



**SOT FDA Colloquia on Emerging Toxicological Science:
Challenges in Food and Ingredient Safety**

April 8, 2021—The Toxicology of Nanoparticles

Live Webcast

The Toxicology of Nanoparticles

Chair: Richard Canady, NeutralScience LC3

Co-chair: Kapal Dewan, US FDA CFSAN

Overview

The Society of Toxicology (SOT) in conjunction with the US FDA Center for Food Safety and Applied Nutrition (CFSAN) have partnered to provide this colloquia series. The series presents scientific information that is high-quality, cutting-edge, future-oriented toxicological science to provide a well-grounded foundation to inform the work of US FDA employees. These webcasts are open to the public at no charge. These events are not a public forum for discussion of toxicology regulatory issues.

One of the most challenging aspects of safety assessment for nanomaterial use in consumer products is deriving an estimate of dose from use of a product that can be compared to doses delivered in a toxicology assay. What is the status of this critical translation between use and testing today? This SOT FDA Colloquium will explore issues of problem formulation for toxicology and exposure assessment in safety assessment of nanomaterial use in consumer products.

Schedule (All times are Eastern US, UTC -4)

9:00 AM–9:05 AM	Welcome George Daston, SOT President, Procter & Gamble Company, Mason, OH
9:05 AM–9:10 AM	Overview and Speaker Introductions Rick Canady NeutralScience LC3, Camano Island, WA, and Kapal Dewan, US FDA CFSAN, College Park, MD
9:10 AM–9:45 AM	Lessons Learned from Nanomaterial Characterization: Critical Quality Attributes that Influence Biological Properties Anil Patri, NCTR, Jefferson, AK
9:45 AM–10:20 AM	Standard Dose Measurement for Nanomaterials: What to Include in Exposure and Toxicity so That We Can Bound Dose Estimates for Safety? Christie Sayes, Baylor University, Waco, TX

- 10:20 AM–10:30 AM Break
- 10:30 AM–11:05 AM Dosing-Related Challenges in Toxicity Studies and Risk Assessment of Titanium Dioxide in Food
Walter Brand, RIVM, Bilthoven, The Netherlands
- 11:05 AM–11:40 AM Practical Application to Regulatory Toxicology: Issues Faced in Consideration of Developing Health Guideline Values
Lynne Haber, University of Cincinnati Risk Science Center, Cincinnati, OH
- 11:40 AM–12:40 PM Roundtable Discussion
Moderator: Richard Canady
All speakers
Additional Panelists:
Timothy Duncan, US FDA, Bedford, IL
Agnes Oomen, RIVM, Bilthoven, The Netherlands