

AMERICAN ASSOCIATION OF CANDY TECHNOLOGISTS

MONDAY, OCTOBER 7, 2024

- 2:00 PM **Tempering Demo** – (Optional)
5:30 PM **Speed Networking**
6:00 PM **Opening Reception** (until 8:00 PM)

TUESDAY, OCTOBER 8, 2024

MORNING SESSION

- 8:00 AM **Welcome and Opening Remarks**
8:05 AM **Trends in Chocolate & Cocoa: Exploration of the World of Chocolate and Cocoa to Spark Creative, Imaginative Uses**
Heather Houston, *Guittard Chocolate Co.*
Rebecca Kuehn, *Guittard Chocolate Co.*

Chocolate has been and continues to be one of the most popular and versatile flavors in confections and desserts. In recent years, chocolate has evolved beyond traditional uses, sources and flavor pairings. From tree to bar and beyond, we will explore current and upcoming trends in using chocolate and cocoa as ingredients and the endless opportunities to innovate.

- 8:50 AM **Chocolate Viscosity: Sciences, Practices, and Methods**
Linsen Liu, PhD, *Guittard Chocolate Co.*

Viscosity stands as a paramount characteristic in chocolates and confectionery products. It impacts the processing, transportation, applications and sensory of those products; therefore, its measurement and accuracy are vital for chocolate making and processing. This presentation reviews the scientific principles of the Brookfield viscometer and best practices for chocolate viscosity measurement and provides recommendations on improving the NCA/MCA official method.

- 9:35 AM **Break**
9:50 AM **Reformulating Sucrose out of Bittersweet Chocolate**
Mackenzie (Mack) Hansen, *Tate & Lyle*

Consumer interest in health & wellbeing has driven demand for healthier chocolate products that retain a desirable eating quality. Some producers aim to address this through sugar and carbohydrate reduction, placing pressure on ingredient suppliers to provide better-for-you bulking options to customers. This presentation will explore learnings from recent investigations into the physicochemical and sensory texture consequences of reformulating sucrose (used at 48.08% w/w) out of bittersweet chocolate matrices.

Tuesday, October 8 (continued)

- 10:35 AM **Quality Chocolate Confections with Cocoa Butter Equivalents**
Bob Johnson, *Fuji Vegetable Oil, Inc.*

Cocoa butter equivalents, or CBES were first introduced to the chocolate industry more than 50 years ago. This presentation will briefly address the benefits that CBES offer to confectioners and some of the considerations in formulating, producing and marketing confections utilizing CBES.

- 11:20 AM **Understanding Oil Migration in Chocolate-Covered Products**
Audrey Lidgard, *Utah State University*

Oil migration (OM) is one of the leading causes of product quality deterioration for chocolate-covered products in the confectionery industry. This talk aims to take a closer look at the mechanisms behind OM, the steps the industry is taking to minimize it and a model research method being used to further study it.

- 12:05 PM **Lunch**

AFTERNOON SESSION

- 1:05 PM **Sugar Boiling 101**
Tim Grady, *Food Ingredients Inc.*

Boiling sugar is the basis of a large swath of the confectionery industry, and is the first step in manufacturing many sugar based candies. This lecture will cover glass transition temperature, the relationship between boiling temperature and water content, and the effects of post-cook processing and special ingredient inclusions to alter the candy texture, functionality, and flavor.

- 1:50 PM **Precision in Product Labeling: A Guide for Confectionery Scientists**
Megan Murphy, *Trustwell/Genesis*

In an increasingly regulated food industry, confectionery scientists must navigate the complexities of recipe analysis and product labeling with precision and accuracy. This session will cover best practices for utilizing software tools to streamline recipe analysis and ensure compliance with labeling regulations.

- 2:35 PM **Break**

- 2:50 PM **The Sweetest Collaboration: How Three Generations are Shaping Candy's Future**
Tom Houlihan, *Guittard Chocolate Co.*
Carly Meck, *Blommer Chocolate Co.*
McKenna Helder, *University of WI - Madison*

This session will feature candy professionals from three distinct generations! Gain insights and advice on navigating your career in the candy industry. Whether you're a seasoned expert, a rising star,

Tuesday, October 8 (continued)

or just starting out, this panel discussion offers valuable perspectives on evolving trends and challenges in candy technology, building relationships, fostering collaboration across generations and finding your niche and achieving your goals in the candy world.

