



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

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)

October 9–10, 2018

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), Workshop Opening and Welcoming Remarks. <i>Treye Thomas (CPSC, NNI Coordinator for Environmental, Health, and Safety Research)</i> <i>Lisa Friedersdorf (Director, National Nanotechnology Coordination Office—NNCO)</i>
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 U.)
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 U.) and Alyson Johnson (NIOSH) Speakers: Peter Byrley (EPA); Justin Gorham (NIST); Sandra Pirela (SafeBridge Consultants, Inc.); Souhail al-Abed (EPA)
Cesar Chavez Auditorium	
Cesar Chavez Auditorium	
C5320 (Rm 6)	

<p>N5437 (A, B, C)</p>	<p>Session B. Assessing Exposure and Health Effects for Nanomaterial Workers: Epidemiologic and Biomarker Approaches. Co-chairs: Gabriele Windgasse (CA Dept. of Public Health) and Paul Schulte (NIOSH) Speakers: Paul Schulte (NIOSH); John Beard (Brigham Young U.); Robin Keeler (Dept. of Energy); Mike Kleeman (UC Davis); Gabriele Windgasse (CA Dept. of Public Health)</p>
<p>C5515 (1A & B)</p>	<p>Session C. Integrating Exposure and Toxicity Assessments of Nanomaterials at Different Stages of the Life Cycle. Co-chairs: Aaron Erdely (NIOSH) and Christie Sayes (Baylor U.) Speakers: Aaron Erdely (NIOSH); Kim Rogers (EPA); Jenny Roberts (NIOSH); Mark Wiesner (Duke U.); Christie Sayes (Baylor U.)</p>
<p>N4437 (A, B, C)</p>	<p>Session D. Exposure to Nanomaterials in Agroecosystems and Agricultural Production. Co-chairs: Jason White (Connecticut Agricultural Experiment Station—CAES) and Arturo Keller (UC Santa Barbara—UCSB) Speakers: Greg Lowry (Carnegie Mellon U.); Juan Pablo Giraldo (UC Riverside); Swadeshmukul Santra (U. Central Florida); Mathews Paret (U. of Florida); Carmen Gomes (Iowa State U.); Wade Elmer (CAES); Leanne Gilbertson (U. Pittsburgh)</p>
<p>12:00-1:30</p>	<p>Lunch Break (on your own)</p>
<p>1:30-2:30 Cesar Chavez Auditorium</p>	<p>Plenary Session (2), Roundtable Discussion. Chair: Igor Linkov (U.S. Army Engineer Research and Development Center—ERDC) Connecting the Pieces: Linking Manufacture and Use of Nanomaterials or Nanotechnology-Enabled Products with Exposure, Outcome, and Risk. Roundtable Panel: Benjamin Trump (U.S. Army ERDC); Will Boyes (EPA); Mark Wiesner (Duke U.); Wu-Sheng Shih (Brewer Science)</p>
<p>2:30-2:45</p>	<p>Break</p>
<p>2:45-4:15 N5437 (A, B, C)</p>	<p>Concurrent Breakout Session (2) Session A. Exposure Scenario: Workplace Exposure. Co-chairs: Laura Hodson (NIOSH) and Scott Brown (Chemours) Speakers: Kevin L. Dunn (NIOSH); Delphine Bard (Health and Safety Laboratory, Health and Safety Executive United Kingdom); Michele Shepard (Colden Corp.); Marilyn Black (UL)</p>
<p>C5320 (Rm 6)</p>	<p>Session B. Exposure Scenario: Consumer Exposure (General Products). Co-chairs: Joanna Matheson (CPSC) and Sandra Pirela (SafeBridge Consultants, Inc.) Speakers: Gedi Mainelis (Rutgers U.); Sandra Pirela (SafeBridge Consultants, Inc.); Joanna Matheson (CPSC)</p>
<p>N4437 (A, B, C)</p>	<p>Session C. Nanomaterial Exposure in Ecological Systems. Co-chairs: Elijah Petersen (NIST) and Monika Mortimer (UC Santa Barbara—UCSB) Speakers: Paul Westerhoff (Arizona State U.); Adeyemi Adelaye (UC Irvine); Monique Johnson (NIST); Elijah Petersen (NIST); Monika Mortimer (UCSB)</p>

Final agenda as of 10//52018. See <https://www.nano.gov/qeen2> for updated information.

