

Nanotechnology and Energy

How will nanotechnology impact the future of energy?

SPEAKERS

Dr. Ted Marston – Chief Technology Officer, EPRI Dr. Michael Riddle – Head, Strategic Research, ChevronTexaco Dr. Lawrence Dubois – Vice President, SRI Prof. Arun Majumdar – University of California, Berkeley

VENUE

TCSEQ auditorium, Stanford University Sep 17, 2003, 6:00-9:00 pm

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AGENDA

6:00 – 6:50 pm	Registration, Refreshments and Networking
7:00 – 7:10 pm	Introduction Dr. Wasiq Bokhari , Chair, MIT Stanford UC Berkeley Nanotechnology Forum Dr. Arun Mehta , Member, Steering Committee, MIT Stanford UC Berkeley Nanotechnology Forum
7:10 – 8:30 pm	Speaker Presentations
8:30 – 9:00 pm	Q&A session
9:00 pm	Session close by the Chair

SPEAKER BIOS

Ted Marston - Chief Technology Officer, Electric Power Research Institute. Dr. Marston recently completed three years as Chief Nuclear Officer of EPRI and prior to that he was a Senior Vice President of EQE International, Inc., and the President and CEO of PLG, Inc. Dr. Marston has more than 25 years of international experience in the assessment and management of risk for industrial facilities and in independent power plant development, railroad risk, design, manufacturing, maintenance and operation of commercial nuclear and conventional power plants, design and licensing of advanced reactors, component and system reliability, failure analysis and margin assessment, life cycle management, fatigue and fracture of metallic and polymeric components. Dr. Marston is a Fellow of the American Society of Mechanical Engineers.

Mike Riddle - Head of Strategic Research, Chevron Texaco. Dr. Riddle received his B.S. in Chemical Engineering from the University of Oklahoma and his Ph.D. in Chemical Engineering from the University of Wisconsin. Mike started his career with Exxon in 1977 as an R&D engineer and joined Chevron as a researcher in 1984, eventually rising to be the Head of Strategic Research in 2001. He currently oversees long term investment and research in the areas of fuel cells, hydrogen storage, and nanotechnology. *Lawrence Dubois* - Vice President, Physical Sciences Division, SRI. Dr. Dubois leads a group of over 150 scientists and engineers focusing on the development and commercialization of advanced materials, micro-fabrication technologies, power sources, biological warfare defense, medical diagnostics, molecular and optical physics, explosives and propellants, catalysts, coatings, and environmentally benign processing. Before joining SRI in 2000, Dr. Dubois was the Director of the Defense Sciences Office at DARPA responsible for an annual investment of approximately \$300 million. Dr. Dubois received his Ph.D. in Physical Chemistry from the University of California, Berkeley in 1980. Dr. Dubois is the author of over 130 publications and holds four U.S. and several foreign patents. His numerous honors include the prestigious IR100 and Alpha Chi Sigma awards as well as Distinguished Member of Technical Staff, the Office of the Secretary of Defense Award for Outstanding Achievement and the Secretary of Defense Medal for Outstanding Public Service. He sits on the Board of Directors of two spin-off companies from SRI: Polyfuel and CYANCE.

Arun Majumdar - Professor of Mechanical Engineering, UC Berkeley. Dr. Majumdar holds the Almy and Agnes Maynard Chair Professor in Mechanical Engineering, University of California, Berkeley, where he served as the vice chair from 1999-2002. He completed his PhD in Mechanical Engineering from UC Berkeley in 1989, and then served on the Mechanical Engineering faculties at Arizona State University (1989-92) and UC Santa Barbara (1992-96). He is a recipient of the NSF Young Investigator Award, the ASME Melville Medal, ASME Heat Transfer Division Best Paper Award, and 2001 ASME Gustus Larson Memorial Award. He is currently serving as an editor for the International Journal of Heat and Mass Transfer, and co-editor-in-chief of Microscale Thermophysical Engineering. He also serves as Chair, Board of Advisors, ASME Nanotechnology Institute; Member, Council on Materials Science and Engineering, US Department of Energy; Member, Chancellor's Advisory Council on Nanoscience and Nanoengineering at UC Berkeley; and Member, Nanotechnology Technical Advisory Group to the President's Council of Advisors on Science and Technology (PCAST). He is a fellow member of both ASME and AAAS.

