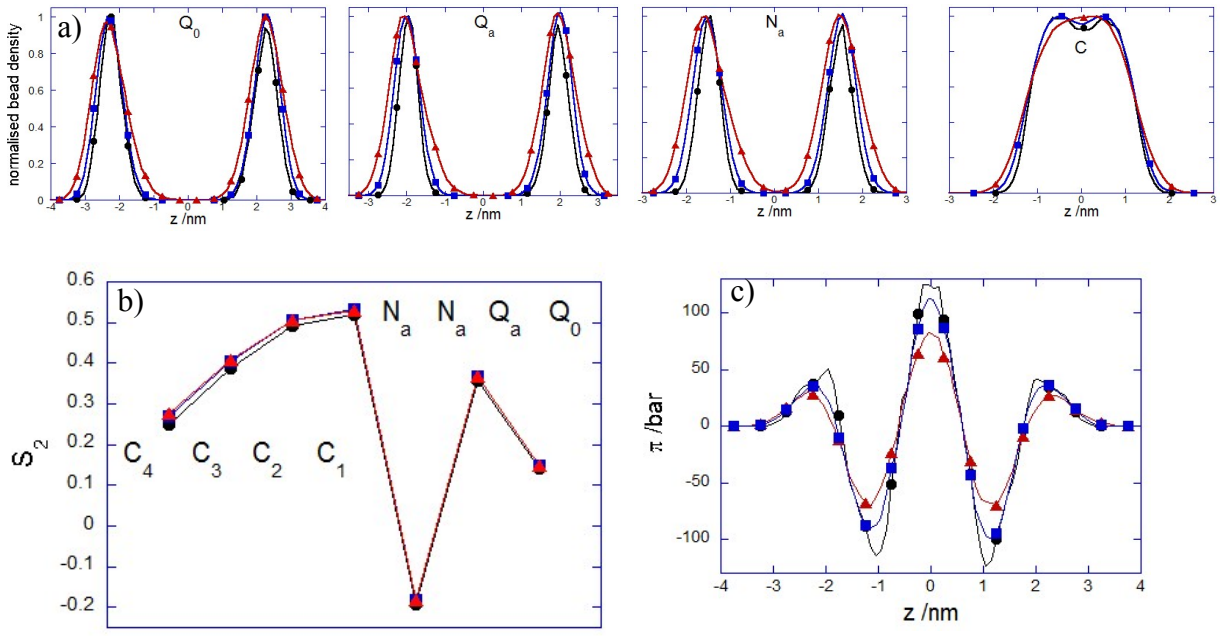

Fig. S1. a) Normalised densities of Q_0, Q_a, N_a and C beads, b) S_2 order parameter and c) lateral pressure profile π for bilayer **I** (●), **II** (■) and **III** (□).

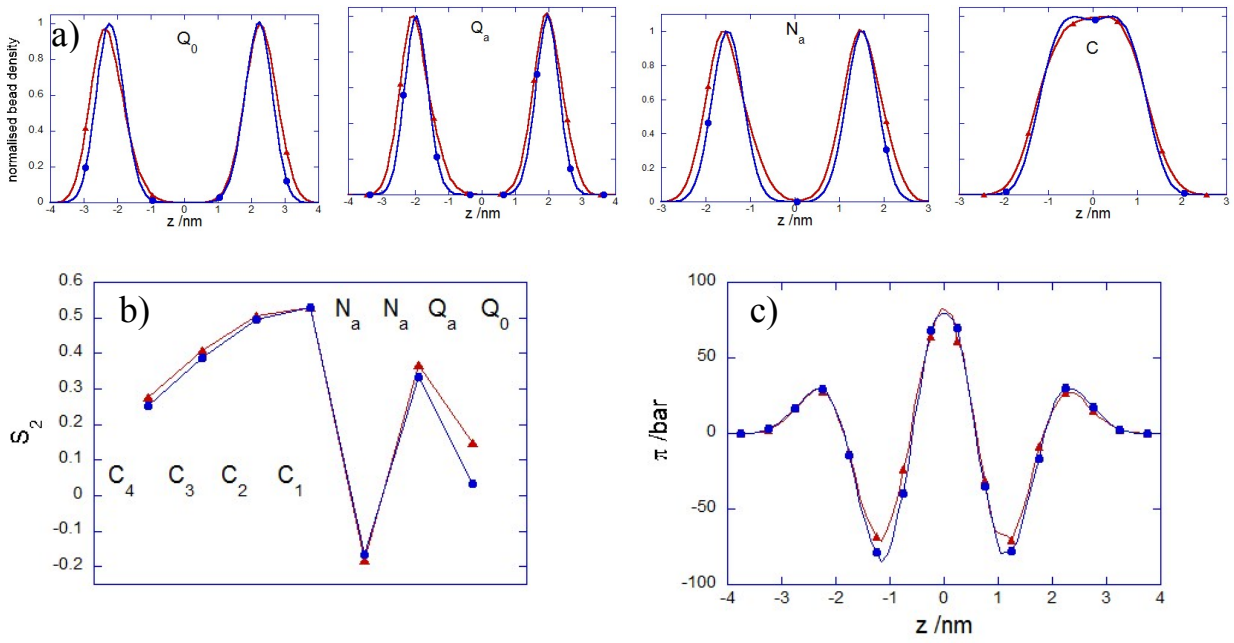

Fig. S2. Comparison of a) normalised densities of Q_0, Q_a, N_a and C beads, b) orientational order parameter and c) lateral pressure profile of bilayer **III** at $r_{cut,el}$ = (□) 15 and (●) 25 nm.

