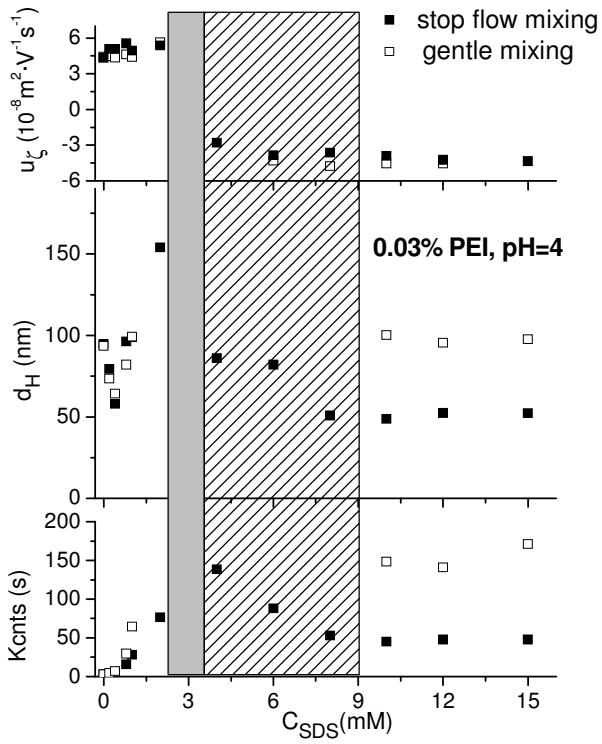
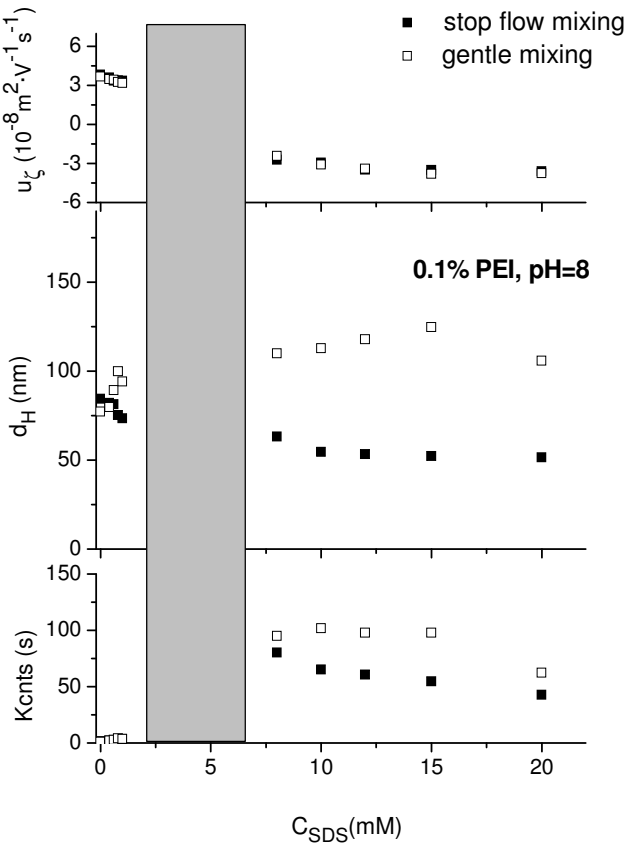
Effect of polyelectrolyte concentration

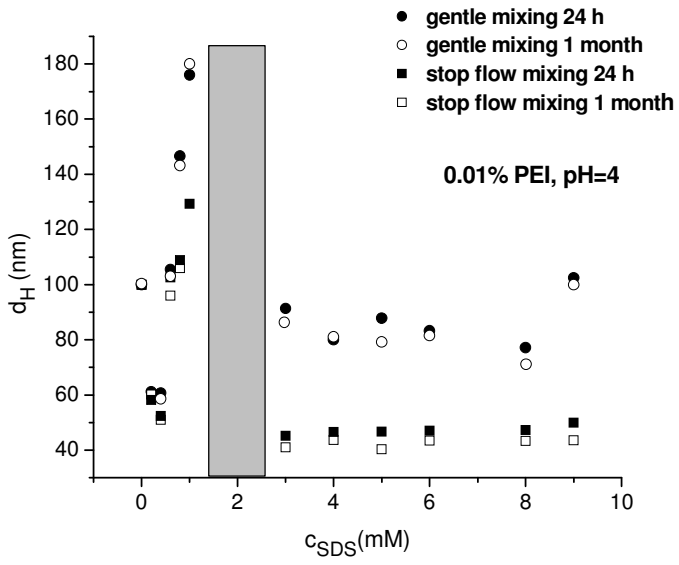


S1 The electrophoretic mobility and apparent hydrodynamic diameter of the PEI/SDS complexes as well as the intensity of the scattered light as a function of surfactant concentration for the two mixing protocols. Prior to the measurements the PEI/SDS solutions, prepared by the two methods, were left to stand for 24 hours. The gray area indicates the precipitated or the highly turbid systems for the stop flow mixing and the gray plus the transparent sparse area together denote the same for the gentle mixing protocol. pH=4, 0.03% PEI without added salt.

