

EMERSON CENTER LECTURESHIP AWARD SYMPOSIUM

Computation and Energy: Search for Renewable and Sustainable Energy

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



C. L. Emerson

March 2, 2009

Harland Cinema, Dobbs University Center, Emory University

AWARD WINNER & KEYNOTE SPEAKER

Daniel G. Nocera, Massachusetts Institute of Technology



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 artificial photosynthesis to power our planet might be achieved.

INVITED SPEAKERS

EVENTS SCHEDULE



Jean-Luc Bredas
School of Chemistry &
Biochemistry, Georgia
Institute of Technology

9:00 – 9:20

OPENING CEREMONY & AWARD PRESENTATION

9:20 – 10:20

Daniel G. Nocera: *Powering the Planet: The Challenge for Science in the 21st Century*



David Beratan
Department of
Chemistry, Duke
University

10:20–11:20

Jean-Luc Bredas: *Interfacial Electronic Properties in Functional Organic Materials for Energy Conversion*

11:20 – 1: 00

POSTER SESSION

1:00 – 2:00

LUNCH

2:30 – 3:30

David Beratan: *Electron Tunneling, Thermal Fluctuation, and Molecular Design*

3:30 – 4:30

David Sholl: *Using Atomically-Detailed Computations to Accelerate Materials Screening For Energy Applications*

4:30 – 4:50

COFFEE BREAK

4:50 – 5:50

Craig Hill: *Stable Molecular Water Oxidation and other Catalysts Central to Energy and Materials Research*

5:50

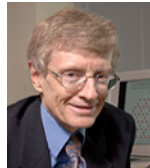
CLOSING

6:30 – 8:00

DINNER (by invitation)



David Sholl
School of Chemical &
Biomolecular
Engineering, Georgia
Institute of Technology



Craig Hill
Department of
Chemistry, Emory
University

REGISTRATION

Registration is free.
Please register at:

www.emerson.emory.edu/conferences

EMORY



CONTACT INFORMATION

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Abstracts of talks are available online