

EMERSON CENTER LECTURESHIP AWARD SYMPOSIUM

Computation and Energy: Search for Renewable and Alternative Energy

Co-sponsored by the Computational & Life Sciences Strategic Initiatives, and Center for Comprehensive Informatics, Emory University



Dr. Cherry L. Emerson

Monday, March 02, 2009

Harlem Cinema, Dobbs University Center (DUC), Emory University

AWARD WINNER & KEYNOTE SPEAKER:



Daniel G. Nocera

Department of Chemistry; Massachusetts Institute of Technology (MIT), Boston

Title: Powering the Planet: The Challenge for Science in the 21st Century

The supply of secure, clean, sustainable energy is arguably the most important scientific and technical challenge facing humanity in the 21st century. Rising living standards of a growing world population will cause global energy consumption to increase dramatically over the next half century. However, deleterious consequences resulting from external drivers of economy, the environment, and global security dictate that this energy need be met by renewable and sustainable sources. This talk will place the scale of the global energy issue in perspective and then discuss how an artificial photosynthesis to power our planet might be achieved.

INVITED SPEAKERS:

SCHEDULE OF EVENTS:



Jean-Luc Bredas
School of Chemistry & Biochemistry,
Georgia Tech.,
Georgia, Atlanta



David Beratan
Department of Chemistry,
Duke University,
N. Carolina, Durham



David Sholl
School of Chemical & Biomolecular Engineer.
Georgia Tech.,
Georgia, Atlanta



Craig Hill
Department of Chemistry
Emory University,
Georgia, Atlanta

Time	Event	Speaker	Title
9:00 - 9:20	OPENING CEREMONY & AWARD PRESENTATION		
9:20 - 10:20	Daniel Nocera (MIT):		<i>Powering the Planet: The Challenge for Science in the 21st Century</i>
10:20 - 11:20	Jean-Luc Bredas (Georgia Tech.):		<i>Interfacial electronic properties in functional organic materials for energy conversion</i>
11:20 - 2:30	POSTER PRESENTATIONS (LUNCH)		
2:30 - 3:30	David Beratan (Duke University):		<i>Electron Tunneling, thermal fluctuation, and molecular design</i>
3:30 - 4:30	David Sholl (Georgia Tech.):		<i>Using Atomically-detailed Computations to Accelerate Materials Screening For Energy Applications</i>
4:30 - 4:50	COFFEE BREAK		
4:50 - 5:50	Craig Hill (Emory University):		<i>Stable molecular water oxidation and other catalysts central to energy and materials research</i>
5:50 - 6:30	CLOSING		
6:30 - 8:30	DINNER (by invitation)		

**EMERSON CENTER,
CLS & CCI**

REGISTRATION AND CONTACT INFORMATION:

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<http://www.emerson.emory.edu/conferences/index.html>



The Emerson Center Lectureship Award was established in 2003 to recognize distinguished achievements by scientists in computational sciences and to facilitate collaboration among different disciplines of computational sciences. Current Emerson Center Lectureship Award Selection Committee members are Kurt Warncke (Physics, Chair), Scott Devine (Biochemistry), James Kindt (Chemistry), Jamal Musaeff (Emerson Center), James Nagy (Math & CS) and Astrid Prinz (Biology) of Emory University.