

WEDNESDAY, JANUARY 27 – THURSDAY, JANUARY 28, 2016 | MONTRÉAL, QC

National Consultation on Nanomaterials and Their Implications for Human Health and Environment

McGill University, New Residence Hall, 3625 Avenue du Parc

Workshop Agenda

DAY 1 – KNOWLEDGE-SHARING AND CAPACITY BUILDING

7:45 a.m. – 8:45 a.m. **Registration, Breakfast & Networking**

8:45 a.m. – 9:00 a.m. **Opening Remarks**

SPEAKERS:

Dr. Subhasis Ghoshal



McGill University
Director, Trottier Institute for Sustainability
in Engineering and Design (TISED)
Associate Professor, Civil Engineering

Bob Oliver



Pollution Probe
Chief Technology Advisor

9:00 a.m. – 10:15 a.m. **Plenary 1-1: Nanomaterials in Our Daily Lives: Understanding Their Uses and Benefits**

Nanomaterials exhibit novel properties and behavioural phenomena that make them useful for diverse applications in industry, medicine, food and consumer products. This session provides participants with a context-setting overview of the global market for nanomaterials: their past development, where they are used today, potential breakthroughs on the horizon and challenges confronting the sector. A view to how the benefits of nanotechnology can be realized while addressing consumer concerns and potential human health risks will also be introduced.

MODERATOR:

Dr. Robert Slater



Carleton University
Adjunct Professor in
Environmental Policy

SPEAKERS:

Dr. Mark Wiesner



Duke University
Professor of Civil &
Environmental Engineering
Director, Center for
Environmental Implications
of Nanotechnology

Dr. John Dutcher



University of Guelph
Professor, Department
of Physics

Dr. Lajos P. Balogh



AA Nanomedicine &
Nanotechnology
Chief Scientific Advisor
and Principal

Dr. Elizabeth Nielsen



Consumers Council
of Canada
CSA Consumer
Representative

DAY 1 – KNOWLEDGE-SHARING AND CAPACITY BUILDING – continued

10:15 a.m. – 10:30 a.m. **Health Break**

10:30 a.m. – 12:15 p.m. **Plenary 1-2: Impacts of Nanomaterials and Their Implications for Human and Environmental Health**

The current state of knowledge on the measurement and the movement of nanomaterials in the environment and in the human body will be the focus of this session. Participants will discover potential exposure pathways and identified and suspected health risks. Knowledge gaps will also be identified as well as specific activities underway to address these where possible.

MODERATOR:

Greg Paoli



Risk Sciences
International, Inc.
Principal Risk Scientist

SPEAKERS:

Dr. Alistair Boxall



University of York, U.K.
*Professor of
Environmental Science*

Dr. Tina Bahadori



U.S EPA
*National Program Director,
Chemical Safety for
Sustainability*

Dr. Chris Metcalfe



Trent University
*Professor and Chair,
Environmental and
Resource Studies
Director, Institute for
Watershed Science*

Dr. Louise Vandelay



Université du Québec
à Montréal
*Professor,
Department of
Sociology*

12:15 p.m. – 1:15 p.m. **Catered Lunch & Networking**

1:15 p.m. – 2:30 p.m. **Parallel Breakout Sessions (A, B, C)**

Session 1-3A: Understanding the State of Science and Research Gaps

This session will examine the state of knowledge on the health implications of nanomaterials, further exploring the gap areas raised in Plenary 1-2. Participants will discuss the ways in which gaps in knowledge can increase uncertainty in the appropriate management of nanomaterials, where the gaps are being closed, and the manner and degree to which findings are being shared with key stakeholders to enhance risk mitigation.

FACILITATOR:

Bruce Dudley



Delphi Group
Senior Vice President

SESSION EXPERTS:

Dr. Frank von der Kammer



University of Vienna
*Senior Scientist and
Lecturer, Department
for Environmental
Geosciences*

Dr. Greg Goss



University of Alberta
*Professor, Biological
Sciences
Director, Office of
Environmental
Nanosafety*

DAY 1 – KNOWLEDGE-SHARING AND CAPACITY BUILDING – continued

Session 1-3B: Exploring the Technological Applications of Nanomaterials

Nanomaterials can potentially address a range of societal challenges, such as the sustainability of global food and energy systems, climate change, as well as advancements in clinical medicine. Participants in this session will explore applications of the technology, as well as ways in which stakeholders can work together to ensure that innovation is supported and solutions emerge while addressing and managing health and environmental risks.

