



## Department of Chemical Engineering Seminar Series

Tuesday, September 29, 2009  
Presentation: 1:30 p.m., 1017 H.H. Dow  
Refreshments to Follow: 3158 H.H. Dow (Pod Room)

**Matt Tirrell**

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Berkeley, California

### *Protein Analogous Micelles: Versatile, Modular Nanoparticles*

Peptides are functional modules of protein macromolecules that can be displayed apart from the whole protein to create biofunctional surfaces and interfaces, or can be re-assembled in new ways to create synthetic mimics of protein structures. Each of these routes is being employed to gain new insight into protein folding and to develop new, functional, biomolecular materials. Examples of work from our laboratory in this area using peptide-lipid conjugate molecules (peptide amphiphiles) will be discussed relating to multi-functional surfaces, DNA-binding peptide assemblies, and protein analogous micelles for cancer and cardiovascular therapeutics.

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The Chemical Engineering Seminar Series is sponsored in part by the Dow Chemical Company



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