

# U.S. Consumer Product Safety Commission

## MEETING LOG

**PRODUCT:** Nanotechnology

**SUBJECT:** ISO/TC 229 Nanotechnologies Working Group Joint Working Group 2 (Measurement and Characterization) to discuss creation of a study group on nanoparticle stability

**LOCATION:** Teleconference

**DATE:** December 18, 2024

**ENTRY DATE:** December 18, 2024

**LOG ENTRY SOURCE:** Joanna Matheson (HSTR)

**COMMISSION ATTENDEES:** Joanna Matheson (HSTR)

**NON-COMMISSION ATTENDEES:** Contact ANSI for a complete list.

### MEETING SUMMARY:

ISO Technical Committee 229 (ISO TC/229) focuses on standardization in the field of nanotechnologies, understanding and control of matter and processes at the nanoscale where the onset of size-dependent phenomena usually enables novel applications, as well as use of nanoscale materials to create improved materials, devices, and systems that exploit these new properties. Specific working groups address the development of standards and guides for terminology and nomenclature; metrology and instrumentation; test methodologies; modelling and simulations; and science-based health, safety, and environmental practices.

ISO/TC 229 Joint Working Group 2 (JWG 2; Measurement and Characterization) met virtually on December 18, 2024, from 7:00am to 8:00am ET to discuss the creation of a study group on nanoparticle stability. The proposal for forming a study group was made by U.S. experts. Resuspension as one of the major failure modes for nanomaterials (particularly for the pharmaceutical industry) and the different approaches taken by industry, even for the same phenomenon, was provided as an example of the need for a study group. Standard methods and test conditions for monitoring and predicting physical stability do not exist.

The proposed title of the study group was modified by the working group to "Prediction of physical stability of suspensions". The suggested scope is to collect and assess existing methods and standards related to nanoparticle physical stability and to liaise with other standard development organizations and stakeholders. The primary focus is on methods to aid in prediction of resuspension, factors influencing the physics of resuspension, as well as scaling rule and accelerated aging techniques.

The working group experts supported the advancement of assembling the study group and is submitting the recommendation to ISO/TC 229.