Supporting Information

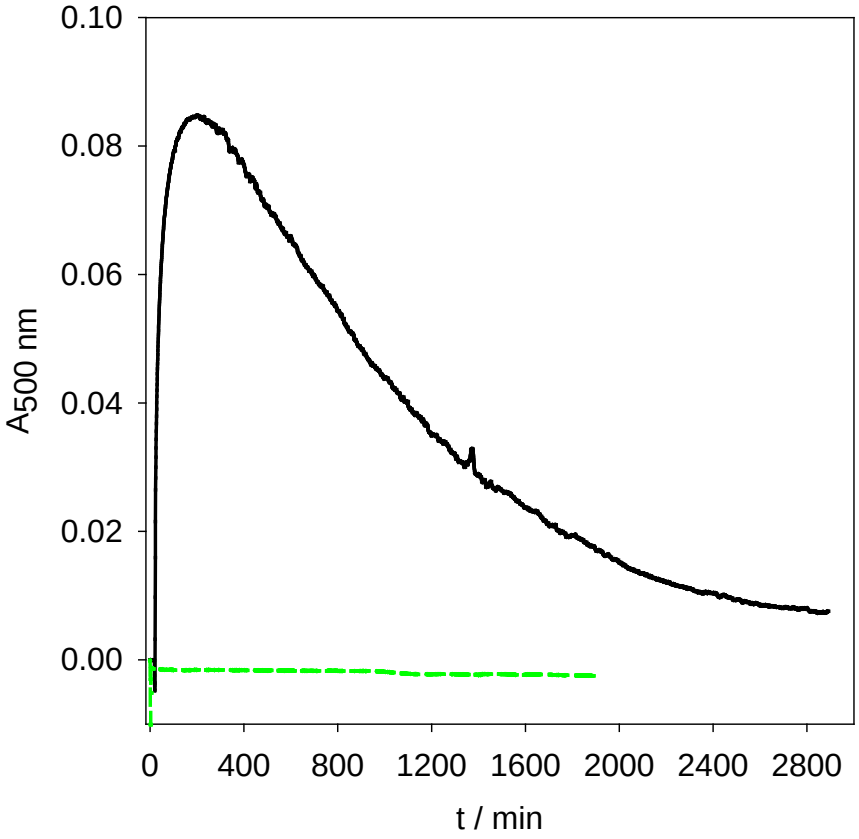


Figure 1 of SI: Evolution of the turbidity, quantified by the absorbance at λ=500 nm, for a PSP solution (10^{-4} M in monomer units) injected in a PAH solution (_____ ,10^{-4} M in monomer units) or in a PDADMAC solution (_ _ _ _ ,10^{-4} M in monomer units). The experiments were performed in the presence of 0.15 M NaCl.

