



ANSI-NSP N 145r1-2024  
Date revised: August 23, 2024

Draft Agenda

ANSI Nanotechnology Standards Panel (ANSI-NSP)  
[www.ansi.org/nsp](http://www.ansi.org/nsp)

Standards Needs for Nanoplastics

Registration can be found here:

[https://register.ansi.org/standards\\_needs\\_for\\_nanoplastics\\_2024](https://register.ansi.org/standards_needs_for_nanoplastics_2024)

September 10, 2024  
9.00 a.m. – 4.30p.m. EDT

September 11, 2024  
9.00 a.m. – 1.00 p.m. EDT

*This is a draft agenda and will be adjusted as necessary until the ANSI-NSP meeting*

**DAY 1: SEPTEMBER 10, 2024, 9.00 A.M. – 4.30 P.M. EDT.**

**OPENING REMARKS**

Kathryn L. Beers, Ph.D.  
Director, Material Measurement Laboratory  
National Institute of Standards and Technology (NIST)

**1.0 Welcome and Discussion of Goals for this Workshop**

ANSI-NSP Co-Chair Dr. Shaun Clancy will review the goals of this Workshop

**2.0 Overview of work underway: Presentations from U.S.-based Standards Development Organizations (SDOs) on their current work in nanotechnology standardization**

Dr. Clancy

One of the key roles of the ANSI-NSP is to serve as the cross-sector coordinating body for the purposes of facilitating the development of standards in the area of nanotechnology.

- ASTM E56 Nanotechnology – Dr. Vince Hackley, *National Institute of Standards and Technology (NIST). Chair, subcommittee E56.02; E56 Membership Secretary; E56 International Liaison*
- IEC/TC 113 - Nanotechnology for electrotechnical products and systems - *Invited*
- ISO/TC 229 Nanotechnologies – Dr. Vladimir Murashov, *Senior Scientist, Office of the Director, National Institute of Occupational Safety and Health*
- SEMI - *Invited*

### **3.0 U.S. Government interest relative to nanoplastics**

Dr. Anil Patri – *Director, Nanocore, Chair, Nanotechnology Task Force National Center for Toxicological Research, Food and Drug Administration*

### **4.0 Korea initiative to develop nano-plastic reference materials and measurements**

Dr. Jaeseok Kim – *Korea Research Institute of Standards and Science*

### **5.0 Consideration of background information shared in advance of the ANSI-NSP webmeeting and general discussion of nanoplastics**

Dr. Clancy

In advance of this meeting, a number of reading materials will be shared with participants to help facilitate a discussion of the following questions:

- What are the specific issues/concerns surrounding nanoplastics?
- How are nanoplastics different from microplastics? How are they the same as microplastics?
- What international activities are underway to consider and respond to the impact of nanoplastics on human health and the environment?
- Are there industry activities underway consider and respond to the impact of nanoplastics on human health and the environment?
- What is the U.S. Government (both in terms of regulatory & research) doing to consider and respond to the impact of nanoplastics on human health and the environment?

### **6.0 Evaluating Standards Needs for Nanoplastics – Highlights from the Recent ASTM Committee E56 Survey**

ASTM E56 Nanoplastics Task Group co-leads Dr. Justin Gorham (NIST) and Dr. Vince Hackley (NIST) provide a preliminary overview of results from a recent survey assessing the current landscape for nanoplastic standards.

## **7.0 Consideration of current nanotechnology standards: Can existing documents and efforts be utilized for nanoplastics?**

Dr. Clancy

The work programs of a number of standards activities will be shared in advance of this meeting. Participants are asked to consider if any of these current efforts can be utilized for nanoplastics? If not, can the existing standards be modified to meet the needs for nanoplastics?

### **Break for Lunch (approx. 30 minutes)**

## **8.0 Break-out sessions to gather participant input on nanoplastics standardization**

***Breakouts to commence at 1 p.m. ET and will end the meeting day at 4:30 p.m. ET***

Charge to breakout groups: Each breakout will be a moderated discussion to improve the shared understandings on each topic and identify how SDO's could initiate standards development activities such as Technical Reports, Technical Specifications and International Standards. Identification of priority areas for standards in nanoplastics is an important goal for each session.

### ***Session 1 – Terminology***

*Moderator: Dr. Scott Brown, GSK*

There are already terms developed by SDO's for plastics and for nanomaterials. What are the additional terminology needs? Are nanoplastics always a waste or can nanoplastics be intentionally produced?

### ***Session 2 – Measurement and Characterization***

*Moderator: Dr. Elisabeth Mansfield, National Institute of Standards and Technology*

There are already standards and technical reports for measuring physical, chemical and performance properties for a variety of nanomaterials. Can they be used for nanoplastics? If not, what makes nanoplastics distinct from other classes of nanomaterials?

### ***Session 3 – Health & Environmental Impacts***

*Moderator: Dr. Gregory Zarus, Center for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry (To be confirmed)*

There is a broad concern about the occurrence of nanoplastics in the environment and human exposure to nanoplastics through consumer use and in the workplace. Are nanoplastics different from other nanomaterials? If so, how? There are existing standards and technical reports addressing nanomaterials generally and for some specific nanomaterials. Are these standards applicable to EHS concerns for nanoplastics? If not, what is missing?

**DAY 2: SEPTEMBER 11, 2024, 9.00 A.M. – 1:00 P.M. ET**

Kara Lavender Law, Ph.D  
Research Professor of Oceanography  
Sea Education Association

**9.0 International perspectives on nanoplastics**

- European Commission Joint Research Center  
Dr. Kirsten Rasmussen (*invited*)
- National Research Council Canada  
Dr. Shan Zou (*invited*)

**10.0 Open discussion of Breakout outcomes and proposed priority areas for standardization:**

Dr. Clancy

**11.0 Wrap-up and Next Steps**

**12.0 Adjournment**