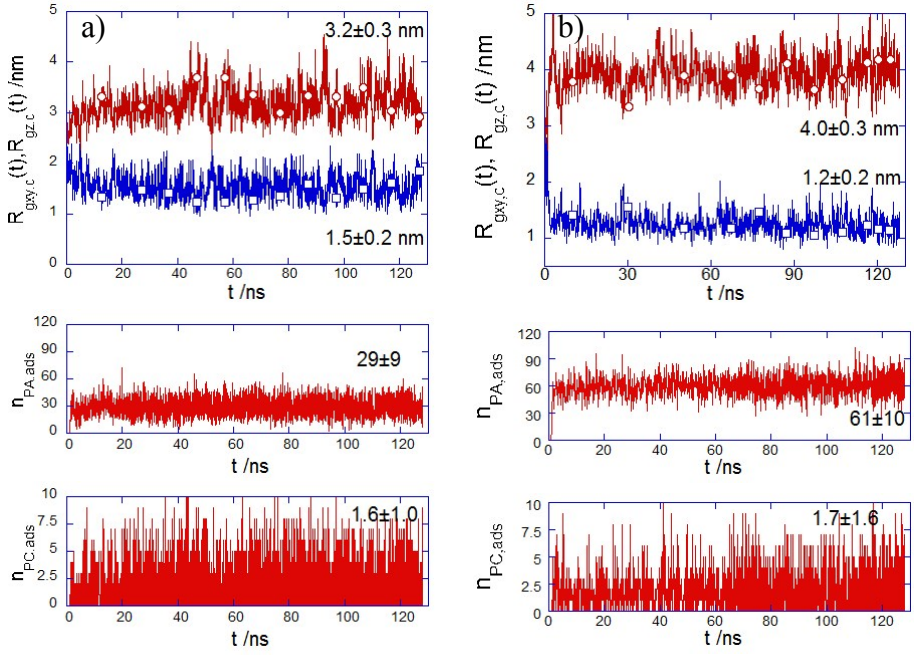

Fig. S3. (○)$R_{gxy,c}$ and (□)$R_{gz,c}$ projections of the radius of gyration and number of bound beads $n_{PA,ads}$ and $n_{PC,ads}$ for PEC with β = a) 1.2 and b) 1.4 at $r_{cut,el}$ = 2.5 nm. Averaged values over the last 40 ns time interval are given.

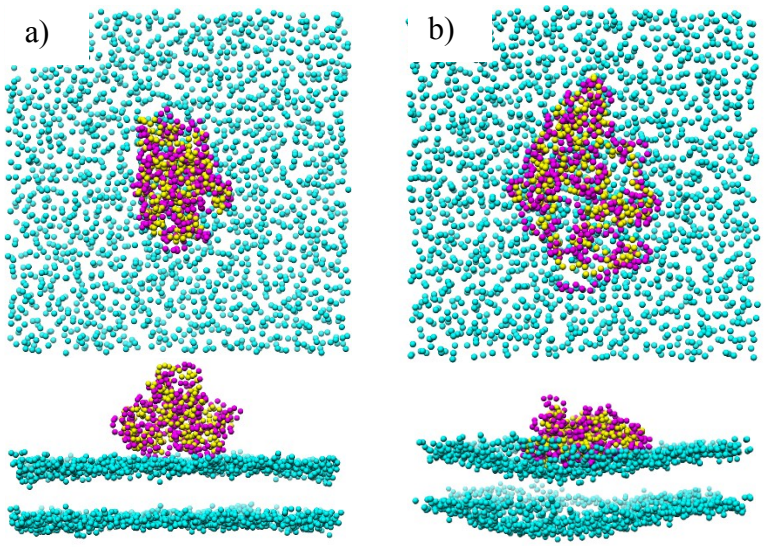

Fig. S4. Top and side-view snapshots of the final configuration of PEC with β = 1.2 and polyion 1.4 at $r_{cut,el}$ = 2.5 nm; for clarity sake, only Q_0 group of DPPC is illustrated only and the color code is same as in Fig. 1

File: Movie S1.mp4

An animation created for the configuration of PEC with β = 1.0 bound to the bilayer **III** at t = 11.0 ns; Q_a, N_a and C beads of DPPC and all bonds are omitted.

File: Movie S2.mp4

An animation created for the configuration of PEC with β = 1.2 bound to the bilayer **III** at t = 127.1 ns; Q_a, N_a and C beads of DPPC and all bonds are omitted.

File: Movie S3.mp4

An animation created for the configuration of PEC with β = 1.4 bound to the bilayer **III** at t = 127.9 ns; Q_a, N_a and C beads of DPPC and all bonds are omitted.