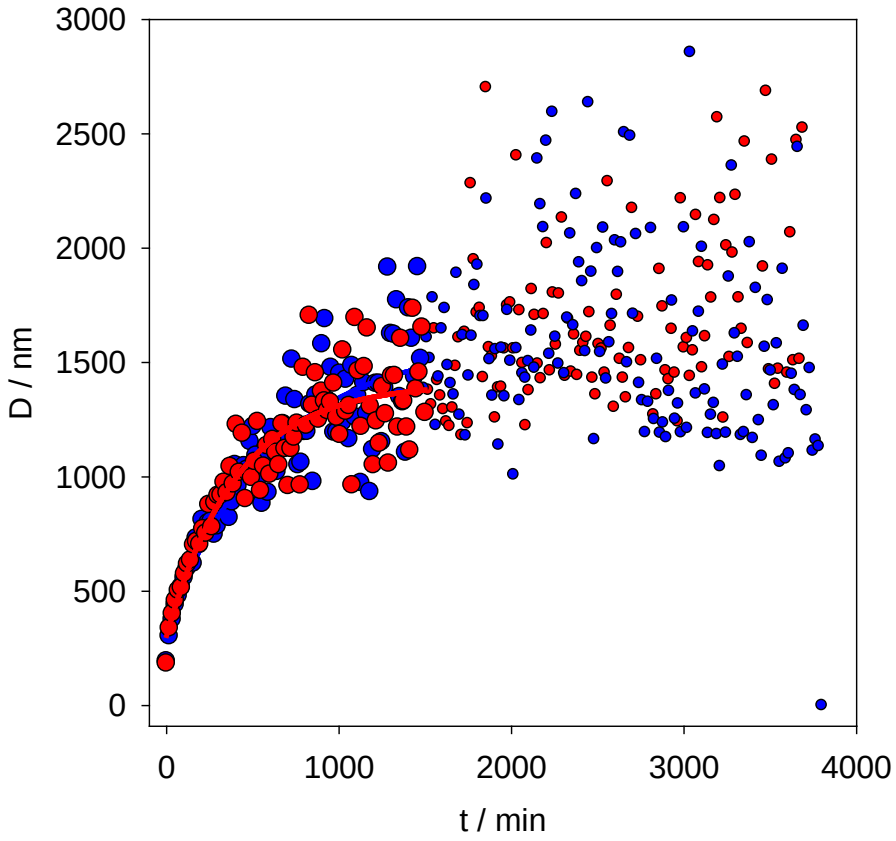
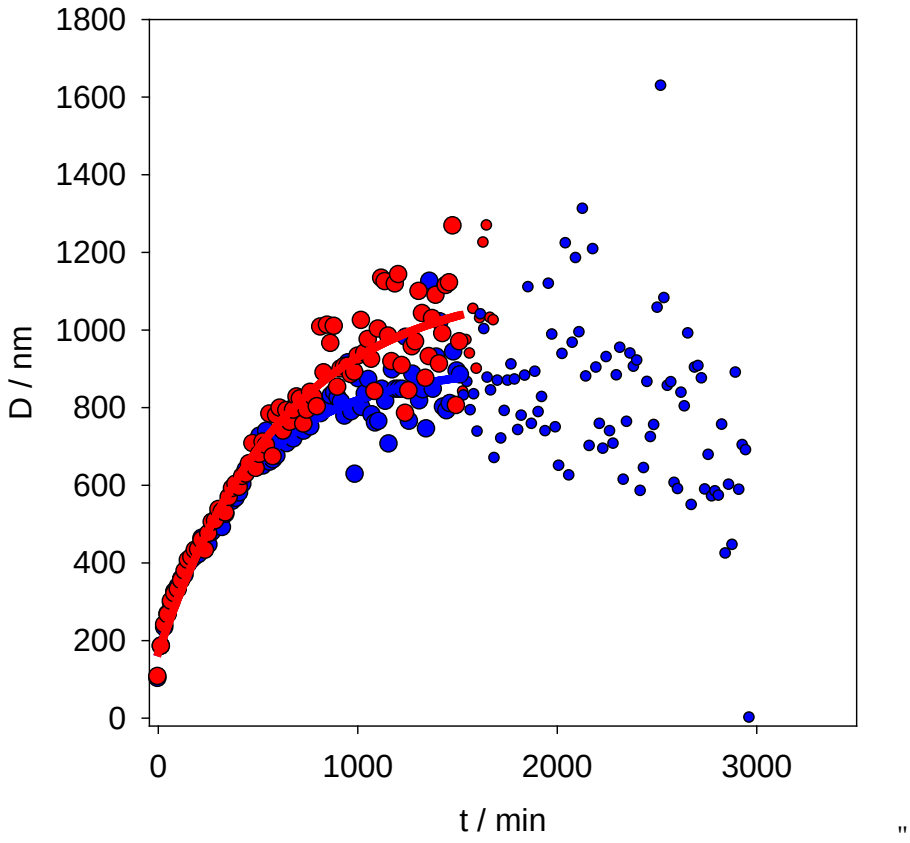


Figure 2 of SI: Evolution of the average hydrodynamic diameter of PAH-PSP "complexes" in the presence of 10 mM NaCl in the case where a volume V of PAH (2 x 10^{-4} M in monomer units) is injected in an identical volume V of PSP (2 x 10^{-4} M in monomer units) (●) or when the PSP solution is injected in the PAH solution (●). The full lines correspond to a fit of equation (1) to the experimental data. The fit was limited to the first 1500 min of the experiments.



"

Figure 3 of SI: Evolution of the average hydrodynamic diameter of PAH-PSP "complexes in the presence of 1.0 M NaCl in the case where a volume V of PAH (2 x 10^{-4} M in monomer units) is injected in an identical volume V of PSP (2 x 10^{-4} M in monomer units) (●) or when the PSP solution is injected in the PAH solution (●). The full lines correspond to a fit of equation (1) to the experimental data. The fit was limited to the first 1500 min of the experiments.

.

