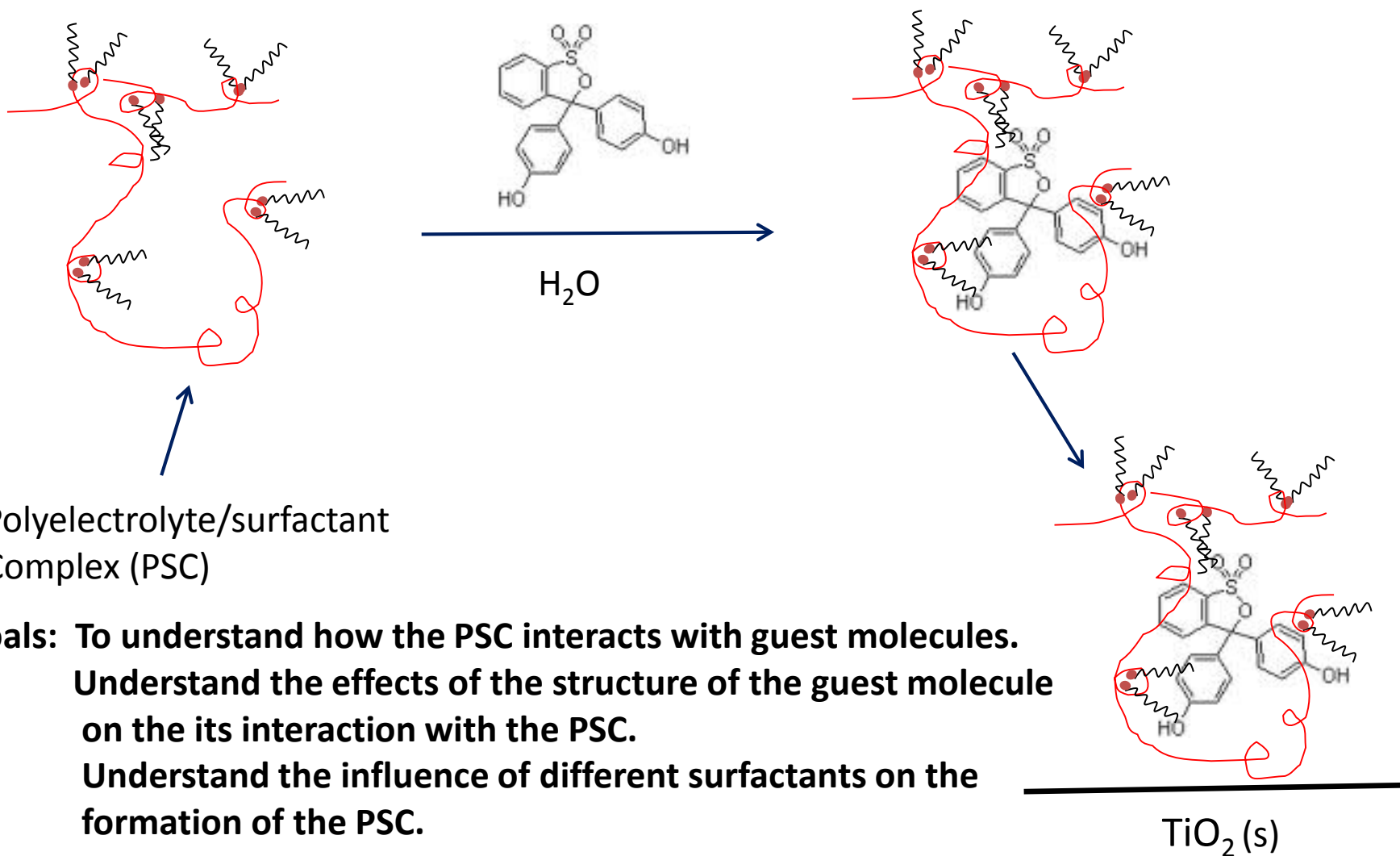


Rivera Research Group

Investigation of macromolecular complexes and their interactions with guest molecules.



