

UNH Materials Science Seminar

11:10-12:00, Thursday, April 17, 2008

Kingsbury Hall S145

University of New Hampshire

An introduction to Bulk Heterojunction Organic Photovoltaics

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In order to make solar energy affordable to the general public, from the standpoint of both equipment purchase, installation and the cost of electricity, a new technology is required. In the late 80's and early 90's a new approach to low cost photovoltaics emerged, referred to as Bulk heterojunction organic photovoltaics. As the name implies, this technology comprises carbon-based materials. The feature that differentiates this technology from all of the others is the roll-to-roll processes that are used to manufacture the cells and modules. These processes are typical of those used in the printing and coating industry in that solutions of the active materials, dissolved in organic solvents or water, are applied to a plastic sheet, as opposed to a metallic foil, by means of a coating applicator. The talk will introduce the basic principle of the technology and its composition.

Host: Professor Glen Miller x2456