

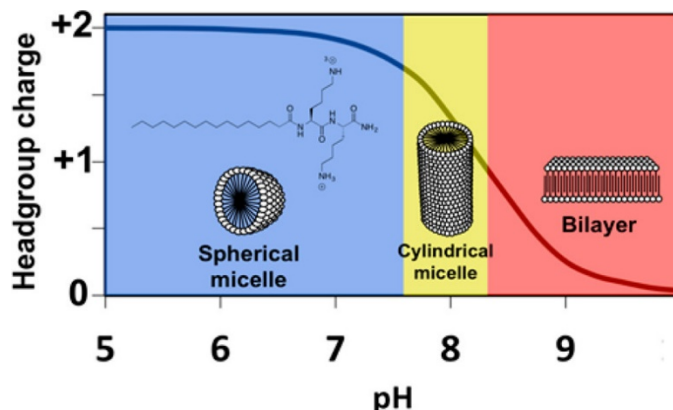
Open Positions

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

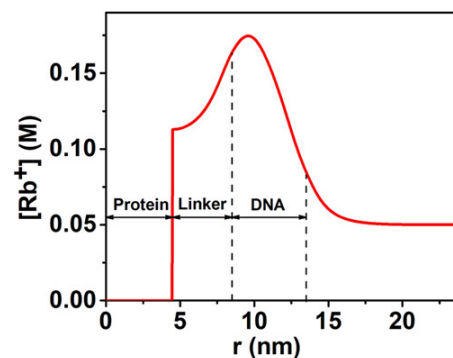
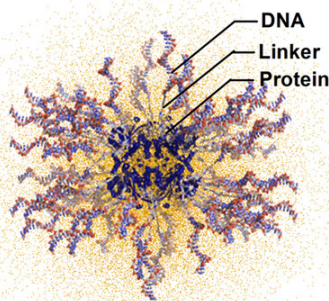
This project focuses on understanding the correlation between molecular assembly and steric and electrostatic intermolecular interactions, which could guide the future design of functional supramolecular structures. Characterization tools including in-situ SAXS/WAXS, Cryo-TEM, and Bio-AFM are used to 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 (bedzyk@northwestern.edu) if you are interested in working in our group!

Postdocs

Post-doctoral Research Associate Position open in X-ray Interface Science, Institute for Catalysis in Energy Processes, Northwestern University.

Position is available immediately for experimental research in the area of interfacial science with a focus on atomic-scale characterization of metal/oxide interfaces and overlayers and their interactions with molecules relevant to catalytic processes. The experimental program will make use of existing surface x-ray scattering and spectroscopy facilities at the Advanced Photon Source. Candidates should have a PhD in Physics, Applied Physics or Materials Science with experience in UHV surface/interface science, and x-ray scattering and/or x-ray spectroscopy. Applicants should e-mail their vitae, research interests, list of publications and names of 2 to 3 references (with phone numbers) to Prof. Bedzyk (**bedzyk@northwestern.edu**)

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