

# U.S. Consumer Product Safety Commission

## LOG OF MEETING

**SUBJECT:** ANSI- Accredited US TAG Meeting ISO/TC 229 Nanotechnologies

**DATE OF MEETING:** February 27, 2019

**LOG ENTRY SOURCE:** Treye Thomas, EXHR

**DATE OF LOG ENTRY:** March 27, 2019

**LOCATION:** Offices of American Chemical Society, Washington, DC

### CPSC ATTENDEE(S):

Name	Company
Isaac Mireku	CPSC
Treye Thomas	CPSC
Richard Uhl	CPSC
Priscilla Verdino	CPSC

### Summary:

A summary of the meeting agenda is attached. The CPSC staff participated in Working Group 2 Metrology and WG 3 EHS (environment, health and safety). Highlights include a review of a technical report (TR) entitled "Evaluation of methods for assessing the release of nanomaterials from commercial, nanomaterial containing polymer composites". This report is the result of the Nanorelease project that received significant support from the CPSC staff. There was also a discussion of developing a work item based on research conducted through an interagency agreement between the CPSC and EPA staffs. The method was developed to evaluate the release of nanoparticles from treated surfaces.

**Draft Agenda  
ANSI-Accredited U.S. TAG Meeting  
ISO/TC 229 Nanotechnologies  
Working Group 3 – Health, Safety and Environment**

**American Chemistry Council  
700 Second Street NE  
Washington, DC 20036**

Page | 1

**Wednesday, February 27, 2019  
9.00 a.m. – 4:30 p.m.**

**Webex:**

**Meeting Number:** [REDACTED]  
**Meeting Password:** [REDACTED]  
**Call in Number:** [REDACTED]

**1.0 Welcome and Introductions**

9:00 a.m. – 10:10 a.m.

Dr. Shaun Clancy

TAG WG 3 Chair Dr. Shaun Clancy will ask for introductions from members physically present and on the webmeeting.

**2.0 Approval of Draft Agenda**

9:10 a.m. – 9:15 a.m.

Dr. Clancy will seek to obtain approval of the draft agenda.

**Document: NANO TAG WG 3 081-2019**

**Proposed Motion:** Approve the draft Agenda as distributed.

**3.0 U.S. TAG WG 3 Review of Current WG 3 Program of Work**

9:15 a.m. – 9:30 a.m.

Dr. Clancy will review the current WG 3 Program of Work and the status of all projects under development.

**4.0 TAG WG 3 Review of WG 3 Interim Project Group**

**Meetings – Kuala Lumpur, Malaysia**

9:30 a.m. – 9:45 a.m.

Dr. Clancy/  
Dr. Murashov

TAG WG 3 Members will review the discussions and actions from the WG 3 Project Group meetings in Kuala Lumpur, Malaysia

**5.0 TAG WG 3 Review of Proposed meeting schedule for the WG 3 Meetings – Sydney Australia**

9:45 a.m. – 10:15 a.m.

Dr. Clancy

TAG WG 3 Members will review the proposed meeting schedule for the WG 3 Meeting in Sydney, Australia, identify

participants and consider the need to formulate U.S. positions in advance.

**Document: NANO TAG N XXXX-2019 – Draft Meeting Schedule – WG 3 Interim Meetings, Sydney Australia**

- 6.0 U.S. TAG WG 3 Discussion: PG 23 – ISO 20814 Nanotechnologies – Testing of the Photocatalytic Activity of Nanoparticles**  
10:15 a.m. – 10:30 a.m.

Dr. Vytas Reipa

Page | 2

ISO/DIS 20814 was approved with 100% approval. It is anticipated that this document should bypass the FDIS ballot stage. The U.S. experts will discuss the implications of not submitting this for FDIS ballot

**Document: NANO TAG N 3522-2019**

- 7.0 Update from the WG 3 Convenor – Activities of the OECD WPMN**  
10:30 a.m. – 10:45 a.m.

Dr. Murashov

Dr. Murashov will provide an update on the discussions from the February meeting of the WPMN, noting any specific items of interest for the WG 3 membership.

- 8.0 TAG WG 3 Project Group Discussion: WG 3/PG 31 ISO/TS 23034 Nanotechnologies – Method to estimate cellular uptake of carbon nanomaterials by using optical absorption measurement**  
10:45 a.m. – 11:15 a.m.

Dr. Reipa,  
Dr. Amanda Pentecost

An updated draft of this proposed ISO TS was distributed to the experts at the end of December, with U.S. experts providing comments on the latest draft. As the U.S. experts were the only ones to provide input, Dr. Zhang has requested the document be redistributed for additional input, to be received by the end of March, 2019.

**Action:** TAG WG 3 members will review the latest draft and comments received and discuss whether additional comments are required.

**Document: TC 229 WG 3 N 951 – Updated Draft TS 23034**

**Document: U.S. Comments – December draft TS 23034**

- 9.0 TAG WG 3 Project Group Discussion: PG 30 ISO/TR 22455 High throughput screening method for nanoparticles toxicity using 3D cells**  
11:15 a.m. – 11:30 a.m.

