

Figure 1. Aggregation of LPS O-antigen free bacteria with PEI600 (a,b) and PEI750000 (c,d). Evolution of the residual optical density and aggregate size as a function of PEI concentration (a,c); Evolution of the electrophoretic mobility and residual optical density as a function of PEI concentration (b,d). The green dotted lines define distinct PEI concentration domains.



Figure 2 : AFM images of LPS O-antigen free *S. oneidensis* MR-1 aggregated with PEI600 (a) 20 mg/L and (b) 100 mg/L, and with PEI750000 (c) 5 mg/L (D1 domain) and (d) 20 mg/L (D2 domain). The red squares indicate cell wall fragments deposited on the glass slide.



Figure 3: TEM observations of LPS O-antigen free *S. oneidensis* MR-1 aggregated with PEI600 (a) 20 mg/L and (b) 100 mg/L, and with PEI750000 (c) 2.5 mg/L (D1 domain) and (d) 30 mg/L (D2 domain). The black arrows point the small dark grains in 3a. The red squares indicate the membrane outgrowth in 3c and some cytoplasmic content and mixed PEI-membrane complexes in 3d.



Figure 4. Cell lysis (assessed by crystal violet release) induced by PEI600 (a) and PEI750000 (b) on LPS O-antigen free S. *oneidensis* MR-1.



Figure 5. Aggregation of LPS O-antigen decorated bacteria with PEI600 (a,b) and PEI750000 (c,d). Evolution of the residual optical density and aggregate size as a function of PEI concentration (a,c); Evolution of the electrophoretic mobility and residual optical density as a function of PEI concentration (b,d). The green dotted lines define distinct PEI concentration domains.



Figure 6 : AFM images of LPS O-antigen decorated *S. oneidensis* MR-1 aggregated with PEI600 (a) 20 mg/L and (b) 100 mg/L, and with PEI750000 (c) 5 mg/L (F1 domain), (d) 30 mg/L (F2 domain) and (e) 90 mg/L (F3 domain). The red squares indicate the mixted PEI/membrane complexes.



Figure 7: TEM observations of LPS O-antigen decorated *S. oneidensis* MR-1 aggregated with PEI600 (a) 20 mg/L and (b) 100 mg/L, and with PEI750000 (c) 5 mg/L (F1 domain), (d) 8 mg/L (F2 domain) and 100 mg/L (F3 domain). The red squares indicate the mixed PEI-membrane complexes in 7c and 7d.



Figure 8. Cell lysis (assessed by crystal violet release) induced by PEI600 (a) and PEI750000 (b) on LPS O-antigen decorated S. *oneidensis* MR-1.