United States
Consumer Product Safety Commission

MEETING LOG

SUBJECT: ISO/TC 229 WG3 New Work Item Proposal

FY26 OP PLAN ENTRY: Nanotechnology

DATE OF MEETING: 3/26/2026

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Matthew Cho (HSTR)

FILING DATE: 4/2/2026

CPSC ATTENDEE(S): Matthew Cho (HSTR)

NON-CPSC ATTENDEE(S): Contact ANSI for the full attendee list.

Summary of Meeting:

- ISO Technical Committee 229 (ISO/TC 229) Working Group 3 (WG3: Health, Safety and Environmental Aspects of Nanotechnologies) discussed four new work item proposals.
- "Assessment of catalase-like activity of nanoparticles using ESR method." Certain nanoparticles may remove reactive oxygen species (ROS) catalytically similar to the enzyme catalase. The characteristics could have practical applications such as food preservation. The goal is to propose an alternative method to measure catalytic efficiency, using electron spin resonance (ESR). ESR can be used to more effectively measure oxygen generated from oxidoreductase biochemical pathways, compared to traditional oxygen probe meter.
- "Evaluation guideline for weathered Quantum Dots: Physicochemical characterization and macrophage-based safety assessment." Quantum Dots are widely used for making consumer products, such as display monitors and cameras. In the life cycle of the products, these products may degrade, leading to changes in physicochemical properties that may result in releasing of toxic substances. The goal is to establish test guidance for degradation simulation and biological assessment of released substances.
- "Nanotechnologies – Guidance on physico-chemical characterization of nanomaterial biocorona." When a biological system is exposed to nanomaterials, biomolecules, such as proteins, sugars, and nucleic acids adsorb onto the surface of the nanomaterial, resulting in "biocorona." Biocorona, particularly protein corona, may modify biological pathways, and influence cellular uptake, biodistribution and clearance, and immune responses. The goal is to develop a standardized method that can characterize nano-biocorona.
- "Nanotechnology nanoplastics mass concentration detection surface-enhanced Raman spectroscopy methods." Polystyrene nanoparticles released from products are environmental pollutants. Detection methods for polystyrene nanoparticles are not yet standardized. The proposed study will establish a detection method for polystyrene nanoparticles using Raman spectroscopy. Meeting participants suggested that this topic may better fit into WG2 (Chemical characterization).

Next Steps:
The 49th ISO/TC229/WG3 meeting will be held in Sydney, Australia from May 18 to 22, 2026. Staff expects to attend this meeting virtually.

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