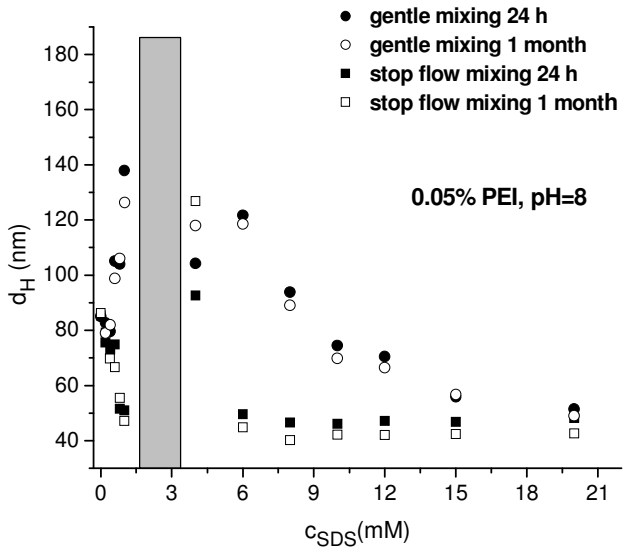


S2 The electrophoretic mobility and apparent hydrodynamic diameter of the PEI/SDS complexes as well as the intensity of the scattered light as a function of surfactant concentration for the two mixing protocols. Prior to the measurements the PEI/SDS solutions, prepared by the two methods, were left to stand for 24 hours. The gray area indicates the precipitated or the highly turbid systems. pH=8, 0.1% PEI without added salt.

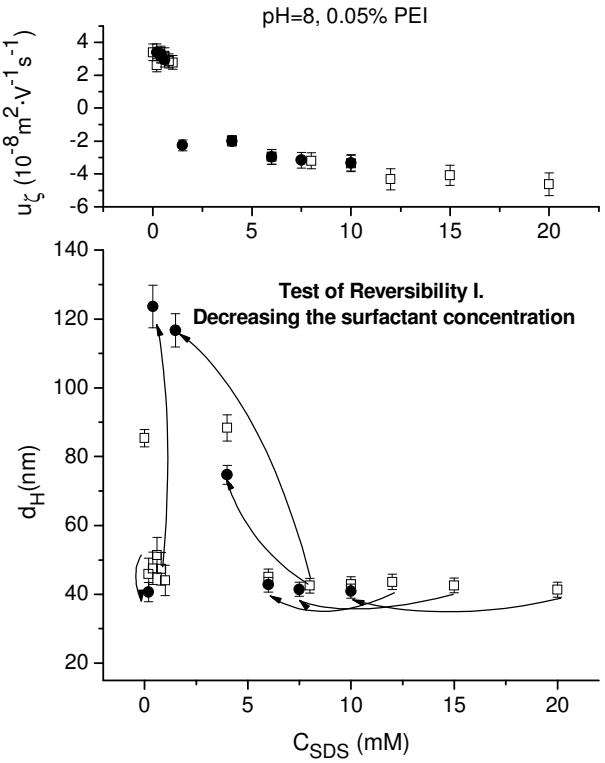
Time dependence and reversibility of the polyelectrolyte/surfactant complex formation



S3 Effect of time on the apparent hydrodynamic diameter of the PEI/SDS complexes. The squares and circles indicate the experimental results of the stop flow and the gentle mixing protocol, respectively. The solid and open symbols denote those data where the solutions were left to stand for 24 hours and 1 month, respectively after the preparation. pH=4, 0.01% PEI without added salt.

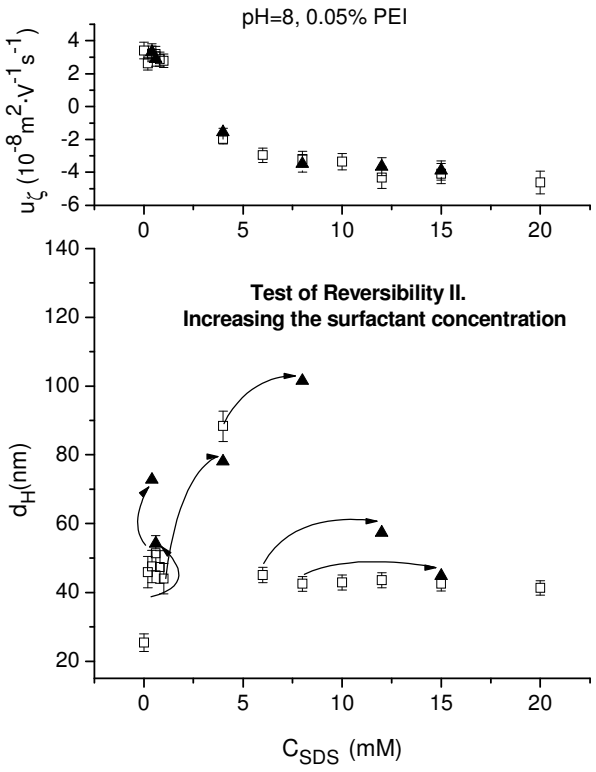


S4 Effect of time on the apparent hydrodynamic diameter of the PEI/SDS complexes. The squares and circles indicate the experimental results of the stop flow and the gentle mixing protocol, respectively. The solid and open symbols denote those data where the solutions were left to stand for 24 hours and 1 month, respectively after the preparation. pH=8, 0.05% PEI without added salt.



S5 *Reversibility of PEI/SDS complex formation in the case of stop flow mixing: I. Decreasing the surfactant concentration to attain the final state of the system.*

The open squares denote the experimental data of electrophoretic mobility and apparent hydrodynamic diameter belonging to PEI/SDS solutions which were prepared by stop flow mixing and left to stand for a month. The solid circles indicate those experiments where the final surfactant concentration is attained in two steps (see further details in the text). pH=8, 0.05% PEI without added salt.



S6 *Reversibility of PEI/SDS complex formation in the case of stop flow mixing: II. Increasing the surfactant concentration to attain the final state of the system.* The open squares denote the experimental data of electrophoretic mobility and apparent hydrodynamic diameter belonging to PEI/SDS solutions which were prepared by stop flow mixing and left to stand for a month. The solid circles indicate those experiments where the final surfactant concentration is attained in two steps (see further details in the text). pH=8, 0.05% PEI without added salt.