

## **Presentation and recognition of functional groups on self-assembling peptide amphiphile nanofibers**

Dr. Mustafa Guler, Dept. of Chemistry, Northwestern University, IL

This presentation will discuss investigations of a novel series of molecules to study presentation of functional groups in self-assembling, fiber-like nanostructures consisting of branched and linear architectures of peptide amphiphiles (PAs). These PA molecules consist of a hydrophilic peptide sequence containing the epitope of interest as well as other functional groups such as biotin, oligonucleotide recognition unit, metal chelating agent. The molecule is terminated at one end by an alkyl segment to drive self-assembly in aqueous media through hydrophobic collapse. These molecules are being used in biomaterials for tissue engineering and biotechnology applications.