

The Chemistry Biology Interface (CBI) Program Student Invited Seminar Series



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“Self-assembly and applications of DNA-amphiphiles.”

Date: Friday, October 14th

Time: 4:00PM EST

Location: Remsen 233

Followed by reception at 5:00PM in Remsen 140

Abstract: Self-assembly of amphiphilic molecules is an attractive method to engineer supramolecular materials for biomedical and other applications. In my group, we focus on the design of DNA-amphiphiles and evaluate how different building blocks of the amphiphiles affect their tendency to self-assemble spontaneously into different nanostructures. In this presentation, I will discuss aspects of the molecular design of DNA-amphiphiles that control the formation of functional nanostructures, along with the use of these amphiphiles as biosensors, artificial metalloenzymes and targeted delivery nanoparticles.