

ICON releases workshop report – 2

“Independent efforts such as this one add tremendous value to the work we’re doing at the governmental level,” said Dr. Sally Tinkle, senior science advisor to the acting director at the National Institute of Environmental Health Sciences, National Institutes of Health. “The ICON report provides a detailed roadmap for addressing a specific grand challenge and can inform the federal strategy.”

The first workshop, which was hosted by the U.S. National Institutes of Health in Bethesda, Maryland, focused on classifying nanomaterials and exploring whether existing information about physical and chemical properties is adequate for determining biointeractions. Participants identified the following research needs: tools and models to describe the dynamic nature of nanomaterials throughout their lifecycle; screening tools to correlate the functional properties of nanomaterials with their potential for biological interactions; and exposure assessment studies to determine the net dose for various biointeractions.

The second workshop, which was hosted by Swiss Reinsurance Company at the Centre for Global Dialogue in Rüslikon, Switzerland, focused on identifying the research needed to predict the biological effects of an engineered nanoparticle and defining strategies to develop predictive models. They include: quantitative models to describe the way the properties of nanoparticles affect biomolecular interactions; independent validation of dose and dose rate for nanomaterials; biomarkers to address the vast diversity of nanoparticle types; and strong correlative models for predicting biological effects based on laboratory results.

The diversity of participants, international scope and recognized importance of the goals of the ICON workshops has generated extensive interest and support from both the research and public policy communities worldwide.

“These workshops demonstrated an impressive commitment to international cooperation and harmonization, especially considering the collective necessity to develop and use standardized materials and reference methods operational at the nanoscale” said Dr Gérard Rivière, President of the European Committee for Standardization and Research. “Such broad engagement will be vital to addressing nanotechnology’s impacts in the future.”

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The full report is available on the ICON Website at http://icon.rice.edu/projects.cfm?doc_id=12220.

The **International Council on Nanotechnology** (ICON) is an international, multi-stakeholder organization based at Rice University. Our mission is to develop and communicate information regarding potential environmental and health risks of nanotechnology thereby fostering risk reduction while maximizing societal benefit. The council has evolved into a network of scholars, industrialists, government officials and public interest advocates who share information and perspectives on a broad range of issues at the intersection of nanotechnology and environment, health and safety. We maintain a public portal for information on nanomaterial environment, health and safety (EHS) at <http://icon.rice.edu>.

The **Project on Emerging Nanotechnologies** was launched in 2005 by the **Wilson Center** and **The Pew Charitable Trusts**. It is a partnership dedicated to helping business, governments, and the public anticipate and manage the possible health and environmental implications of nanotechnology.