<p>C5515 (1A & B)</p>	<p>Session D. Emerging Technologies and Advanced Materials: Stakeholder Perspectives on Exposure, Hazard, and Risk Assessment. Co-chairs: Shaun Clancy (Evonik-retired) and Silvia Maberti (ExxonMobil)</p> <p>Speakers: Bruce Lippy (CPWR—The Center for Construction Research and Training); Angela Hight Walker (NIST); Rick Canady (Neutral Science); Trey Thomas (CPSC); Ken Moss (EPA)</p>
<p>4:15-5:00 Cesar Chavez Auditorium</p>	<p>Plenary Session (3), Reporting Out from the Day’s Breakout Sessions. Chair: Deborah Burgin (Agency for Toxic Substances and Disease Registry)</p>
<p>5:00-6:00 Auditorium Lobby Area</p>	<p>Evening Poster Session</p>

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

<p>8:30-10:15 Cesar Chavez Auditorium</p>	<p>Plenary Session (4), Exposure-Driven Risk Assessment for Nanosafety Research. Chair: William Boyes (EPA)</p> <p>Exposure-driven risk assessment of engineered nanomaterials released from nano-enabled products across their life cycle: Lessons learned from case studies. Phil Demokritou (Harvard TH Chan School of Public Health)</p> <p>Roundtable panel: Alison Elder (U. Rochester); Gedi Mainelis (Rutgers U.)</p>
<p>10:15-10:30</p>	<p>Break</p>
<p>10:30-12:00 C5521</p>	<p>Concurrent Breakout Session (3)</p> <p>Session A. Dosimetry Modeling and Computational Approaches to Evidence Integration. Chair: Annie Jarabek (EPA)</p> <p>Speakers: Gunter Oberdoerster (U. Rochester); Jordan Smith (Pacific Northwest National Lab); Christine Hendren (Duke U.); Holger Behrsing (Institute for In Vitro Sciences, Inc.)</p>
<p>N5437 (A, B, C)</p>	<p>Session B. Consumer Exposure: Food, Food Contact, and Personal Care Products. Co-chairs: Hongda Chen (USDA/NIFA) and Jo Anne Shatkin (Vireo Advisors)</p> <p>Speakers: Hang Xiao (U. of Mass. Amherst); Cristina Sabliov (Louisiana State U.); Tim Duncan (FDA); Yanyun Zhao (Oregon State U.); Maria Rubino (Michigan State U. School of Packaging)</p>
<p>C5515 (1A & B)</p>	<p>Session C. Characterization and Quantification. Co-chairs: Todd Luxton (EPA) and Keana Scott (NIST)</p> <p>Speakers: Kirk Scheckel (EPA); James Ranville (Co. School Mines); Justin Clar (Elon U.); Ryan Beams (FDA); Jason Unrine (U. of Kentucky); Jana Navratilova (EPA)</p>

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<p>C5320 (Rm 6)</p>	<p>Session D. Meet the New Investigators: Fresh Perspectives on the Breakthroughs They are Hoping to Make and the Challenges They Face. Co-chairs: Dilpreet Singh (Harvard TH Chan School of Public Health) and Lisa Friedersdorf (NNCO)</p> <p>Speakers: Nancy Monteiro-Riviere (Kansas State U.); Lila Thornton (Duke U. and Young Nano Scientists); Zach Shepard (U. Rhode Island); Kevin L. Dunn (NIOSH); Jazlynn Sykes (U. Arkansas); Scott Brown (Chemours)</p>
<p>12:00-1:00</p>	<p>Lunch (on your own)</p>
<p>1:00-2:30 Cesar Chavez Auditorium</p>	<p>Plenary Session (5). Chair: Janet Carter (OSHA)</p> <p>Fostering U.S.-International Collaboration in Integrating Exposure in Nanomaterial Risk Evaluation. Vladimir Murashov (NIOSH)</p> <p>Roundtable Panel: Christof Asbach (The Institute of Energy and Environmental Technology); Anil Patri (FDA); Rick Canady (Neutral Science); Nora Savage (National Science Foundation); Cathy Fehrenbacher (EPA)</p>
<p>2:30-3:00</p>	<p>Workshop Wrap-Up: Lessons Learned and Next Steps. Chair: Janet Carter (OSHA)</p> <p>Concluding Remarks</p>