## In situ investigation of halide co-ion effects on SDS adsorption at air/water interfaces

**Supporting Information** 

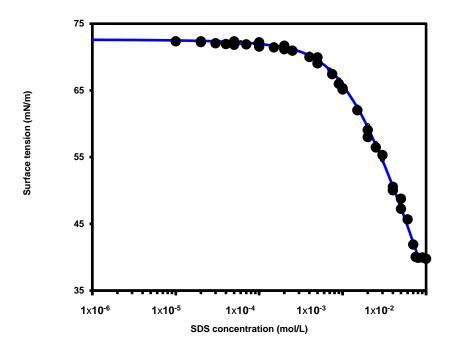
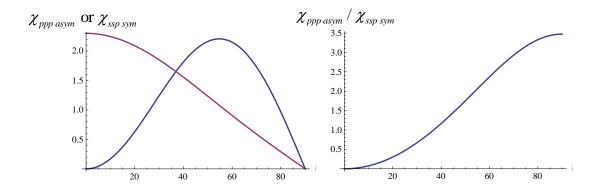


Figure S1: Surface tension of the purified SDS used in this study.



**Figure S2:** *Left:* Functions of macroscopic hyperpolarisability quantities in the laboratory frame versus methyl tilt angle,  $\theta$ . Blue: methyl C-H asymmetric stretch in ppp polarization combination,  $\chi_{ppp\;asym}$ . Maroon: methyl C-H symmetric stretch in ssp polarization combination,  $\chi_{ssp\;sym}$ . *Right:*  $\chi_{ppp\;asym}/\chi_{ssp\;sym}$  as a function of the methyl tilt angle,  $\theta$ .