- 3:35 PM **Sweet Emotions: Infusing Delight with a Sprinkle of AI**
Vinay Indraganti, *BCD iLabs*

This seminar delves into the transformative role of artificial intelligence (AI) in the confectionary industry. Attendees will explore how AI algorithms are reshaping traditional approaches to product development, focusing on the integration of AI formulation methods. Through discussions, case studies and expert insights, participants will uncover the ways in which AI is optimizing confectionery formulations. By examining the challenges and opportunities inherent in this technological shift, the seminar aims to illuminate the path toward a more innovative and efficient future for confectionery delights.

- 4:30 PM **Supplier Exhibits & Reception** (until 6:30 PM)
6:45 PM **Stroud Jordan Award Banquet**

WEDNESDAY, OCTOBER 9, 2024

MORNING SESSION

- 8:00 AM **Opening Remarks**
8:05 AM **NCA Regulatory Update**
Farida Mohamedshah, *NCA*
8:50 AM **Natural Colors in Confections**
Patrick Troutman, *IFC Solutions*

This annual update from NCA will address regulatory news, changes and outlook across the confectionery industry.

Now more than ever, confectioners are being asked to implement naturally-derived colors and ingredients as consumer demand continues to look for clean labeling on products they purchase. The regulatory landscape is also changing as California has passed legislation to restrict use of FD&C Red 3 in the state. More states have either introduced similar legislation or are expected to do so in the near future. The use of natural colorants poses many challenges in comparison to certified colors which are still widely used in the confection industry. This presentation will give an overview and practical guide for naturally derived coloring options available to confectioners for use in their applications and what characteristics determine which colors are more suitable based on the finished product and processing parameters.

Wednesday, October 9 (continued)

9:35 AM **Chocolate Temper Meter Basics**
Tom Allen, *Tricor Systems, Inc.*

Properly tempered chocolate has always been one of the keys to producing chocolate with high gloss, a good snap, and a long shelf life. In this lecture we will be discussing using an automated temper meter to determine your temper status.

We will explore the principles of how temper meters work, slope and CTU results, and some ways to obtain a good temper result after a poor reading.

10:20 AM **Break**

10:35 AM **Round Table Session 1**

11:00 AM **Round Table Session 2**

11:25 AM **Round Table Session 3**

Round Table Topics (all topics available each session):

- Cannabis
- Deeper Dive into Sugar Boiling 101
- Social Impact
- Shelf Life Testing
- Chocolate Inclusions
- Nutraceuticals in Confections
- Networking
- Working with Co-Manufacturers
- Chocolate vs Compound/Chocolate Regulatory
- New Managers (Technical Role to Managerial Role)

11:50 AM **Lunch**

AFTERNOON SESSION

12:50 PM **Panning: Hair Dryers to Psychometric Charts**
Jeff Bogusz, *Lucky Teapot Consulting*

Panning is a sport. The more you practice, the better you get. And where you play makes a difference. This talk will look at the differences between panning at the lab scale versus in a manufacturing environment. We will explore what can be done in the lab to smooth the scale-up transition to larger production.

1:35 PM **Overcoming Moisture Challenges in Candy and Confections**
Zachary Cartwright, PhD, *Aqualab by Addium*

Many candies and confectionery products have distinctive textures and flavors that come together to form a unique customer experience. This presentation will review how to use moisture, water activity, and sorption isotherms to overcome key challenges in the production of candy and confections.

Wednesday, October 9 (continued)

2:20 PM **Break**

2:30 PM **Vegan Chocolates: Opportunities for Better Taste, Better Planet**
Sudarshan Nadathur, *ADM*

The long-beloved category of chocolate is evolving due to shifts in consumer needs and motivations, as well as shifts in climate patterns. With more demand for vegan, reduced-sugar and more sustainable options, new formulations showcase non-dairy proteins, alternative sweeteners and ingredients that can alter the taste and consumer preference of the product. This presentation will discuss approaches to modulate and optimize taste, not only to enable consumer acceptance in new formulations but also to spark surprise and delight for the taste experience.

3:15 PM **Considerations for Use of Confections in Ice Cream & Frozen Desserts**
Liz Miller, *Denali Ingredients*

Confections and ice cream are undoubtedly two of the tastiest product categories on the market. The only thing more delicious is combining them. This topic will explore some of the many ways that confections can be highlighted in frozen desserts as well as considerations to ensure the confections stand up to the environmental challenges of the freezer aisle.

4:30 PM **Iron Confectioner Competition**

6:15 PM **Dinner**



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2024 National Technical Seminar Agenda

Monday, October 7
through
Wednesday, October 9

The Hyatt Lodge
Oak Brook, Illinois, USA