



## Joint Special Meeting of The Toxicology Forum/ Regulatory Governance Initiative Nanoparticles: Tools for Toxicology

May 1-3, 2011

1.5 days, Carleton University, Ottawa, Ontario

### Importance of Session

Regulators are presently working to assess the scientific evidence available on nanoparticles with the aim of determining risk to human health and the environment. At the same time these materials are being manufactured in increasing quantities and are being incorporated in ever more consumer products and medical devices and presumably discarded after their useful properties are exhausted.

In recent years, there have been efforts by both governments and industry to harmonize regulatory processes between Canada and the United States of America. This offers a potentially rewarding course of action as the scientific knowledge and procedures are at an early stage of development and, as a consequence, both countries have considerable flexibility to align their practices while taking into account their unique circumstances.

The Regulatory Governance Initiative at Carleton University ([www.carleton.ca/regulation](http://www.carleton.ca/regulation)) has produced a number of analyses of the regulation of nanoparticles with the support of different federal government departments as well as with the Treasury Board of Canada Secretariat (The Regulation of Known Unknowns: Toward Good Regulatory Governance Principles; International Approaches to the Regulatory Governance of Nanotechnology; <http://www.carleton.ca/regulation/criticalconversations/knownunknowns.html>; Tox Sci 112:276). The Toxicology Forum has held many sessions on nanoparticles at all three—**could we list where these meetings were-** of its meetings. As toxicology testing on nanoparticles matures, it is particularly valuable and timely to focus on issues related to characterisation. Consensus in this area will provide an essential foundation for the regulatory and other measures which will undoubtedly follow.



## **Sunday May, 1**

5:30 Evening Reception

## **Monday May, 2**

7:00 Breakfast

### **Opening Remarks**

8:15 Welcome from Carleton University (TBC), Dr. David Longfellow, Toxicology Forum  
Session Chair introduction: environmental toxicology (from USA EPA)  
Brief discussion on products in the pipeline, Andrew Maynard

### **Keynote Presentation**

8:40 Risk and Regulation for the Production and Use of Nanoparticles: The Decade Ahead.  
Andrew Maynard, Risk Sciences Center, University of Michigan

### **Session I Characterization Matters**

Session Chair: Representative from USA EPA (TBC).

9:10 Characterization of Nanoparticles  
Alan Steele, National Research Council of Canada

9:40 Aquatic Toxicology: Fauna  
Stephan Klaine, Clemson University

10:10 Break

10:40 Aquatic Toxicology: Flora  
Radovan Popovic, the University of Quebec in Montreal



11:10 Nanotechnology in Fertilizers

Maria De Rosa, Carleton University

11:40 Panel on Regulatory Challenges

Representative from US Environmental Protection Agency (TBC)

George Enui, Environment Canada,

Dan Wayner, National Research Council Canada

12:25 Lunch

## **Session II**

Session Chair: Karen Lloyd, Health Canada

13:40 The Use of Nanoparticles in Food Products: Considerations for Food Safety

Bernadene Magnuson, CANTOX Health Sciences International

14:10 Medical and Related Safety Studies

Paul Howard, National Center for Toxicological Research, US Food and Drug Administration

14:40 Pesticidal Claims Case Study: A Nanosilver Pesticide Product

Jessica Ryman-Rasmussen, US Environmental Protection Agency, Office of Pesticide Programs

15:10 Break

15:40 Case Study: Nanoscale Silver in Disinfectant Spray

J. Michael Davis, US Environmental Protection Agency, National Center for Environmental Assessment, Office of Research and Development

16:10 Case Studies: Nanoscale Titanium Dioxide in Water Treatment and in Topical Sunscreen



J. Michael Davis, US Environmental Protection Agency, National Center for Environmental Assessment, Office of Research and Development

16:40 Nanoparticles in Cosmetics

Linda Katz, US Food and Drug Administration

17:10 Inhalation Exposure

Vince Castranova, National Institute of Occupational Safety and Health

17:30 Panel: Regulatory issues and consumer exposures.

Dr. Julie Skare, Proctor & Gamble

Sammy Godefroy, Health Canada

19:00 Conference Dinner

## **Tuesday May 2**

### **Session III**

8:00 Breakfast

9:00 Chair Introduction: Strategic Issues in Nanoparticle Regulation

Robert Slater, Carleton University

9:10 Managing the Risk of Proportion and Ranked Nanoparticle Regulation

Marc Saner, University of Ottawa

10:35 Break

11:00 US Research Coordination

Sally Tinkle, National Nanotechnology Coordination Office of the National Science and Technology Council



11:30 Consumer and Environmental Perspective

Anne Mitchell, former Executive Director of the Canadian Institute for Environmental Law and Policy --I would be ready to add her current affiliation but keep CIELAP

12:00 Going Forward: Risks, Benefit and Regulation Panel

Karen Dodds, Environment Canada

Carlos Pena, the US Food and Drug Administration Commissioner's Office

Richard Patton, Chemical Industry Association of Canada

Pierre Charest, Health Canada

13:00 End