Second Conference on the
Physics of Sustainable Energy: Efficiency and Renewables

A popular energy workshop is making a repeat performance. The first conference on the physics of sustainable energy was held at the University of California in Berkeley in March 2008, and the proceedings were published as #1044 in the AIP Conference Series. (For a review of the proceedings, see Physics & Society, July 2009, pg. 22.) In response to the positive enthusiasm about the conference, a second one is being held, again at UC Berkeley (Evans Hall 10), on March 5-6, 2011 under the sponsorship of the APS Forum-Physics/Society, the APS Topical Group on Energy Research and Applications and the American Association of Physics Teachers. International experts will give the technical background to understand the issues connected with using energy more efficiently and producing it renewably.

The event sold out last time, so we recommend signing up in advance. The cost is $100 for 24 talks, a 400-page book and 2 lunches, student rate is $80, plus $35 for the banquet at the Berkeley Faculty Club. The event is organized by Dave Hafemeister, Barbara Levi, Dan Kammen and Peter Schwartz. Contact dhafemei@calpoly.edu (805-544-5096) for questions. Information at www.calpoly.edu/~dhafemei.

Saturday, March 5, Energy Policy
CA State Policy, Dian Grueneich (CA PUC Commissioner, tentative acceptance)
Science and Policy Innovations for a Low-Carbon Economy, Dan Kammen (UC Berkeley, World Bank)
Energy in the Developing World, Ashok Gadgil (LBL)
Energy and Water Connection, Michael Webber (Univ. Texas)
Environmental Effects of Fossil Fuels
NAS 2010 Study, Hidden Environmental Costs of Fossil Energy, Chris Field (Carnegie Inst. of Washington)
Studying the Causes of Recent Climate Change, Benjamin Santer (LLNL)
Non-Carbon Greenhouse Gasses, Katey Anthony (U. Alaska)
Global Circulation Models, Inez Fung (UC Berkeley)
Carbon Sequestration, Julio Friedmann (LLNL)
Decarbonizing Transportation
Transportation Mode Switching, Betty Deakin (UC Berkeley)
Electric Cars: Hybrids/PHEV/BEV, Dan Sperling (Inst. Transportation Studies, UC Davis)
Low Carbon Transportation Fuels of the Future, Tim Lipman (Trans. Sustainability Res. Ctr., UC Berkeley)
Banquet Speaker Energy Efficiency (1970 to 2030): From Sustainability to Carbon Taxes, Art Rosenfeld (former CEC Commissioner and Fermi Awardee)

Sunday, March 6, Enhanced Efficiency Buildings
Exploring the Limits of Energy Efficiency in Office Buildings, David Claridge (Texas A&M)
Energy Simulation Tools for Buildings, Philip Hayes (LBL)
Smart Buildings Using Demand Response, Mary Ann Piette (LBL)
Appliance and Lighting Energy Standards, Greg Rosenquist (LBL)
Renewable Energy
NAS 2009 Study on Electricity from Renewable Resources, K. John Holmes (NAS Study Director)
APS 2010 Study on Integrating Renewables on the Electricity Grid, George Crabtree (APS Study Director, ANL)
Offshore Wind Power, Walter Musial (NREL)
Polymer Thin Film Photovoltaics, Alan Heeger (UCSB, Nobel Prize)
Photovoltaic Roof Systems (Solyndra)
Photovoltaic Concentrator Systems, Steve Horne (Sol Focus)
Topics in Nuclear Power: Small Reactors and Nuclear Waste, Robert Budnitz (LBL)

Register credit card at www.aps.org/units/fps/meetings/energy/, or check to APS Meetings Dept., One Physics Ellipse, College Park, MD, 20740-3844. $100 registration__, $80 Student__, $35 Banquet__: Total_______
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