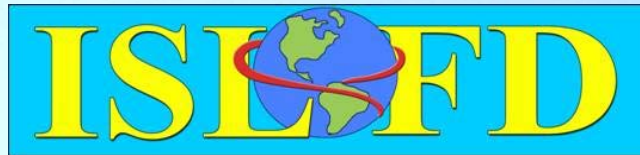


## Morning Session\*

- 7:30-8:30** **Registration, Breakfast, Set-Up**
- 8:30-8:45 **Robert Sever, Ph.D.**  
**Kevin Tebrinke, P.E.**  
Welcoming Remarks, Chapter Update & Session Introduction
- 8:45-9:30 **Michael Pikal, Ph.D.**  
**University of Connecticut**  
Destabilization of Proteins During Lyophilization: Causes and Solutions
- 9:30-10:00 **Alex Herbert**  
**Ben Venue Laboratories**  
Controlled Nucleation at Bench and Pilot Scale
- 10:00-10:45** **Networking, Exhibits, Posters**
- 10:45-11:15 **Raj Suryanarayanan, Ph.D.**  
**University of Minnesota**  
Monitoring Phase Transitions in Frozen Systems and During Freeze-Drying: Potential Implications on Product Performance
- 11:15-11:45 **Sid Wolfe**  
**Onyx Pharmaceuticals**  
**Ruben Nieblas**  
**McCrone**  
Using Thermal Microscopy to Develop an Annealing Cycle
- 11:45-1:15** **Lunch, Exhibits, Posters**



International Society of Lyophilization  
– Freeze Drying, Inc.  
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## Midwest Chapter Annual Meeting April 11, 2013

Please Join Us!

Attendee: \$75  
(Breakfast and Lunch are included)  
To register, send an email to:  
[isbfd@live.com](mailto:isbfd@live.com)

### Venue

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

### Suggested Hotel

SpringHill Suites by Marriott  
410 West Lake Street  
Elmhurst, IL 60126  
Tel: 630-782-6300  
Use Code "ALGC"  
or reserve online at:

[cwp.marriott.com/chiem/isbfd](http://cwp.marriott.com/chiem/isbfd)

*Shuttle to Meeting Available*

## Afternoon Session\*

- 1:15-1:40 **Steven Nail, Ph.D.**  
**Baxter BioPharma Solutions**  
An Approach to Measuring the Dependence of Drug Product Stability on Residual Moisture Level
- 1:40-2:05 **Jamey Jarman**  
**Baxter BioPharma Solutions**  
Establishment of Acceptance Criteria for Leak Testing of Pharmaceutical Freeze Dryers
- 2:05-2:30 **James Hartling**  
**Boehringer Ingelheim Vetmedica**  
Vaporized Hydrogen Peroxide: Overview and Applications
- 2:30-3:15** **Networking, Exhibits, Posters**
- 3:15-3:45 **Wanda K. Isaacson, M.S.**  
**Zoetis**  
Lyophilization Cycle Development – Challenges with Animal Health Vaccines
- 3:45-4:15 **Ronald G. Iacocca, Ph.D.**  
**Eli Lilly and Company**  
USP <1660> - The Path Moving Forward on Glass Quality
- 4:15-4:30 **Robert Sever, Ph.D.**  
Thomas Jennings Student Award  
Closing Remarks & Audience Feedback  
Door Prize

### **A Complete Lyo Event**

Technical Presentations | Posters | Networking Opportunities | Vendor Exhibits