



QEEN II: 2nd Quantifying Exposure to Engineered Nanomaterials from Manufactured Products Workshop

October 9–10, 2018

Sponsored by the Consumer Product Safety Commission (CPSC) and
co-hosted by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) and the
National Nanotechnology Initiative (NNI)

U.S. Department of Labor, Frances Perkins Building
200 Constitution Ave., NW, Washington, D.C.

Tuesday, October 9, 2018: *Taking Stock: Nanomaterial Exposure Science in 2018*

- 8:00-8:30 **Registration**
- 8:30-8:45 **Plenary Session (1) *Treye Thomas (CPSC)***
Workshop Opening and Welcoming Remarks. *Lisa Friedersdorf (National Nanotechnology Coordination Office—NNCO)*
- 8:45-10:15 **Advances and Knowledge Gains Since QEEN I. *Chuck Geraci (NIOSH)***
What Have We Learned About Environmental Realism with Respect to Nanomaterial Exposure? *Paul Westerhoff (Arizona State Univ.)*
- 10:15-10:30 **Break**
- 10:30-12:00 **Concurrent Breakout Session (1)**
- Session A. Quantifying Potential Acute and Chronic Exposure from 3D Printing/Additive Manufacturing. **Co-Chairs: *Tim Nurkiewicz (W. Virginia Univ.) and Alyson Johnson (NIOSH)***
- Session B. Consumer Exposure: Food, Food Contact, and Personal Care Products. **Co-Chairs: *Hongda Chen (USDA/NIFA) and JoAnne Shatkin (Vireo Advisors)***
- Session C. Estimating Nanomaterial Exposure Using Life Cycle Assessment Methods. **Co-Chairs: *Aaron Erdely (NIOSH) and TBD***
- Session D. Exposure to Nanomaterials in Agroecosystems and Agricultural Production. **Co-Chairs: *Jason White (Connecticut Agricultural Experiment Station) and Arturo Keller (UCSB Bren School)***
- 12:00–1:30 **Lunch Break (On your own)**
- 1:30-2:30 **Plenary Session (2) Chair: *Igor Linkov (U.S. Army Engineer Research and Development Center)***
Roundtable Discussion - Connecting the Pieces: Linking Manufacture and Use of Nanomaterials or Nanotechnology-enabled Products with Exposure, Outcome and Risk. **Roundtable panel: (TBD)**
- 2:30-2:45 **Break**

Agenda as of 7/24/2018. See <https://www.nano.gov/geen2> for updated information and registration.

- 2:45-4:15 **Concurrent Breakout Session (2)**
Session A. Exposure Scenario: Workplace Exposure. **Co-Chairs: Laura Hodson (NIOSH) and Scott Brown (Chemours)**
Session B. Exposure Scenario: Consumer Exposure (General Products). **Co-Chairs: Joanna Matheson (CPSC) and TBD**
Session C. Nanomaterial Exposure in Ecological Systems. **Co-Chairs: Elijah Petersen (NIST) and Monika Mortimer (UCSB)**
Session D. Emerging Technologies and Advanced Materials: Industry Perspectives on Exposure, Hazard, and Risk Assessment. **Co-Chairs: Shaun Clancy (Evonik) and Silvia Maberti (ExxonMobil)**
- 4:15-5:00 **Plenary Session (3): Deborah Burgin (Agency for Toxic Substances and Disease Registry)**
Reporting out from the day's sessions
- 5:00-6:00 **Evening Poster Session**

Wednesday, October 10: Tackling the Challenges in Nanomaterial Exposure Science

- 8:30-10:15 **Plenary Session (4) Chair: William Boyes (EPA)**
Introducing the QEEN II Young Investigator Winners
Are Poorly Soluble, Low-Toxicity Particles a Model for Nanomaterial Inhalation Exposure and Risk Assessment?
Plenary speaker: **Phil Demokritou (Harvard TH Chan School of Public Health)**
Roundtable panel (**TBD**)
- 10:15-10:30 **Break**
- 10:30-12:00 **Concurrent Breakout Session (3)**
Session A. Linking Dosimetry, and Modeling and *In Silico* Approaches. **Co-Chairs: TBD**
Session B. Assessing Exposure and Health Effects for Nanomaterial Workers: Epidemiologic and Biomarker Approaches. **Gabriele Windgasse (CA Dept. of Public Health) and Paul Schulte (NIOSH)**
Session C. Characterization and Quantification. **Co-chairs: Todd Luxton (EPA) and Keana Scott (NIST)**
Session D. Meet the New Investigators: What Breakthroughs are They Hoping to Make and the Challenges They Face. Co-chairs: **Dilpreet Singh (Harvard TH Chan School of Public Health) and Treye Thomas (CPSC)**
- 12:00-1:00 **Lunch (On your own)**
- 1:00-2:30 **Plenary Session (5) Chair: Janet Carter (OSHA)**
Fostering U.S.-International Collaboration in Integrating Exposure in Nanomaterial Risk Evaluation. **Vladimir Murashov (NIOSH) and Myriam Hill (Health Canada)**
Roundtable panel: **Cathy Fehrenbacher (EPA) and Anil Patri (FDA)**
- 2:30-3:00 **Workshop Wrap-Up: Lessons Learned and Next Steps**
Concluding Remarks