

The Future of the NNI: A Stakeholder Workshop

August 1-2, 2019

Hilton Washington DC National Mall
480 L'Enfant Plaza, Washington, DC 20024

AGENDA

The NNI has played a pivotal role in fostering and advancing a dynamic nanotechnology ecosystem in support of the initiative's four goals: advance world-class research, foster commercialization, develop and sustain research infrastructure, and support the responsible development of nanotechnology. Building on this strong foundation, experts across the nanotechnology community will share their perspectives on the key elements required for the nanotechnology enterprise to thrive over the next 15 years.

DAY 1

8:00 – 9:00 am **Registration and Coffee**

9:00 – 9:20 am **Welcome and Introductions** Webcast **Gallery I/II**
Lisa Friedersdorf, National Nanotechnology Coordination Office
Chloé Kontos, White House Office of Science and Technology Policy

Session 1: Vision for the Future of the Nanotechnology Enterprise

This session will explore a **vision** for what nanotechnology research and development can enable over the next 15 years. Based on the ideas discussed in this session, participants will address ecosystem needs to achieve this vision in subsequent sessions.

9:20 – 10:00 am **Keynote** Webcast **Gallery I/II**
John Rogers, Northwestern University

10:00 – 10:30 am **Break**

10:30 am – 12:00 pm **Plenary Discussion Panel** Webcast **Gallery I/II**
Moderator: Andrew Schwartz, Department of Energy
Norman Scott, Cornell University
Dawn Bonnell, University of Pennsylvania
Sudipta Seal, University of Central Florida
Alan Seabaugh, University of Notre Dame

12:00 – 1:00 pm **Lunch** on your own

Session 2: Needs Across the Nanotechnology Ecosystem

Breakout sessions to discuss **needs** to achieve the vision outlined in Session 1. Each breakout session will be primarily discussion-based and address topics provided by workshop organizers.

1:00 – 2:15 pm **Breakout Sessions**

- **Water & Environment** **Gallery I**
Moderator: Qilin Li, Rice University
- **Energy** **Gallery II**
Moderator: Saniya LeBlanc, George Washington University
- **Nanomedicine** **Gallery III**
Moderator: Andre Nel, University of California, Los Angeles
- **Electronics** **Gallery IV**
Moderator: Qiliang Li, George Mason University

2:15 – 2:30 pm	Break	
2:30 – 3:45 pm	Breakout Sessions	
	<ul style="list-style-type: none"> • Food & Agriculture Moderator: Eric McLamore, University of Florida • Infrastructure Moderator: Matteo Pasquali, Rice University • Sensing/Internet of Things Moderator: Evangelyn Alocilja, Michigan State University • Aerospace & Automotive Moderator: Debbie Senesky, Stanford University 	<p>Gallery I</p> <p>Gallery II</p> <p>Gallery III</p> <p>Gallery IV</p>
3:45 – 4:00 pm	Break to reconfigure room	
4:00 – 5:00 pm	Breakout Session Read-Outs Webcast	Gallery I/II
	Moderator: Stacey Standridge, National Nanotechnology Coordination Office	
5:00 – 6:00 pm	Town Hall Discussion Webcast	Gallery I/II
	Moderator: Lisa Friedersdorf, National Nanotechnology Coordination Office	

The National Academies of Sciences, Engineering, and Medicine is seeking community input for the quadrennial review of the NNI. The study will analyze the relative position of the United States compared to other nations, identify critical research areas where the United States should be the world leader, and consider if and how the NNI should continue. Please join members of the study committee for a town hall to discuss future directions and opportunities for nanotechnology in the United States in the context of worldwide efforts. In particular, input on the following topics is welcome:

- New or revised goals for the NNI.
- New research areas and technical priorities for the future.
- Potential partnerships, coordination, and management mechanisms to advance nanotechnology research and development.

The National Academies will issue a report in 2020 that will provide analysis and recommendations to the NSET Subcommittee of the National Science and Technology Council and to NNCO.

DAY 2

8:00 – 8:25 am	Coffee	
8:25 – 8:30 am	Day 2 Welcome Webcast	Gallery I/II
8:30 – 9:30 am	Commercialization Panel Webcast Moderator: Matthew Laudon, TechConnect Ventures Leonardo Spanu, Shell Matthew Hull, Virginia Tech and NanoSafe, Inc. Alexis Wells Carpenter, AxNano, LLC Jennifer Shieh, White House Office of Science and Technology Policy	Gallery I/II
9:30 – 9:45 am	Break to reconfigure room	

Session 3: Mechanisms to Support Key Ecosystem Needs

This session will reconvene the breakout groups from Session 2 to discuss **mechanisms** to address the previously identified needs. The breakout sessions will be primarily discussion-based and moderated by Federal representatives.

9:45 – 11:00 am	Breakout Sessions <ul style="list-style-type: none">• Water & Environment Moderator: Nora Savage, National Science Foundation• Energy Moderator: George Maracas, Department of Energy• Nanomedicine Moderator: Piotr Grodzinski, National Institutes of Health• Electronics Moderator: Robinson Pino, Department of Energy	Gallery I Gallery II Gallery III Gallery IV
11:00 – 11:15 am	Break	
11:15 am – 12:30 pm	Breakout Sessions <ul style="list-style-type: none">• Food & Agriculture Moderator: Hongda Chen, U.S. Department of Agriculture/National Institute of Food and Agriculture• Infrastructure Moderator: Jonathan Porter, Department of Transportation• Sensing/Internet of Things Moderator: Eric Forsythe, U.S. Army Research Laboratory• Aerospace & Automotive Moderator: Mia Siochi, NASA	Gallery I Gallery II Gallery III Gallery IV
12:30 – 1:30 pm	Lunch on your own	
1:30 – 2:45 pm	Breakout Session Read-Outs  Moderator: Antti Makinen, Department of Defense	Gallery I/II
2:45 – 3:00 pm	Break	
Session 4: Tying It All Together Building on the conversations throughout the event, this session will synthesize the key findings to identify potential strategic directions for the NNI.		
3:00 – 4:30 pm	Synthesis of Workshop Discussions  Moderator: Paul Westerhoff, Arizona State University Quinn Spadola, Georgia Institute of Technology Ahmed Busnaina, Northeastern University Jeff Nelson, Sandia National Laboratories	Gallery I/II
4:30 – 4:45 pm	Workshop Wrap-Up 	Gallery I/II