Supplementary Information

For

Modification of polydiallyldimethylammonium chloride with sodium polystyrenesulfonate dramatically change the resistance of polymer-based coatings towards wash-off from both hydrophilic and hydrophobic surfaces

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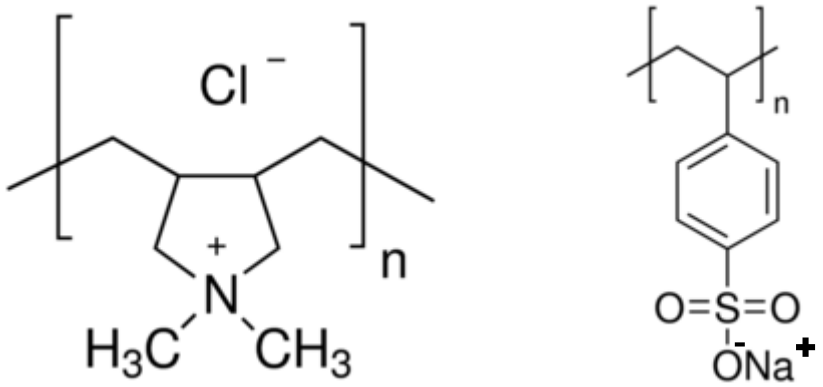


PDADMAC PSS

Figure S1. Structure formulas of polyelectrolytes.

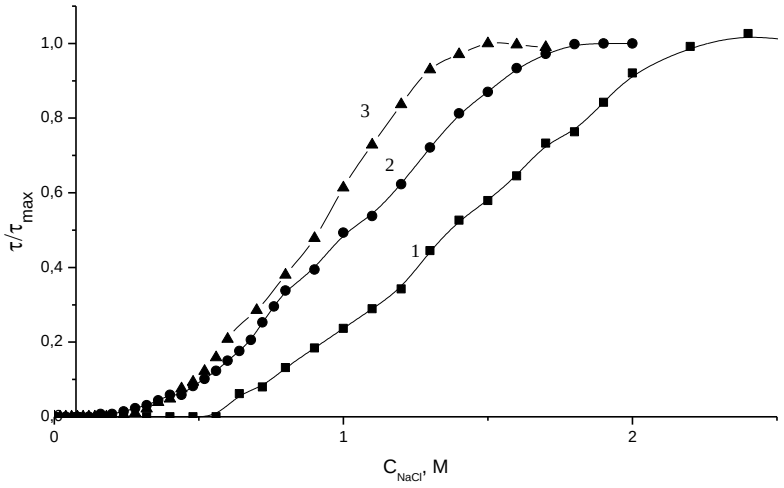


Figure S2. Turbidimetric titration curves for the PDADMAC/PSS IPEC mixture with NaCl. $C_{PDADMAC} = 4 \times 10^{-4}$ base-mol/l, $\chi = 0.03$ (1); 0.09 (2) and 0.12 (3); pH 7.0.

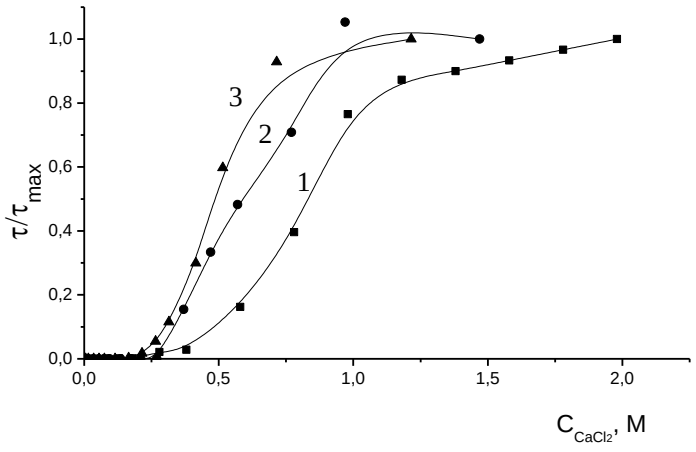


Figure S3. Turbidimetric titration curves for the PDADMAC/PSS IPEC mixture with $CaCl_2$. $C_{PDADMAC}$ = 4 × 10^{-4} base-mol/l, χ = 0.06 (1); 0.09 (2) and 0.12 (3); pH 7.0.

