

Validation of Nonthermal Technologies

SYMPOSIUM AGENDA

(Schedule subject to slight changes)

SUNDAY, OCTOBER 29

Cornell Institute for Food Systems Industry Partnership Program (CIFS-IPP) & Department of Food Science Reception at Stocking Hall

- 4:00-5:00 PM **Registration & Networking**
- 5:00-5:30 PM **Welcome remarks:**
[Olga Padilla-Zakour](#), Department Chair
[Julie Stafford](#), CIFS-IPP Industry Liaison Officer
[Carmen I. Moraru](#), Symposium Chair
- 5:30-6:30 PM **Cornell Food Science facilities tours**
- 6:30-8:00 PM **Networking Dinner**

MONDAY, OCTOBER 30

Symposium at The Statler Hotel

- 8:00-8:30 AM **Registration and continental breakfast**
- 8:30-9:00 AM **Welcome remarks:**
[Carmen I. Moraru](#), Symposium Chair
[Kathryn Boor](#), Dean, College of Agriculture and Life Sciences
- 9:00-9:45 AM **Keynote talk: “Validation of novel processing methods for microbial inactivation to ensure compliance with the FSMA preventive controls requirements”**
[Jenny Scott](#), Senior Adviser, Center for Food Safety and Nutrition, US Food and Drug Administration

Session 1: Overview of non-thermal processing technologies and critical process factors

Moderators: [Carmen I. Moraru](#), Cornell University and [Gustavo Barbosa-Canovas](#), Washington State University

- 9:45-10:15 AM **Current Status of Nonthermal Processing Technologies**
[Gustavo Barbosa-Canovas](#), Washington State University
- 10:15-10:30 AM **Coffee Break**
- 10:30-10:50 AM **High Pressure Processing (HPP, HPH)**
[Bala Balasubramaniam](#), The Ohio State University

- 10:50-11:10 AM ***Pulsed Electric Field Processing (liquid and solid state)***
Speaker to be confirmed soon
- 11:10-11:30 AM ***Light Based Treatments (UV, PL, LED)***
Carmen I. Moraru, Cornell University
- 11:30-11:50 AM ***Cold Plasma***
Speaker to be confirmed soon
- 11:50 AM-12:10 PM ***Irradiation***
Rosana Morreira, Texas A&M University
- 12:10-12:30 PM ***Combination Treatments Based on Nonthermal Technologies***
Olga Padilla-Zakour, Cornell University
- 12:30-1:30 PM Lunch

Session 2: Inactivation of microorganisms by non-thermal processing: mechanisms and inactivation kinetics

Moderator: **Randy Worobo**, Cornell University

- 1:30-1:50 PM ***Inactivation of Bacteria: vegetative cells vs. spores***
Ahmed Yousef, The Ohio State University
- 1:50-2:10 PM ***Inactivation of Viruses and Protozoa***
Dallas Hoover, University of Delaware

Session 3: Regulatory framework and requirements for validation of non-thermal processing technologies

Moderators: **Olga Padilla-Zakour**, Cornell University and **Roman Buckow**, CSIRO

- 2:10-2:30 PM ***Validation for Regulatory Approval of Nonthermal Technologies***
Randy Worobo, Cornell University
- 2:30-2:50 PM ***Practical Aspects of Processing Methods Validation from a Regulatory Agency Perspective***
Nate Anderson, US-FDA
- 2:50-3:10 PM ***Regulatory Aspects of Novel Technologies and their Validation in the European Union***
Lilia Ahrné, University of Copenhagen & EFFoST President
- 3:10-3:30 PM ***Regulatory Aspects of Novel Technologies in Canada***
Tatiana Koutchma, Agriculture and Agri-Food Canada
- 3:30-4:00 PM Coffee Break and Poster Viewing (part I)

Session 4 (Part I): Examples of validation studies for nonthermal technologies

Moderator: [Lilia Ahrné](#), University of Copenhagen & EFFoST President

- 4:00-4:20 PM **Validation of Commercial HPP Treated Products: successes and challenges**
[Jessie Usaga](#), University of Costa Rica and [Randy Worobo](#), Cornell University
- 4:20-4:40 PM **Validation of Thermally Assisted High Pressure Processing**
[Jason Wan](#), IFSH
- 4:40-5:00 PM **Validation of High Pressure Processing in Australia: the case of HPP treated raw milk**
[Roman Buckow](#), CSIRO, Australia
- 5:00-5:30 PM Q&A with all speakers
- 6:30-7:00 PM Happy Hour & Networking
- 7:00 PM Dinner begins
- 7:40-8:00 PM Dinner speaker: [Larry Keener](#), President and CEO, International Product Safety Consultants
A History of Validation of Food Processing Technologies: success stories and lessons learned
- 8:30 PM Adjourn

TUESDAY, OCTOBER 31

Symposium Continued at The Statler Hotel

- 8:00-8:30 AM Continental breakfast

Session 4 (Part II): Examples of validation studies for nonthermal technologies

Moderator: [Jason Wan](#), IFSH

- 8:30-8:50 AM **Challenge Trials in Foods with Controlled Microbiota**
[Michael Gänzle](#), University of Alberta, Canada
- 8:50-9:10 AM **Models for Validation with Nonthermal Technologies**
[Christopher Doona](#), US Army – Natick
- 9:10-9:30 AM **One Technology – Multiple Regulatory Approvals**
Speaker to be confirmed soon
- 9:30-10:00 AM Coffee Break and Poster Viewing (part II)

Session 5 Roundtables: Challenges for the commercialization of non-thermal processing

Moderators: [Olga Padilla Zakour](#) and [Julie Stafford](#), Cornell University

- 10:00-10:30 AM **Regulatory & Inspection Agencies Perspective**
 Panel Lead: **Nate Anderson**, FDA
 Participants to be confirmed soon
- 10:30-11:00 AM **Equipment Manufacturers Perspective**
 Panel Lead: **Carole Tonello**, Hiperbaric
 Participants to be confirmed soon
- 11:00-11:30 AM **Food Processors, Product Developers and Retailers Perspective**
 Panel Lead: **Marcia Walker**, 915 Labs
 Participants to be confirmed soon
- 11:30 AM-12:30 PM Lunch

Optional Site Visit and Dinner (additional charge)

- 1:00 PM Departure for Geneva (transportation provided)
 Stop at Taughannock Falls
- 3:00-4:00 PM Visit of the Cornell HPP Validation Center and other nonthermal technologies (Geneva, NY)*
 Tour led by **Olga Padilla-Zakour**
**The tour is free. Those interested in attending the tour, but not the dinner, can join us in Geneva but will have to have their own transportation.*
- 4:30 PM Departure for Glenora Wines on Seneca Lake
- 6:00-8:00 PM Wine-food Pairing Dinner at Glenora Wines
- 8:00 PM Return to Ithaca

Sponsored by:



Co-organizers:



Cornell University
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