

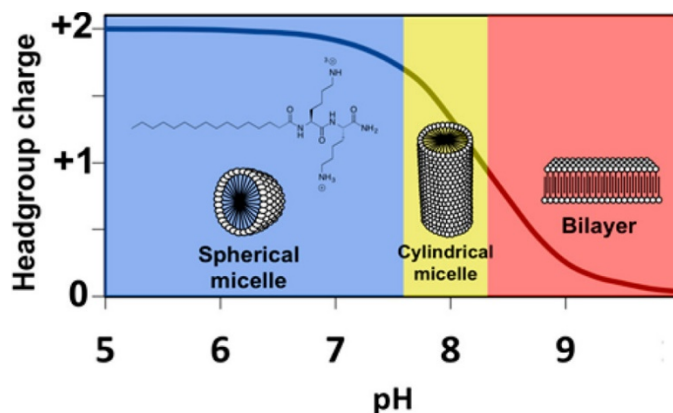
Open Positions

Graduate Students

The Bedzyk group is looking for talented graduate students in Materials Science, Applied Physics, or Physics and Astronomy to join our lab for the following projects:

Electrostatic-Driven Self Assembly Design of Functional Nano-structures

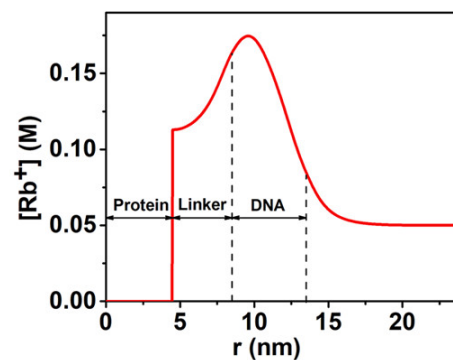
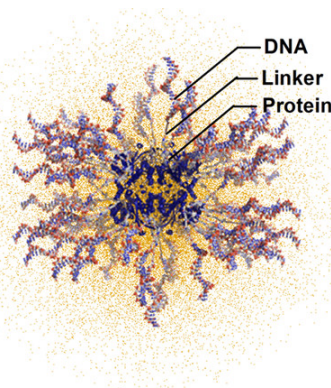
This project focuses on understanding the correlation between molecular assembly and steric and electrostatic intermolecular interactions, which could guide the future design of functional supramolecular structures. Characterization tools including in-situ SAXS/WAXS, Cryo-TEM, and Bio-AFM are used to probe assembly of structures at various length scales, and intermolecular interactions are controlled by tuning solution conditions.



Gao, C., et al., *J. Phys. Chem. B*, **2017**, 121 (7), 1623-1628.

Electrolyte-Mediated Assembly of Like-Charged Colloids

This project focuses on understanding the electrolyte-mediated interactions and ionic environments of highly charged DNA-functionalized nanoparticles in high and low ionic strength regimes. In-situ SAXS will be used to study the interparticle interactions and assembly of DNA-Au nanoparticles, and Anomalous SAXS will be used to study the spatial distributions of ions surrounding DNA-coated proteins.



Krishnamoorthy, K., et al., *ACS Cent. Sci.*, **2018**, 4 (3), 378-386.

Other opportunities may be available through Argonne National Lab. Please contact Professor Bedzyk if you are interested in working in our group!

Postdocs

None available at this time.