

The Department of Mechanical Engineering presents:

***Dr. Lia Stanciu***

*School of Materials Engineering*

*Purdue University*

*West Lafayette, Indiana*

**Friday, October 2nd**

**11:10AM-12:00PM**

**Bourns Hall A265**

## **At the Interface of Materials Science and Biology**

The intrinsic interdisciplinary character of materials chemistry is a constant point of scientific excitement. We can continuously strive to get as much experience as possible in the field of materials science and to address as many of inter-related questions coming from other disciplines. This presentation will introduce the audience to research in the area of chemical synthesis of biologically inspired materials and electron microscopy of biomolecules.

One project aims to develop a simple generic approach for the fabrication of stable, renewable biosensor platforms. Another project has as its goal to establish the structural foundations for manipulation and exploitation of self-organization encountered in biological matter to combine the natural characteristics of biological materials with the exquisite physical properties of nanoparticles. The basics and areas of application of cryo-electron microscopy (cryo-EM) will also be presented.

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