# Phosphatidyl serine containing supported lipid bilayers on titania: formation and lipid asymmetry.

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Bilayers prepared on $TiO_2$ from phosphatidyl serine (PS)-containing liposomes in the presence of $Ca^{2+}$ are asymmetric with respect to the distribution of this lipid: it is sequestered in the surface-proximal leaflet.[1,2] As such, they represent an interesting model system for studying cell membranes, which have a similar architecture in terms of the distribution of PS. We will present recent results on the distribution of PS in $TiO_2$-supported bilayers and discuss the effects of liposome composition and $Ca^{2+}$ concentration on their formation. This latter process exhibits interesting similarities with $Ca^{2+}$-induced fusion of PS-containing liposomes in solution.

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2. Richter, R. P.; Maury, N.; Brisson, A. R., *Langmuir* **2005,** *21*, (1), 299-304.