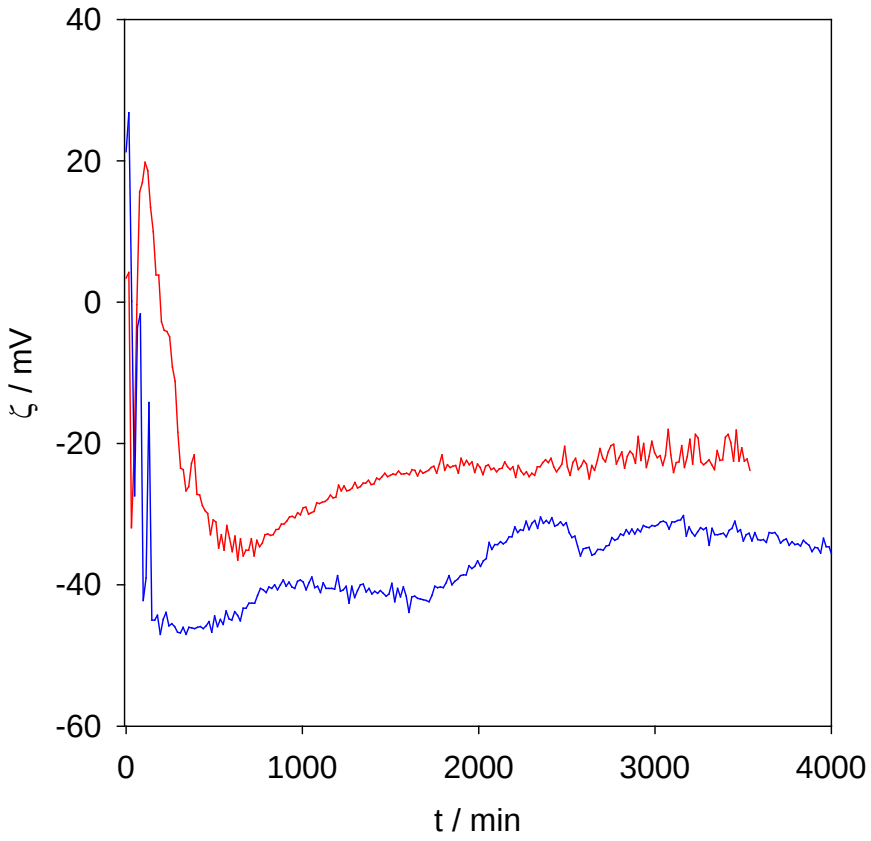


Figure 4 of SI: Evolution of the average zeta potentail of PAH-PSP "complexes" in the presence of 10 mM NaCl in the case where a volume V of PAH (2 x 10^{-4} M in monomer units) is injected in an identical volume V of PSP (2 x 10^{-4} M in monomer units) (_____) or when the PSP solution is injected in the PAH solution (_____).

