Third workshop

Sustainable Energy Future: Focus on Organic Photovoltaics

New Directions in Organic Photovoltaics: From Materials to Architectures.

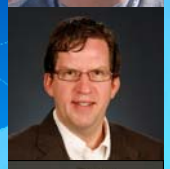
Prof. David Carroll, Wake Forest University

Molecular Engineering of Conjugated Polymers to Reach Higher Efficiency "Plastic" Solar Cells

Prof. Wei You, University of North Carolina at Chapel Hill

Transparent Conducting Electrodes made from Networks of Single-walled Carbon Nanotubes for Organic Photovoltaics

Dr. Jeff Blackburn, National Renewable Energy Laboratory



A Case Study of Poly(3-hexylthiophene)-fullerene Derivative Bulk Heterojunction photovoltaics

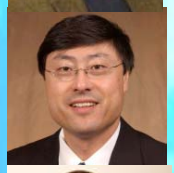
Prof. Paul R. Berger, The Ohio State University

Polymer-based Photovoltaic Cells Incorporating Inorganic Nanocrystals

Prof. Jiangeng Xue, University of Florida

Carbon Nanotube (CNT) Network Transparent Electrodes for Organic Solar Cells

Dr. Chunming Niu, Unidym

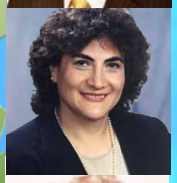


Magneto-Optical Studies of Internal Photovoltaic Processes in Organic Solar Cells

Prof. Bin Hu, University of Tennessee Knoxville

Interfaces in Organic Photovoltaics

Prof. Bernard Kippelen, Georgia Institute of Technology



Introduction to impedance spectroscopy

Prof. Rosario Gerhardt , Georgia Institute of Technology

Impedance and Photo-Electrochemical Techniques in Renewable Energy Research

Dr. Carl-Albrecht Schiller, Zahner, Germany

September 15-16, 2009

http://www.cnms.ornl.gov/workshops/2010/announcement.shtm

Sustainable Energy Future: Focus on Organic Photovoltaics

The goals of this workshop are to:

- Review the current state of research activities in nanomaterial-based organic photovoltaics
- Introduce in-house capabilities for material synthesis and measurements at CNMS and its current R&D efforts
- Facilitate discussions of user research proposals and opportunities for collaboration among attendees
- Introduce advanced techniques to characterize photovoltaic cells.

	September 15th	
8:00-8:40	**Dr. David Carroll**	**New Directions in Organic Photovoltaics: From Materials to Architectures**
8:50-9:30	**Dr. Wei You**	**Molecular Engineering of Conjugated Polymers to Reach Higher Efficiency "Plastic" Solar Cells**
9:50-10:30	**Dr. Jeff Blackburn**	**Transparent Conducting Electrodes made from Networks of Single-walled Carbon Nanotubes for Organic Photovoltaics**
10:30-11:00	**Break**	**Poster/Discussion**
11:00-11:40	**Dr. Paul R. Berger**	**A case study of poly(3-hexylthiophene)-fullerene derivative bulk heterojunction photovoltaics**
12:00-13:00	**Lunch**	**Jim Browning (neutron), Kunlun Hong (Polymer), Kai Xiao (Organic nanowires)**
12:10-13:00	**Dr. Jiangeng Xue**	**Polymer-based photovoltaic cells incorporating inorganic nanocrystals**
13:00-13:40	**Dr. Chunming Niu**	**Carbon nanotube (CNT) network transparent electrodes for organic solar cells**
13:50-14:30	**Dr. Bin Hu**	**Magneto-Optical Studies of Internal Photovoltaic Processes in Organic Solar Cells**
14:30-15:00	**Break**	**Poster/Discussion**
15:00-15:40	**Dr. Bernard Kippelen**	**Interfaces in Organic Photovoltaics**
15:50-16:50		**Poster/Discussion**
	September 16th	
8:00-9:40	**Dr. Rosario Gerhardt**	**Introduction to impedance spectroscopy**
9:40-16:50	**Carl-Albrecht Schiller**	**Impedance and Photo-Electrochemical Techniques in Renewable Energy Research**

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Lecture and Demonstration of PV testing capability using Zahner

Carl-Albrecht Schiller
ZAHNER-elektrik GmbH & Co. KG
http://www.zahner.de

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