

Title and Abstract

Prof. Tonya Kuhl

Department of Chemical Engineering and Materials Science and Department of Biomedical Engineering

Neutron and X-ray Reflectometry and Grazing Incidence Diffraction Studies of Single Phospholipid Membranes

Over the past several decades, supported lipid bilayers have been used as model systems of cellular membranes, to investigate various membrane interactions, and as platforms for development of bio-sensors. Precise structural characterization by neutron and x-ray scattering offers a wealth of insight into membrane organization, self-assembly, and domain formation as well as how membranes respond to changes in their environment, e.g. temperature, protein binding, etc. In this talk, I will discuss some recent advances in our understanding of supported membranes and their use in developing bio-sensors.