FACILITATOR:

Bob Oliver



Pollution Probe
Chief Technology Advisor

SESSION EXPERTS:

Dr. Greg Lowry



Carnegie Mellon University
Professor of Civil and Environmental Engineering

Dr. Michael Fleischauer



National Research Council Canada – National Institute for Nanotechnology
Associate Research Officer, Program Coordinator – Energy

Dr. Darren Anderson



Vive Crop Protection
Chief Communications Officer & Vice President Regulatory

Session 1-3C: Applying the Canadian Chemicals Management Framework to Nanomaterials

This session will examine how substances are currently assessed, regulated and controlled in Canada, as well as how risk assessment and management is conducted in the face of uncertainty (i.e., precautionary approach). The occupational health and safety dimension will be explored, as well as the state of public knowledge and awareness on nanomaterials, including how consumer right-to-know principles are interpreted and applied.

FACILITATOR:

Ken Ogilvie



Independent environmental consultant

SESSION EXPERTS:

Myriam Hill



Health Canada
Section Head, Nanotechnology Section

Beta Montemayor



Canadian Cosmetic, Toiletry and Fragrance Association
Director, Environmental Science and Regulation

Troy Winters



Canadian Union of Public Employees (CUPE)
Senior Health & Safety Officer, CUPE
Vice Chair, CSA Technical Committee OHS – Nanotechnology

DAY 1 – KNOWLEDGE-SHARING AND CAPACITY BUILDING – continued

2:30 p.m. – 3:00 p.m. **Health Break**

3:00 p.m. – 4:00 p.m. **Plenary 1-4: Group Discussion**

This session will bring participants together to report back from the breakout sessions as a group. Questions or gaps will be identified to help form the basis for the discussion on Day 2.

FACILITATOR:

Bruce Dudley



Delphi Group
Senior Vice President

4:00 p.m. – 4:15 p.m. **Closing Remarks**

SPEAKER:

Dr. Subhasis Ghoshal



McGill University
Director, Trotter Institute for
Sustainability in Engineering
and Design (TISED)
Associate Professor,
Civil Engineering

5:00 p.m. – 6:30 p.m. **Reception at the McGill University Faculty Club**

DAY 2 – NEEDS IDENTIFICATION AND PRIORITIZATION

7:45 a.m. – 8:30 a.m. **Breakfast & Networking**

8:30 a.m. – 8:45 a.m. **Opening Remarks – Recap of Day 1**

8:45 a.m. – 10:15 a.m. **Plenary 2-1: International Experiences and/or Approaches to Assessment and Management of Nanomaterials**

The U.S. and the E.U. experiences regarding the assessment and management of nanomaterials will be presented and discussed, informing participants of how other jurisdictions are addressing nanomaterials opportunities and risks, and the new roles that Canada can play.

MODERATOR:

Dr. Robert Slater



Carleton University
Adjunct Professor in
Environmental Policy

SPEAKERS:

Dr. Alistair Boxall



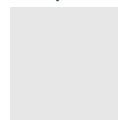
University of York, U.K.
Professor of
Environmental Science

Brad Fisher



Environment and
Climate Change
Canada
Manager,
Nanotechnology
Section Science and
Technology Branch

US rep



US rep

10:15 a.m. – 10:45 a.m. **Health Break**

10:45 a.m. – 12:00 p.m. **Facilitated Breakout Session 2-2: Needs Identification and Prioritization**

In this session, breakout groups will make collective progress toward needs identification and prioritization of issues related to safe and responsible nanomaterials development.

12:00 p.m. – 1:00 p.m. **Networking Lunch & Student Innovation Showcase**

Nanomaterials innovation and health effects research will be brought to the forefront during this session, allowing participants to have a hands-on experience with research being conducted by students at McGill University.

1:00 p.m. – 1:45 p.m. **Plenary 2-3: Policy Café**

The outputs of the breakout groups will be presented to a panel composed of select speakers, serving to animate a dialogue that will engage all participants.

FACILITATORS:

Dr. Subhasis Ghoshal



McGill University
Director, Trottier Institute for
Sustainability in Engineering
and Design (TISED)
Associate Professor,
Civil Engineering

Dr. Nathalie Tufenkji



McGill University
Associate Director, Brace Centre
for Water Resources Management
Associate Professor,
Chemical Engineering

1:45 p.m. – 2:00 p.m. **Thank You and Closing Remarks**

THANK YOU TO OUR SPONSORS



THANK YOU TO MCGILL ORGANIZERS:

Dr. Subhasis Ghoshal

Director, Trottier Institute for Sustainability
in Engineering and Design (TISED)
Associate Professor, Civil Engineering
McGill University

Dr. Nathalie Tufenkji

Associate Director, Brace Centre for
Water Resources Management
Associate Professor, Chemical Engineering
McGill University

Lauren Penney

Manager, Trottier Institute for Sustainability
in Engineering and Design (TISED)
McGill University