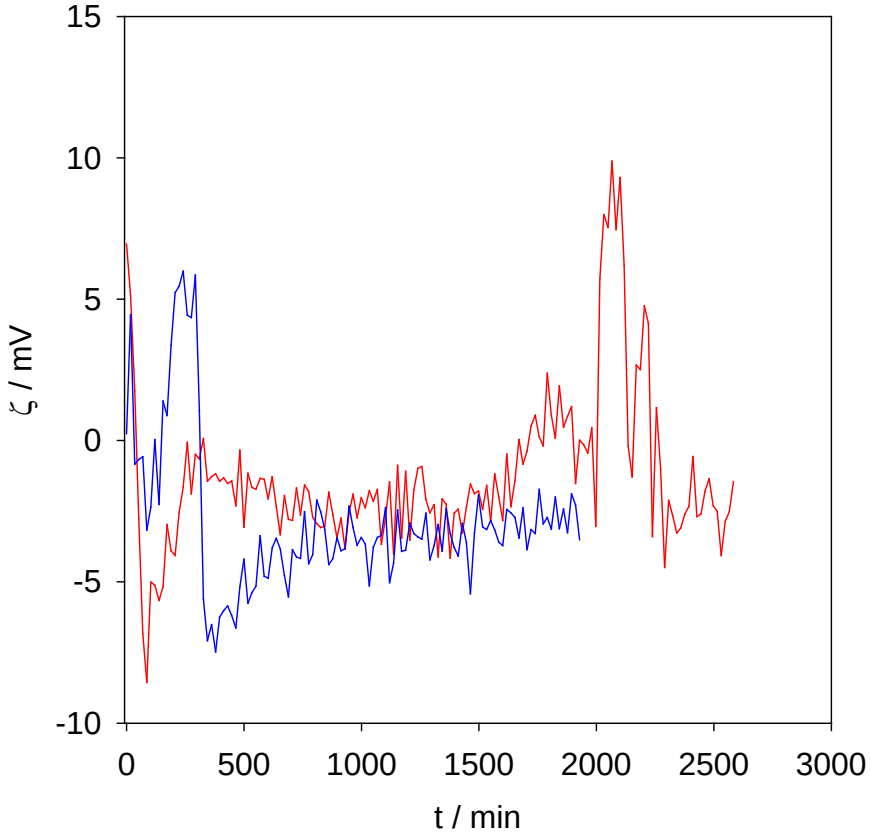


Figure 5 of SI: Evolution of the average zeta potentail of PAH-PSP "complexes" in the presence of 1 M NaCl in the case where a volume V of PAH (2 x 10^{-4} M in monomer units) is injected in an identical volume V of PSP (2 x 10^{-4} M in monomer units) (_____) or when the PSP solution is injected in the PAH solution (_____).

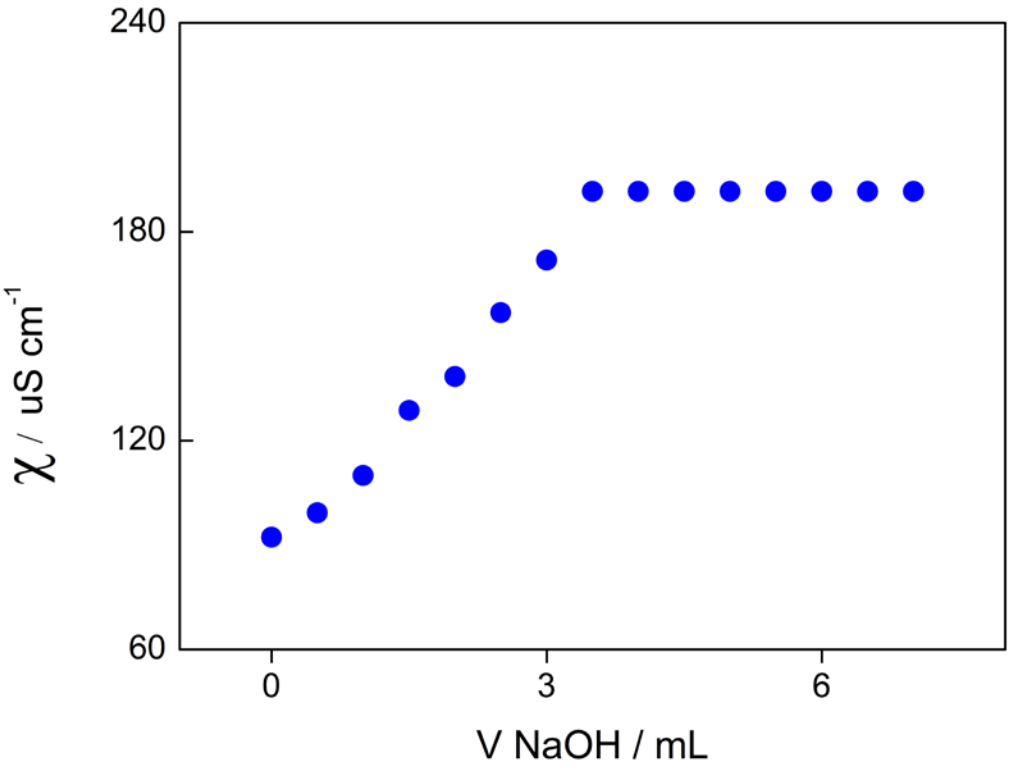


Figure 6 of SI: Condutometric titration curve of the supernatant, after centrifugation of the complexs with NaOH.

The PAH-PSP "complexes" were prepared in the presence of 0.15 M NaCl. A volume V of PAH (1 x 10^{-4} M in monomer units) is mixed with an identical volume V of PSP (1 x 10^{-4} M in monomer units). After allowing to equilibrate for 3000 minutes, the solution was centrifuged and the supernatant liquid was titrated with 1x10^{-4} M NaOH at constant temperature of 25±0.02 ^{0}C. The amount of PAH remaining in the supernetant solution, hence the amount of uncomplexed PAH was calculated, and the stoichiometry of the PAH-PSP complexes was found as 1.1:1 in mol/mol.