Dr. Clancy

An updated draft of ISO/TR 22455 was reviewed and discussed in Kuala Lumpur, U.S. experts were the only experts to provide comments on the updated draft, and

additional changes were made during the PG 30 meeting itself.

No additional document has been distributed in advance of the meeting in Sydney, but TAG WG 3 will consider whether or not to officially nominate an expert to participate on this project.

Page | 3

**Document: WG 3/PG 30 N 010 – PG 30 Draft Report – Kuala Lumpur**

**10.0 TAG WG 3 Discussions with TAG WG 5, Products and applications, regarding relevant projects**

11:30 a.m. – 12:15 p.m.

TAG WG 3 will hold joint discussions with TAG WG 5 regarding the following WG 5 PWIs:

- Nanotechnologies - Antimicrobial textiles - Specifications and performance
- Performance evaluation of nanomedicine and nanoparticle using 3D cell culture system for their uptake at cellular level'
- Performance evaluation of nanomaterials - Biodistribution study using radiolabeled nanomaterials - Part 1: Radiolabelling of nanomaterials for biodistribution study

**LUNCH**

12:15 p.m. – 1:00 p.m.

**11.0 Liposome Study Group - Joint with WG 2**

1:00 p.m. – 1:45 pm

Dr. Katherine Tyner

Dr. Katherine Tyner, leader of the JWG 2 Liposome Study Group, will provide an update on the progress of this SG, including the results of the SG brainstorming activity on relevant standards in existence and gaps where standards are still needed.

**Document: JWG 2 – N 762.zip**

**12.0 TAG WG 3 Discussion: WG 3/PG 29 ISO/DTR 22293 - Evaluation of methods for assessing the release of nanomaterials from commercial, nanomaterial containing polymer composites**

1:45 p.m. – 2:15 p.m.

Dr. Rick Canady

Dr. Mark Ballentine

An updated draft of the proposed TR will be distributed to the WG 3/PG 29 experts on February 22, 2019, in advance of a WG 3/PG 29 Webmeeting on the 12 March.

**Action:** TAG WG 3 members will review the latest draft and discuss any potential comments to be submitted in advance of either the 12 March Webmeeting or the PG 29 Interim PG meeting in Sydney.

Document: TC 229 WG 3 N XXX

**13.0 TAG WG 3 Discussion: WG 3/PG 33: ISO/DTS 23459 - Assessment of protein secondary structure alteration following an interaction by nanomaterials using Circular dichroism spectroscopy**  
2:15 p.m. – 2:45 p.m.

Dr. Clancy

Page | 4

An updated draft of this ISO TS was distributed to the WG 3 experts on February 14 for review and comment. While there are no U.S. experts nominated to this project, TAG WG 3 will consider the updated draft and develop additional comments as necessary.

**Action:** TAG WG 3 will review the updated draft and develop additional comments as necessary.

Document: TC 229 WG 3 961 – Updated Draft TS 23459

**14.0 TAG WG 3 Discussion: WG 3/PG 25 Considerations for *in vitro* studies of airborne engineered nanomaterials**  
2:45 p.m. – 3:00 p.m.

Dr. Monita Sharma

Dr. Sharma will provide an update on the development of this ISO TR, and her anticipated plans for the PG 25 meeting in Sydney

Document: WG3\_PG25\_013\_Draft Report WG 3/PG 25  
\_Nov\_2018

**15.0 TAG WG 3 Discussion: WG 3/PG 26 Label-free impedance technology to assess the toxicity of nanomaterials in Vitro**  
3:00 p.m. – 3:15 p.m.

Dr. Reipa

An updated draft of the ISO TS has not been distributed since the PG 26 Meeting in Kuala Lumpur.

**16.0 TAG WG 3 Discussion: WG 3/PG 28 In vivo toxicity assessment of nanomaterials using dechorionated zebrafish embryo**  
3:00 p.m. – 3:15 p.m.

Dr. Robert Tanguay

An updated draft of this ISO TS was reviewed and discussed during the meeting in Kuala Lumpur, with an anticipated updated draft to be distributed in advance of Sydney.

Document: WG 3 PG 28 N 011 - Draft Report WG 3/PG 28

**17.0 TAG WG 3 Discussion: WG 3/PG 32 ISO/DTR 23463 - Characterization of carbon nanotube and carbon nanofiber aerosols in relation to inhalation**  
3:15 p.m. – 3:30 p.m.

Dr. Clancy

An updated draft of the ISO TR has not been distributed since the PG 32 Meeting in Kuala Lumpur. Dr. Yu noted he would provide an updated draft in advance of Sydney.

**Document: WG 3 PG 32 N 005 – Draft Report WG 3/PG 32**

**18.0 TAG WG 3 Discussion – ISO Systematic Review of ISO/TS 19337:2016**

3:30 p.m. – 3:45 p.m.

ISO/TS 19337:2016, Characteristics of working suspensions of nano-objects for in vitro assays to evaluate inherent nano-object toxicity, is currently out for Systematic Review, with the vote due in June. TAG WG 3 will discuss an initial US recommended position to put forward to the full U.S. TAG.

