



Workshop Agenda

Materials for Energy Applications
Lawrence Berkeley National Laboratory
The Claremont Hotel
January 30- February 1, 2012

Monday, January 30

- 2:00-4:00_{pm} Optional LBNL Tours
5:00-7:00 Welcome Reception and Registration

Tuesday, January 31

- 7:30_{am} Breakfast
- 8:30 Welcome (Empire Room) HORST SIMON
Deputy Director, LBNL
- 8:35 Introduction of Keynote DAVID PAREKH
Vice President, Research and
Director, UTRC
- 8:40-9:05 Keynote Part I PAUL ALIVISATOS
Laboratory Director, LBNL
- 9:05-9:25 Keynote Part II OMAR YAGHI
Director, LBNL Molecular Foundry
- 9:30-10:30 Panel 1 Discussion: "How to Engage with the National Labs"

Panel Organizers: Michelle Buchanan, Associate Laboratory Director--Physical Sciences, Oak Ridge National Laboratory and Edwin (Ned) Niccolls, Senior Consulting Materials Engineer, Chevron Energy Technology Company

Chair: Simon Bare, Research Fellow, UOP LLC, Honeywell
Gary Butler, Team Leader--Advanced Materials R&D, Chevron Corporation
Alex Harris, Chair, Chemistry Department, Brookhaven National Laboratory
Michael Paulus, Director, Technology Transfer, Oak Ridge National Laboratory
Joseph Desmond, Senior Vice President, Government Affairs and Communications, BrightSource Energy

Break

10:50-11:50 Panel 2 Discussion: “Technology Gaps Ripe for Industry Collaboration”

Panel Organizers: Francis Houle, Director of Strategic Initiatives, Chemical Sciences Division, Lawrence Berkeley National Laboratory, and Julia Phillips, Deputy Chief Technology Officer and Director, Research Strategy & Partnerships, Sandia National Laboratories

Chair: Eric Amis, Director, Physical Sciences, United Technologies Research Center
Duane Dimos, Director, Materials Science and Engineering Center, Sandia
Sergio Loureiro, Director, Mechanical Systems, Pratt and Whitney
Delia Milliron, Molecular Foundry, Lawrence Berkeley National Laboratory
Stefan Wurm, Director of Lithography, SEMATECH

12:00-1:15_{pm} Lunch

1:30-2:30 Panel 3 Discussion: “How to Improve Public-Private Partnerships”

Panel Organizers: Doug Ray, Associate Laboratory Director, Fundamental & Computational Sciences, Pacific Northwest National Laboratory and Theresa Kotanchek, Vice President, Sustainable Technologies and Innovation Sourcing, Dow Chemical

Chair: Joseph Kocal, Corporate Fellow, Honeywell Specialty Material, UOP
Leo Christodoulou, Program Manager, Advanced Manufacturing, Energy Efficiency and Renewable Energy (EERE), Department of Energy
Michael Kluse, Laboratory Director, Pacific Northwest National Laboratory
Theresa Kotanchek, Vice President, Sustainable Technologies and Innovation Sourcing, Dow Chemical

Break

2:45-4:15 Multiple Breakout Sessions PANEL ORGANIZERS AND MEMBERS

Breakout 1: How to Engage with the National Labs - Empire Room (plenary location)
Breakout 2: Technology Gaps Ripe for Industry Collaboration – Sonoma Room, Mezzanine Level
Breakout 3: How to Improve Public-Private partnerships - Napa Rooms 1 & 2, Mezzanine Level

4:30-6:30 Poster Session with Reception *See next page for details*

7:00-8:30 Banquet with Guest Speaker STEVEN KOONIN
“What's next in Energy” Science and Technology Policy
Institute, Institute for Defense
Analyses

Wednesday, February 1

7:30_{am} Breakfast

8:30 Introduction of Keynote (Empire Room) PAUL ALIVISATOS
Laboratory Director, LBNL

8:35-9:25 Keynote STEVEN CHU
Secretary of Energy

9:35 Introduction of Keynote DAVID PAREKH
Vice President, Research and
Director, UTRC

9:40-10:30	Keynote: Materials for Energy Efficiency, Energy Efficient Materials	MICHAEL MCQUADE Senior Vice President, Science and Technology, United Technologies
	<i>Break</i>	
11:00-12:15	Concluding Panel: Briefing Questions, Recommendations	STEVEN CHU, MICHAEL MCQUADE ERIC AMIS, SIMON BARE, JOSEPH KOCAL; Moderator: DOUGLAS RAY
12:15-1:30 _{pm}	Lunch	
12:40	Venture Capital Perspective	VINOD KHOSLA Founder, Khosla Ventures
1:30	Close Out	DAVID PAREKH HORST SIMON
2:00-4:00	Optional LBNL Tours	

Poster Session: Topical Areas and Poster Titles**Poster Presenters**

Chemical: catalysis, materials synthesis 1. National Laboratory Chemical Synthesis Capabilities 2. National Laboratories Materials Synthesis Capabilities 3. National Laboratory Catalysis R&D Capabilities 4. National Laboratory Catalysis Solutions	Phillip Britt, ORNL Simona Murph, SRNL Alex Harris, BNL Charles Peden, PNNL
Energy: grid, carbon capture/sequestration, combustion 5. Geologic Carbon Dioxide Sequestration 6. Carbon Dioxide Capture Research and Development 7. Clean and Efficient Combustion for Energy Security 8. Industry Gateway to BES User Facilities 9. Grid Materials and Superconductivity	Curt Oldenburg, LBNL Charles Freeman, PNNL Andrew McIlroy, SNL Piero Pianetta, SLAC Qiang Li, BNL
Renewables, emerging energy: photovoltaics, solar fuels, electrical energy storage systems 10. Solar PV/MPV 11. Wind and Water Power: Test Facilities and Industry Partnerships 12. Biomass 13. Materials for Electrical Energy Storage 14. Artificial Photosynthesis Research in the DOE National Laboratories 15. High-Performance Computing Capabilities Within DOE 16. User Facilities for Materials Characterization	Elise Fox, SRNL Ralph Nichols, SRNL John Holladay, PNNL Jerry Hunt, ANL Joel Ager, LBNL Vince Lordi, LLNL Jim Schuck, LBNL
Energy Efficiency: buildings, windows, light-weight materials 17. Energy Efficient Building Envelope 18. Passive and Active Building Energy Systems 19. Indoor Air Quality- Monitoring and Remediation 20. Lightweight Materials 21. Next Generation Lighting	Steve Selkowitz, LBNL Ron Judkoff, NREL Bill Fisk, LBNL Dan Thoma, LANL Jerry Simmons, SNL
Manufacturing: Scalable Simulation Science 22. Partnering in Materials Science and Leadership Computing 23. Partnering in Renewable Energy 24. Software Opportunities: Industry, ISVs and SciDAC 25. Computing and Manufacturing	Suzy Tichenor & Jack Wells, ORNL Avi Purkayastha, NREL David Skinner LBNL David Martin, ANL
Electronics: high voltage, low power 26. Facilities 27. Smart Systems 28. Power Systems	Jeff Bokor, LBNL Wahid Hermina, SNL
Technology Transfer 29. Sponsored Research: Gaining Benefits from DOE Lab Facilities and Experts 30. Licensing – Accessing Breakthrough Technologies 31. Collaborative Research (CRADA) - Leveraging Your Research Dollars 32. How to Benefit from the DOE User Facilities 33. New Initiatives and Alternative Technology Commercialization Programs	Hannah Farquar, LBNL Bill Farris, NREL Cheryl Fragiadakis, LBNL Ida Shum, LLNL Gwyn Williams, JLab