mepstein@nnco.nano.gov



Assessing Human and Environmental Impacts of Nanotechnology: Workshop and Webcast Explores State of Scientific Research

(February 23, 2009—Bethesda, Md) As part of the National Nanotechnology Initiative's (NNI) ongoing strategy to coordinate nanotechnology-related environmental, health, and safety research (EHS) research, Federal, industrial, and academic scientists will explore current progress of research on human and environmental exposure at a two day workshop.

"This workshop is an important part of our commitment to advancing EHS research, consistent with the NNI vision of building a future in which the ability to understand and control matter at the nanoscale leads to a revolution in technology and industry that benefits society. One of our main goals is to support responsible nanotechnology development," said Dr. Clayton Teague, Director of the National Nanotechnology Coordination Office.

Dr. Teague added that this workshop and several scheduled for later in the year are key components of the overall NNI adaptive management strategy. "This workshop will provide one of the regular assessments of the state of EHS research called for in the 2008 document, Strategy for Nanotechnology-Related Environmental, Health, and Safety Research, and will provide essential information to better understand the evolving needs and priorities of this dynamic field."

The workshop is sponsored by the National Institute for Occupational Safety and Health (NIOSH) and other NNI member agencies and is coordinated by the Nanotechnology Environmental and Health Implications Working Group. It will be hosted by the Consumer Product Safety Commission (CPSC).

"This workshop provides the EHS community an excellent opportunity to collaborate on defining the state-of-the-science, as well as outlining the applied research needed to meet the challenge of allowing this promising technology to continue to move forward with minimal risk.

NIOSH is pleased to sponsor this activity and is excited about sharing our knowledge with the participating stakeholders," stated Dr. Christine Branche, Acting Director of NIOSH.

The workshop will cover the state of research for both the workplace and the general population, focusing on five priority needs:

- Characterize exposure among workers;
- Identify population groups and environments exposed to engineered nanoscale materials;
- Characterize exposure to the general population from industrial processes, industrial and commercial materials, and consumer products containing nanomaterials;
- Characterize health of exposed populations and environments; and,
- Understand workplace processes and factors that determine exposure to nanomaterials and effective methods to control exposures and environmental emissions.

Ken Vest
703.292.4503
kvest@nnco.nano.gov
Marlowe Epstein
703.292.7128
mepstein@nnco.nano.gov

The workshop's goal is to bring stakeholders together to share knowledge about research progress and to chart a path forward for addressing research needs in this vital area. Group and breakout sessions will encourage dialogue and collaboration, to compare progress of ongoing research to research needs, and to identify gaps and emerging trends. The sessions will also relate progress and next steps to adaptive management of the research needs strategy.

"CPSC is pleased to host this important collaboration to chart the future for nanotechnology exposure research. This work is critical in developing knowledge that will ultimately provide confidence in the safety of products that utilize nanomaterials," said Acting CPSC Chairman Nancy Nord.

In addition to NIOSH and CPSC, experts from the Department of Energy (DOE) and the Environmental Protection Agency (EPA), as well as a number of scientists from prominent universities and industry representatives, will play important roles in the workshop.

Since it began, the NNI has promoted research to study the potential EHS impacts of nanotechnology. All told, government agencies participating in the NNI have invested at least \$254 million on research related to environmental, health, and safety concerns between 2005 and 2009.

For FY 2009, \$75 million has been requested for the primary purpose of understanding and addressing potential risks of nanotechnology to the health and the environment. This includes studies funded by several agencies examining the potential toxicity of nanomaterials to humans and the environment, as well as developing and communicating safe practices for handling nanomaterials in the workplace. The FY 2009 EHS funding does not include substantial research in other NNI program component areas that are also vital to learning more about the potential risks of nanotechnology. Based on a sampling of EHS research funded in FY 2006, if all related research was included, current funding figures for EHS research would be as much as 60 percent higher.

The workshop will be held February 24-25 at the CPSC conference facility, 4330 East West Highway, Bethesda Md. The main sessions will also be available by a webcast at:

www.cpsc.gov/webcast/live.html

######

The National Nanotechnology Initiative (NNI) is the program established in fiscal year 2001 to coordinate Federal nanotechnology research and development. The NNI provides a vision of the long-term opportunities and benefits of nanotechnology. By serving as a central locus for communication, cooperation, and collaboration for all Federal agencies that wish to participate, the NNI brings together the expertise needed to guide and support the advancement of this broad and complex field.