

Supplementary materials

Adhesion and structural changes of PEGylated lipid nanocarriers on silica surfaces

Philipp Grad, Katarina Edwards and Víctor Agmo Hernández

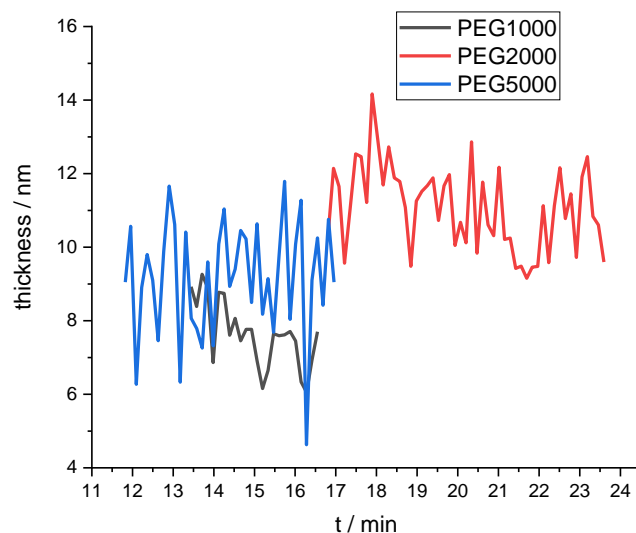


Figure S1 Calculated thickness of the lipodisks films formed on silica coated MP-SPR sensors. The lipodisks are composed of DSPC:DSPE-PEG x with a molar fraction of 80:20 and $x=1000$ (black line), $x=2000$ (red line) and $x=5000$ (blue line). The measurement was performed at 21 °C

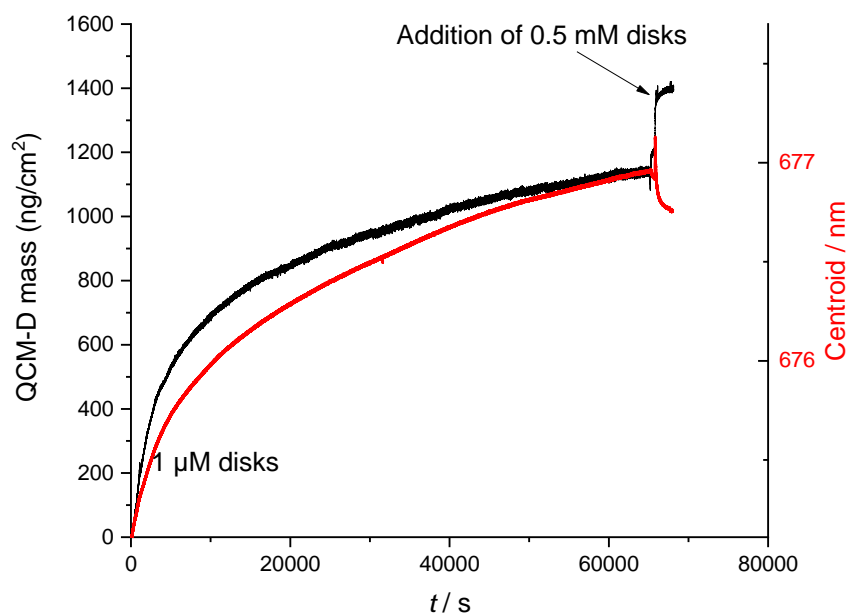


Figure S2 Simultaneously obtained QCM-D calculated mass and centroid position of the NPS signal for 1 μM lipodisks adsorbing on a silica sensor. The lipodisks are composed of DSPC:DSPE-PEG2000 with a molar fraction of 80:20. The measurement was performed at 21 °C

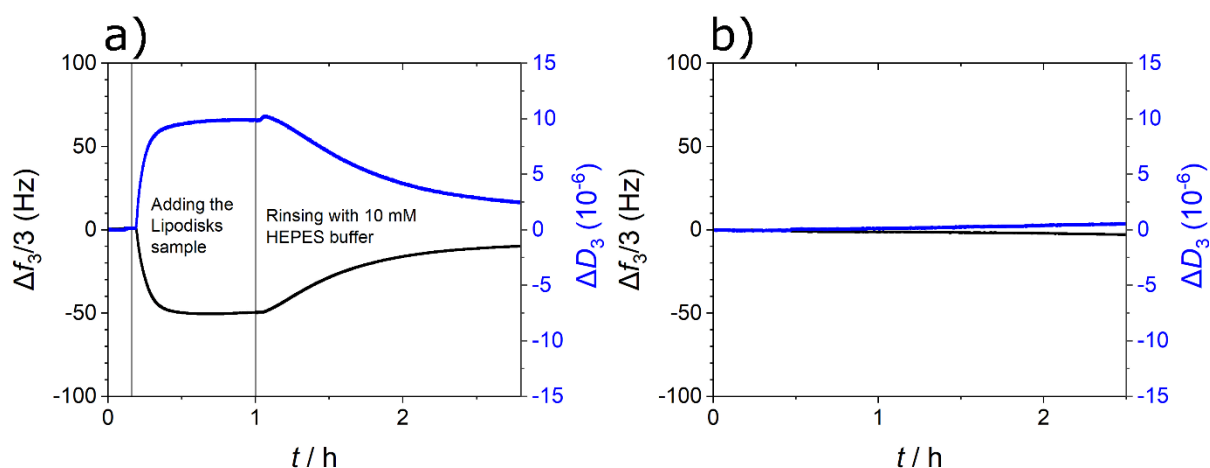


Figure S3 QCM-D graphs of the sample composed of DSPC:DPSE-PEG5000 with molar fractions of 75:25 applied to a silica sensor equilibrated with a) 10 mM HEPES buffer with 150 mM NaCl or b) with 10 mM HEPES buffer with 75 mM CaCl_2 . Samples measured at 25°C.

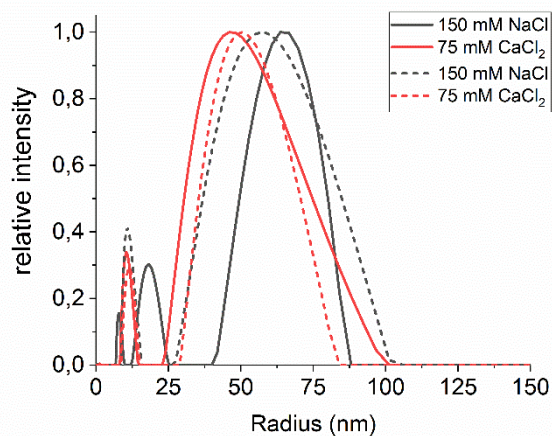


Figure S4 Comparative DLS experiments of samples composed of DSPC:DSPE-PEG2000 with molar fractions of 75:25. The samples have been dispersed in 10 mM HEPES buffer with 150 mM NaCl (black lines) or 75 mM CaCl_2 (red lines). The samples have been measured 2 hours (solid lines) and 3 days (dashed lines) after being dispersed.