



Co-sponsored with the Department of Chemistry

Dr. Lichang Wang

**Department of Chemistry and Biochemistry
Southern Illinois University—Carbondale**

***Top-Down Approach to Fabricate Organic Dyes for Solar
Cells***

The goal of our research in organic solar cells is to understand the electron excitation and transport processes of solar cell materials. Using various computational tools, we have studied the electron excitation/transfer processes of prototype dyes that are currently used in the dye-sensitized semiconductor solar cells and have predicted new promising organic dyes. In this presentation, I will discuss these results and a pragmatic technique developed in my group to accurately calculate the absorption spectra of the organic dyes with significant charge transfer during electron excitation. Furthermore, I will present a top-down method to produce cost-effective dyes for organic solar cells and discuss the preliminary results on the feasibility study of such a method.

**Host:
Dr. Xiao Cheng Zeng
Department of
Chemistry**

**Monday, March 7, 2011
548 Hamilton Hall: 4:20-5:20 pm
UNL City Campus**

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