Polyelectrolyte/surfactant
Complex (PSC)

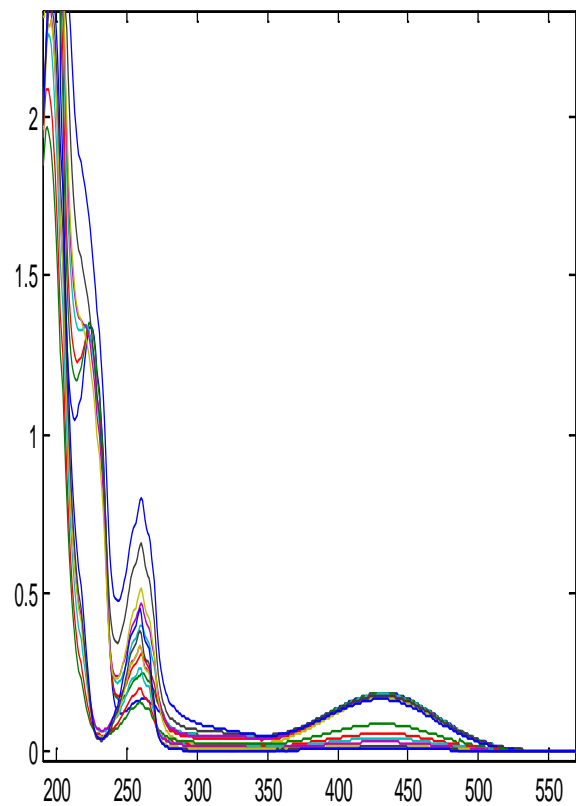
Goals: To understand how the PSC interacts with guest molecules.
Understand the effects of the structure of the guest molecule
on the its interaction with the PSC.
Understand the influence of different surfactants on the
formation of the PSC.

Analytical Techniques Used: ATR-FTIR, UV-vis, quartz crystal microbalance, and surface tension measurement.

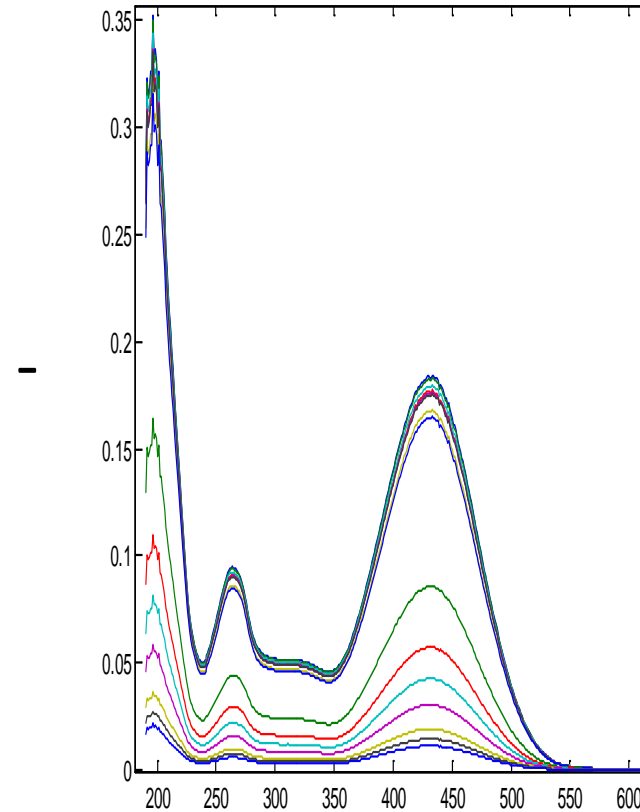
Since macromolecular systems are inherently complex multivariate data analysis techniques such need to be applied to the acquired data in order to fully understand the systems.

Example of a constraint applied to the UV-vis data set.

Original Data Matrix



- Matrix of Dye Spectra



= Matrix with Dye removed