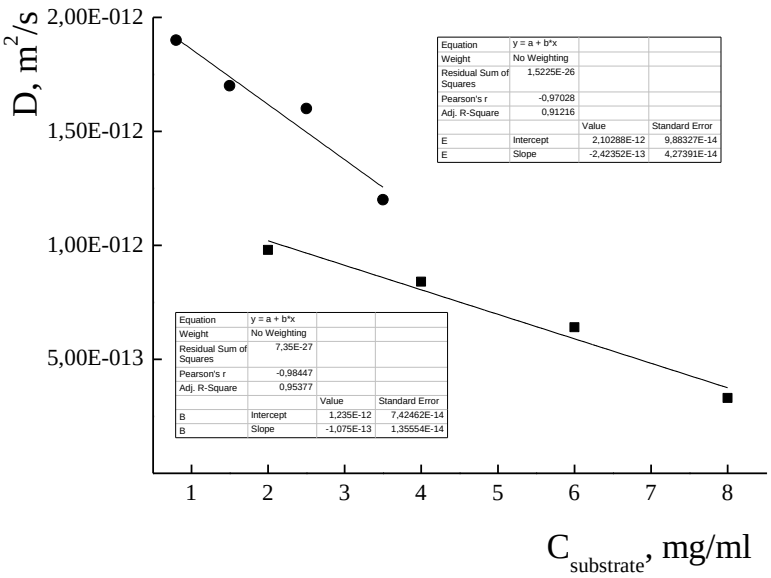
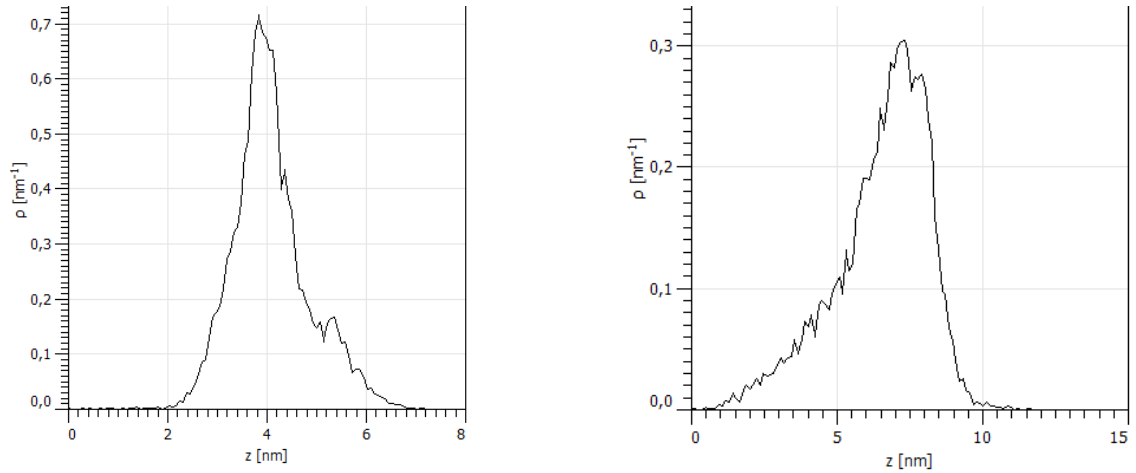


Figure S4. Dependence of the diffusion coefficient upon the concentration of a solution of PDADMAC (1) and IPEC (2) in a water-salt media. pH 7; C_{NaCl} = 0.05 M.

Analysis of the average thickness of the IPEC layers on the glass and PVC surfaces was made using Gwyddion software.



a b

Figure S5. Size distribution densities on the AFM images of the IPEC layers on the glass (a) and PVC (b) substrates