**Action:** TAG WG 3 will begin development of a recommended position on this published TS.

**Document: ISO/TS 19337:2016**

**19.0 TAG WG 3 Discussion – Potential New Areas of Work – ISO/TC 229 WG 3**

3:45 p.m. – 4:15 p.m.

TAG WG 3 members will discuss potential new areas of work within WG 3 and whether there are U.S. experts willing and able to lead new projects.

**20.0 Other Business**

4:15 p.m. – 4:30 p.m.

**21.0 Adjournment**

4:30 p.m.

Draft Agenda  
ANSI-Accredited U.S. TAG Meeting  
ISO/TC 229 Nanotechnologies  
Working Group 2 – Measurement and characterization

American Chemistry Council  
700 Second Street NE  
Washington, DC 20036

Wednesday, February 27, 2019  
9:00 a.m. – 5:00 p.m.

Dial-in Information

Access code:

**1.0 Welcome and introductions**  
9:00 a.m. – 9:15 a.m.

Dr. Angela Hight Walker

**2.0 TAG WG 2 Positions Development: JWG 2 documents currently out for ballot**  
9:15 a.m. – 12:00 p.m.

Dr. Hight Walker will lead TAG WG 2 members in considering those JWG 2 documents currently out for ballot. TAG WG 2 Members are requested to formulate recommended positions and comments on those ballots due to close in early March, 2019.

- **DTS Ballot: ISO/TS 10867 - Nanotechnologies --**  
*Characterization of single-wall carbon nanotubes using near infrared photoluminescence spectroscopy* (closes at ISO 3.5.2019)

**Document: NANO TAG N 3525-2019**

- **DTS Ballot: ISO/TS 11251 - Nanotechnologies --**  
*Characterization of volatile components in single-wall carbon nanotube samples using evolved gas analysis/gas chromatograph-mass spectrometry* (closes at ISO 3.5.2019)

**Document: NANO TAG N 3526-2019**

- **DTS Ballot: ISO/TS 21346 - Nanotechnologies -**  
*Characterization of individualized cellulose nanofibril samples* (closes at ISO 3.7.2019)

**Document: NANO TAG N 3527-2019**

U.S. Comments submitted on this DTS ballot can be found on the wiki: <http://tc229wiki.ansi.org/tiki-index.php?page=JWG2PG25>

- **DTS Ballot: ISO/TS 11308 – Nanotechnologies -**

*Characterization of carbon nanotubes using thermogravimetric analysis (closes at ISO 3.25.2019)*

**Document: NANO TAG N 3532-2019**

- **DTS Ballot: ISO/TS 10798 – Nanotechnologies – Characterization of carbon nanotubes using scanning electron microscopy and energy dispersive X-ray spectrometry** (closes at ISO 3.28.2019)

**Document: NANO TAG N 3533-2019**

- **NWIP Ballot – Nanotechnologies - Particle size distribution for cellulose nanocrystals** (closes at ISO 4.25.2019)

**Document: NANO TAG N XXXX-2019**

**LUNCH**

12:00 p.m. – 1:00 p.m.

**3.0 Liposome Study Group - Joint with WG 3**  
1:00 p.m. – 1:45 pm

Dr. Katherine Tyner

Dr. Katherine Tyner, leader of the JWG 2 Liposome Study Group, will provide an update on the progress of this SG, including the results of the SG brainstorming activity on relevant standards in existence and gaps where standards are still needed.

**Document: JWG 2 – N 762.zip**

**4.0 TAG WG 2 - Review of proposed meeting schedule for the Interim JWG 2 Meetings, Sydney, 13 – 17 May 2019 and discussion of relevant documents**  
1:45 p.m. – 2:45 p.m.

Dr. Hight Walker will review the proposed JWG 2 Meeting schedule for the upcoming Interim meetings in Sydney Australia, 13-17 May, 2019. WG 2 members planning to attend the JWG 2 meetings will be identified.

**Document:**

**5.0 Results of recently completed JWG 2 Ballots: ISO/DIS 19749 and ISO/DIS 21363**  
2:45 p.m. – 3:15 p.m.

Two U.S.-led JWG 2 Projects: **ISO/DIS 19749** *Determination of size and size distribution of nano-objects by scanning electron microscopy* and **ISO/DIS 21363** *Nanotechnologies – Measurements of particle size and shape distributions by transmission electron microscopy*, recently completed DIS balloting.

TAG WG 2 members will hear updates on the proposed next steps for each project, either FDIS balloting or publication.

**Document: NANO TAG N 3514-2018\_Results\_ISO/DIS 21363**



**Document: NANO TAG N 3515-2018\_Results\_ISO/DIS 19749**

**6.0 Strategy Study Group / Metrology Study Group**

3:15 p.m. – 4:30 p.m.

TAG WG 2 members will discuss potential work items for future activities as well as organizations for outreach.

**7.0 TAG WG 2 webmeeting schedule in advance of Sydney**

4:30 p.m. – 5:00 p.m.

TAG WG 2 members will develop a webmeeting schedule to cover those project not discussed during this TAG WG 2 meeting.

**8.0 Adjournment**

5:00 p.m.