

ANSI-NSP 092-2017 January 26, 2017

Agenda

ANSI Nanotechnology Standards Panel (ANSI-NSP) www.ansi.org/nsp

Consumer Technology Association 1919 S. Eads Street Arlington, VA 22202

February 28, 2017 11:00 a.m. – 5:00 p.m.

Dress Code: Business Attire

Buffet lunch will be provided at 1:15 p.m.

NSP Meeting Goals and Anticipated Outcomes:

- General introduction to Graphene and what is the current state of the science
- Discussion of what standards are needed to help support graphene's utilization and commercialization
- Determine whether the standards already published or currently under development meet existing stakeholder needs and if not, what can be done to meet the needs of the community?

1. Welcome and Opening Remarks

11:00 a.m. – 11:20 a.m.

Nanotechnology standardization is of strategic importance to U.S. interests.

ANSI-NSP Co-Chairs will discuss with the Panel the anticipated goals for the day's discussions.

2. Introductions

11:20 a.m. – 11:30 a.m.

Panel participants will introduce themselves, the organization each represents, and his/her area of interest relative to nanotechnology. Dr. Shaun Clancy, Dr. Ajit Jillavenkatesa, ANSI-NSP Co-Chairs

3. Guest Speaker: Mr. Terrance Barkan, Graphene: An Introduction

11:30 a.m. – 12:00 p.m.

Mr. Terrance Barkan, Executive Director of the Graphene Council, will provide an overview of graphene: what it is, its utilization in various industry sectors, and what standards are needed from a commercial perspective.

4. Graphene: Commercialization and Challenges: Industrial Perspectives

12:00 p.m. - 1:15 p.m.

Panelists representing various companies producing and/or utilizing graphene will provide their perspectives on the state of graphene industry, including any challenges and/or impediments to commercialization that will benefit from the development of relevant standards. Panelists will be asked to consider the following:

- Is the technology advanced enough to begin development of graphene-specific standards?
- If so, what standards are needed to help bring graphene-based or enabled products to market? If not, what is missing or needed to develop standards the community needs?
- What are the potential benefits or limitations in developing standards for graphene at this point of time?
- What standards are needed 3-5 years from now?

LUNCH

5. Survey of Existing Standards Relative to Graphene 1:45 p.m. – 2:45 p.m.

After an overview of graphene-related standards currently under development or already published, participants will discuss if these standards are useful to the community as well as identify gaps where standards are still needed.

Some questions to consider: focusing on the following key questions:

- Are the current standards addressing real world needs and key priority areas?
- What, if any, impact do existing nanotechnology standards have on graphene-related R & D?

6. Overview of Work Underway: Presentations from U.S.-

Mr. Terrance Barkan, The Graphene Council

1:15 p.m. – 1:45 p.m.

Domiciled Standards Development Activities

2:45p.m. -3:45 p.m.

Presentations will be made by key organizations involved in current nanotechnology standardization activities. Organizations will be asked to focus on any specific work items that are of relevance to the graphene community.

- ANSI-Accredited U.S. TAG to ISO/TC 229 Nanotechnologies
- USNC TAG to IEC/TC 113 Nanotechnology for electrotechnical products and systems
- ASTM

BREAK

3:45 p.m. - 4:00 p.m.

7. Moderated open discussion to discuss next steps 4:00 p.m. – 4:45 p.m.

Panel participants will hold an open discussion to consider and prioritize the identified standards needs and how these needs can best be met.

ACTION: Discuss anticipated outcome of the NSP meeting, whether future meetings are desired and if so, topics of interest.

8. Closing Remarks and Adjournment 4:45 p.m. – 5:00 p.m.

Dr. Clancy, Dr. Jillavenkatesa

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