Nanotechnology Long-term Impacts and Research Directions: 2000-2020

NSF, Board Room (1235), WTEC international study

Public presentation of the final report on September 30, 2010

Registration online: at http://www.wtec.org/nano2/workshop/

Website: *http://wtec.org/private/nano2_draft/ ; Draft report will be posted on this website for public comments from September 30 to October 15, 2010;* Further details of the study on http://www.wtec.org/nano2/

Webcast access: *To view the webcast, please access the website and type your e-mail http://www.tvworldwide.com/events/NSFnano2/100930*

Agenda

8:30 Innovation in Nanotechnology, Tom Peterson, NSF
8:40 Overview of the study, Mark Hersam, NU
8:50 Long-term View of Nanotechnology Development, Mihail Roco, NSF
9:10 Scientific and Societal Challenges for Nanotechnology, Chad Mirkin, NU
9:30 Chapter 1. Investigative Tools: Theory, Modeling, and Simulation, Mark Lundstrom, Purdue U.
9:50 Chapter 2. Investigative Tools: Experimental Methods, Instruments, and Metrology, Dawn Bonnell, U. Pennsylvania

10:10-10:20 Break

10:20 Chapter 3. Synthesis, Processing and Manufacturing of Nanoscale Components, Devices, and Systems, Mark Tuominen, University of Massachusetts Amherst (and Chad Mirkin, NU)
10:40 Chapter 4. Nanotechnology Environmental, Health, and Safety Issues Andre Nel, University of California Los Angeles
11:00 Chapter 5. Sustainability: Environment, Water, Food, and Climate, Mamadou Diallo, California Institute of Technology (and Jeff Brinker, SNL and UNM)
11:20 Chapter 6. Sustainability: Energy Conversion, Storage, and Conservation, Jeff Brinker, SNL and UNM (and Jim Murday, USC)

11:40-1:00 Lunch
12:00-12:30 Press conference on WTEC study (tentative)

1:00 Chapter 7. Applications: Nanobiosystems, Medical, and Health Chad Mirkin, NU (and Andre Nel, UCLA)
1:20 Chapter 8. Applications: Nanoelectronics and Nanomagnetics Jeff Welser, IBM and Nanoelectronics Research Initiative (and Stuart Wolf, U.VA)
1:40 Chapter 9. Applications: Photonics and Plasmonics Evelyn Hu, Harvard University (and Stuart Wolf, U. VA; Jeff Welser, IBM and NRI)
2:00 Chapter 10. Applications: Nanostructured Catalysts Evelyn Hu, Harvard University
2:20 Chapter 11. Applications: High-performance Materials, Nanosystems, and other Emerging Areas, Mark Hersam, NU
2:40 Chapter 12. Preparation of People and Physical Infrastructure James Murday, University of Southern California (and Mark Hersam, NU)
3:00 Chapter 13. Innovative and Responsible Governance of Nanotechnology for Societal Development Mike Roco, NSF
3:20 Overarching Conclusions
3:30 General Questions and Answers
4:30 Adjourn