Center for Nonlinear Studies

ENERGY FOR THE 21ST CENTURY

May 18-22, 2009 | Santa Fe, New Mexico, USA

"Energy is the single most important challenge facing humanity today."
- Nobel Laureate Rick Smalley, April 2004, Testimony to U.S. Senate

"Researching, developing, and commercializing carbon-free primary power technologies capable of 10-30 TW by the mid-21st century could require effort as, perhaps international, pursued with the urgency of the Manhattan Project or the Apollo Space Program."
- M. I. Hoffert et. al., Nature, 395, 881 (1998)

Energy use has increased significantly since the start of the industrial revolution. This is due to increases in the human population, increased production of consumer goods, and increasing use of energy intensive appliances. Our current modes of energy production are leading to huge emissions of carbon dioxide and methane into the atmosphere. This is a direct cause of the enhanced greenhouse effect that is responsible for global climate change. Depletion of non-renewable sources of energy, such as fossil fuels, heightens the energy cost and further increases pollution. It is a matter of international importance that technological solutions be brought to bear to alleviate this problem as well as providing alternative sources of power and energy. Solar power, wind power, hydroelectric power, nuclear power, hydrogen power, methane from buried organic material, and other renewable power sources have been advocated but, so far, no solution has been proposed that would be both affordable and complete.

For the Annual Conference, CNLS focuses on an exciting, emerging, interdisciplinary field of science. This year's conference centers on the energy problem. The purpose of the conference is to provide an open forum for active interactions between academic, government and industrial researchers from different subfields to debate the issues of our energy future. The subjects of the discussion include, but are not limited to: science and technology of renewable (solar, wind, tidal, biomass, geo-thermal) and non-renewable (e.g., fossil, nuclear) energy sources, energy storage and transmission, as well as global economic, climate and geo-political issues. We hope that this will bring about a more sophisticated knowledge of energy issues and, more importantly, potential solutions to the global energy problem.

Call for Posters:
If you are interested in contributing a poster, please submit an abstract online.

For more information and registration:
http://cnls.lanl.gov/annual29
conferences@cnls.lanl.gov

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Los Alamos NATIONAL LABORATORY
LALP-09-003

This conference is:
Open to the Public with Registration

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Speaker List:
(*=To be confirmed)

Dan Arvizu*
National Renewable Energy Lab
Paul Barbara
University of Texas
Robert Blankenship
Washington University in St. Louis
Brian Clark
Schlumberger Oilfield Services
Charles Dismukes
Princeton University
Harry Gray*
California Institute of Technology
Rajan Gupta
Los Alamos National Lab
Michael Himmel
DOE BioEnergy Science Center & NRELP-
Prashant Kamat
University of Notre Dame
Dan Kammen
University of California, Berkeley
Melinda Kimble
United Nations Foundation
Victor Klimov
Los Alamos National Lab
Steve Koonin
British Petroleum
Michael Ladisch
Purdue University
Paul Langan
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Rudolph Marcus*
California Institute of Technology
Jack McGowan
Energy Control, Inc.
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Massachusetts Institute of Technology
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William Provine
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Trey Sato
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