

Supplementary Information to

A β Self-Association and Adsorption on a Hydrophobic Nanosurface: Competitive Effects and the Detection of Small Oligomers via Electrical Response

Asis K. Jana and Neelanjana Sengupta^{*}

*Physical Chemistry Division, CSIR-National Chemical Laboratory,
Dr. Homi Bhaba Road, Pune 411008, India*

^{*} Correspondence: n.sengupta@ncl.res.in

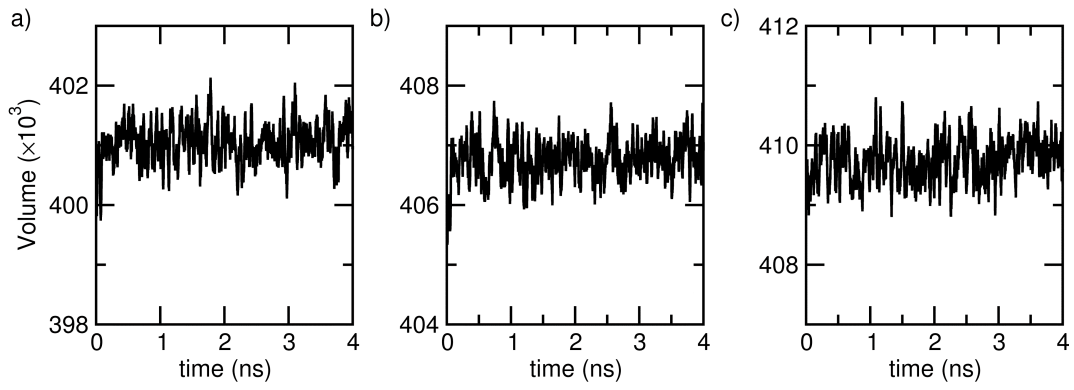


Figure S1. Time evolution of the volume of the simulated box ($\text{\AA}^3$) in surface adsorbed a) monomeric, b) dimeric, c) trimeric systems during equilibration in the presence of KCl ions, prior to the application of electric field.

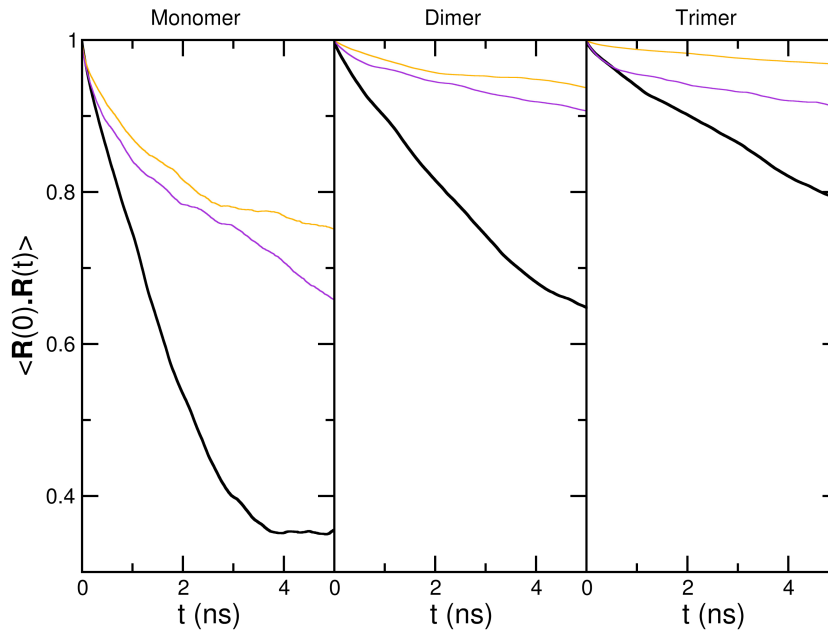


Figure S2. Rotational time correlation functions, $\langle \mathbf{R}(0) \cdot \mathbf{R}(t) \rangle$, of the unit vector $\mathbf{R}(t)$, joining the C_α atoms of the first and the last residues of the $A\beta$ units, in the monomeric, dimeric and trimeric systems. Data for the free systems are shown in black; for the SWCNT surface adsorbed systems in orange; and for the surface adsorbed systems in the presence of a potential difference of 2.25 Volts in purple. For the dimeric and trimeric systems, the time correlation functions have been averaged over the multiple peptide units.