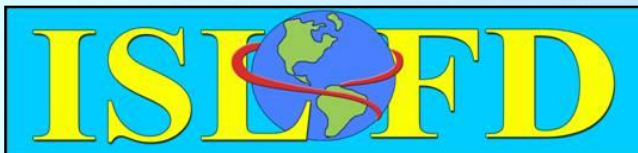


## Morning Session\*

- 7:30-8:30** **Registration, Breakfast, Set-Up**
- 8:30-8:45** **Jeff Schwegman, Ph.D.**  
**Kevin Tebrinke, P.E.**  
Welcoming Remarks, Chapter Update & Session Introduction
- 8:45-9:25** **Evgenyi Shalaev, Ph.D.**  
**Abbvie**  
Accelerated storage for shelf-life prediction of lyophiles: temperature dependence of degradation of amorphous small molecular weight drugs and proteins
- 9:25-9:55** **Jeff Najarian**  
**Merck & Co. Inc.**  
How's Your Vision? A Closer Look At the Current State of Automated Inspection of Lyophilized Products
- 9:55-10:45** **Networking, Exhibits, Posters**
- 10:45-11:15** **Gayathri Shivkumar, Ph.D.**  
**Abbvie**  
Harnessing Computational Modeling to Understand and Optimize Pharmaceutical Lyophilization
- 11:15-11:45** **Dimitrios Peroulis, Ph.D.**  
**Purdue University**  
Tunable RF/Microwave Freeze Drying for Biologics
- 11:45-12:00** **Ling Zhu**  
**University of Connecticut**  
Comparison of Annealing and Controlled Ice Nucleation on Batch Heterogeneity and Lyophilized Cake Porous Structure



International Society of Lyophilization  
– Freeze Drying, Inc.

[www.islyophilization.org](http://www.islyophilization.org)

# Midwest Chapter Annual Meeting April 20, 2023

Please Join Us!

Attendee: \$99

(Breakfast and Lunch are included)

Venue

Midwest Conference Center  
401 West Lake Street  
Northlake, IL 60164-2401

Suggested Hotel

Double Tree O'Hare Airport - Rosemont  
5460 North River Road  
Rosemont, Illinois 60018  
Tel: +1-847-292-9100

Register and get our negotiated ISL-FD  
hotel rate on our website!

[www.islyophilization.org](http://www.islyophilization.org)

## Afternoon Session\*

- 12:00-1:30** **Lunch, Exhibits, Posters**
- 1:30- 2:00** **Prof. Robin Bogner, Ph.D.**  
**University of Connecticut**  
Nuances of Freezing and Their Effects on a Better Measurement of Cake Resistance
- 2:00-2:15** **Kinnari Arte**  
**Purdue University**  
Understanding the Effects of Drying Techniques on mRNA Lipid Nanoparticles
- 2:15-2:45** **Shipra Malik, Ph.D.**  
**University of Connecticut**  
Effect of Freeze-Drying Using Cryoprotectants on The Stability of Nucleic Acid Loaded PLGA Nanoparticles
- 2:45-3:30** **Networking, Exhibits, Posters**
- 3:30-4:00** **Maxwell Korang-Yeboah, Ph.D.**  
**FDA-CDER**  
Regulatory Perspectives on Mathematical Models for Freeze Drying
- 4:00-4:30** **Navpreet Kaur, Ph.D.**  
**Sanofi**  
Demystifying Fogging in Lyophilized Formulations
- 4:30-4:45** **Jeff Schwegman, Ph.D.**  
Thomas Jennings Student Award  
Closing Remarks & Audience Feedback

**A Complete Lyo Event**

Technical Presentations | Posters | Networking Opportunities | Vendor Exhibits

Photo by Mike



\*Schedule Subject to Change