MIT • Stanford • UC Berkeley Nanotechnology Forum

Introduction and Mission

The Nanotechnology Forum is dedicated to promoting the burgeoning field of nanotechnology by connecting ideas, technology and people. It is a unique organization, run entirely by unpaid volunteers under the umbrella of the alumni associations of the three universities.

The Nanotechnology Forum primarily serves the alumni communities of MIT, Stanford and the University of California, Berkeley, but events are open to anyone interested or active in the field of nanotechnology. We provide opportunities for industry experts, researchers, entrepreneurs, venture capitalists, private investors, technologists and the interested public to discuss, understand and evaluate the state-of-the art in nanotechnology.

Our previous events have featured Nobel laureate Dr. Steven Chu (Stanford), Dr. Paul Alivisatos (Berkeley), Dr. Meyya Meyyappan (NASA), Dr. Stan Williams (HP), Dr. Hans Coufal (IBM) and Steve Jurvetson (DFJ). Each event has been attended by approximately 500 people, including prominent presence from Fortune 500 companies, investment and academic communities.

Future event topics

Nano-medicine Nanotech in Memory and Data Storage Nanotech and Materials Ethical, Social and Environment panel Nanotech and semi-conductors Emerging tools and instrumentation

Steering Committee

Kitu Bindra, Dr. Wasiq Bokhari (Chair), Dr. Victor Boksha, Elizabeth Curran, Jonathan Goldman, Dr. Klaudyne Hong, Ed Korczynski, Dr. Fred Lam, Dr. Arun Mehta, Vivek Nadkarni, Camille Olufsson, Gina Reiger, Dr. Jane Scheiber, Anuranjita Tewary, Anthony Waitz, Qian Wu.

Contact

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Girvan Institute of Technology, NASA



The Girvan Institute of Technology is a non-profit corporation focused on research, technology development, technology transfer, and technology commercialization at the NASA Research Park, Moffett Field, California. Girvan's primary mission is to accelerate

the convergence of commercial markets and government-developed technologies, and to spur the use of innovative commercial technology for NASA missions. Girvan identifies commercially developed technologies of interest to NASA, and assists small companies in accessing technology developed by US government agencies for eventual application in commercial markets.



Quantum Insight

Quantum Insight is a pioneering business strategy services firm in the field of emerging new materials and nanotechnology. Our customers include Fortune 500 companies as well as venture and corporate funds. We provide strategic business and market development services to companies active or interested in the fields of emerging new materials and nanotechnology. We also provide investment research, targeted deal sourcing and due diligence services to venture and corporate funds seeking to build new technology startups.

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We at Burns Doane are proud to say that our 100 plus BURNS DOANE SWECKER & MATHIS LLP scientists and attorneys from all the major scientific disciplines have served some of the pioneers in the field of nanotechnology. Our attorneys have helped develop patent portfolios around some of the fundamental building blocks of this emerging area, including carbon nanotubes, photo-voltaics, MEMS, NEMS, and fuel cells. Our attorneys have founded some of the most successful nanotechnology networking organizations across the country and are well positioned to introduce clients to venture capitalists, industry leaders, and others who can help establish successful businesses.

If you would like to become a sponsor, please contact info@mitstanfordberkeleynano.org

NEXT EVENT

Nano-Medicine Panel How Will Nanotechnology redefine medicine?

LOCATION Stanford University Oct 30, 2003 6:00-9:00 pm

STAY INFORMED

To be put on the forum's mailing list, to learn about this and future events, or to learn more about its other activities, please go to our website at:

www.mitstanfordberkeleynano.org