



September 14 - 17, 2021

Hilton Garden Inn West Des Moines 205 S. 64th Street | West Des Moines, IA 50266





Hotel Registration

Contact the Hilton Garden Inn West Des Moines at **1-515-223-0571** or visit:

https://hiltongardeninn.hilton.com/en/gi/groups/personalized/D/DSMWHGI-LALL-20210912/index.jhtml?WT.mc_id=POG for reservations. Lallemand Biofuels & Distilled Spirits has negotiated a limited number of traditional king rooms at a discounted rate of \$119.00 plus tax/night.

Reservations must be received by August 22, 2021 to receive the discounted rate. After August 22, 2021, the rate will increase.

Monday Evening, September 13, 2021

There are no formally scheduled events for Monday evening, but for those wishing to pick up course materials, the registration table will be open from 6 to 7:30 pm.





Day 1 - September 14, 2021

| Time | Session Title | Speaker |
|---------------------|--------------------------------------|------------------------------------------------------------|
| 7:30 am — 8:30 am | Registration Open (Breakfast) | |
| 8:30 am — 8:40 am | Introduction to Course | Francois van Zyl Lallemand Biofuels & Distilled Spirits |
| 8:40 am — 8:55 am | Company Overview | Craig Ammann Lallemand Biofuels & Distilled Spirits |
| 8:55 am — 9:20 am | RFA - Biofuels Industry Update | Robert White Renewable Fuels Association |
| 9:20 am — 9:55 am | Feedstock | Shelly Siemonsma Lallemand Biofuels & Distilled Spirits |
| 9:55 am — 10:15 am | BREAK | |
| 10:15 am — 11:00 am | Milling/Grind Optimization | Alex Sexton Lallemand Biofuels & Distilled Spirits |
| 11:00 am — 11:45 am | Starch and Enzyme Biochemistry | Janet Fisher Lallemand Biofuels & Distilled Spirits |
| 11:45 am — 1:00 pm | LUNCH | |
| 1:00 pm — 1:45 pm | Slurry, Cook, and Liquefaction | Tera Stoughtenger Lallemand Biofuels & Distilled Spirits |
| 1:45 pm — 2:30 pm | Yeast Manufacturing and Applications | Caleb Ogden Lallemand Biofuels & Distilled Spirits |
| 2:30 pm — 2:45 pm | BREAK | |
| 2:45 pm — 3:35 pm | Fundamentals of Yeast and Nutrition | Jim Miers Lallemand Biofuels & Distilled Spirits |
| 3:35 pm — 3:55 pm | Breakout Group Sessions #1 | LBDS Technical Team |
| 3:55 pm — 4:30 pm | Hands-On Workshop | Ryan Brock Lallemand Biofuels & Distilled Spirits |
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Day 2 - Wednesday September 15, 2021

| Time | Session Title | Speaker |
|---------------------|-------------------------------------------------------|----------------------------------------------------------------|
| 7:30 am — 8:30 am | Breakfast | |
| 8:30 am — 9:15 am | Managing Propagation and Optimization | Spenser Burden Lallemand Biofuels & Distilled Spirits |
| 9:15 am — 10:00 am | Managing Fermentation | Lindsey Mathiesen Lallemand Biofuels & Distilled Spirits |
| 10:00 am — 10:20 am | Breakout Group Sessions #2 | LBDS Technical Team |
| 10:20 am — 11:00 am | Bacterial Contamination | Rachel Murdy, Ph. D Lallemand Biofuels & Distilled Spirits |
| 11:00 am — 11:45 am | Plant Hygiene/Contamination Control | Ryan Brock Lallemand Biofuels & Distilled Spirits |
| 11:45 am — 12:00 pm | Take Home Troubleshooting Task | LBDS Technical Team |
| 12:00 pm - 1:00 pm | LUNCH | |
| 1:00 pm — 1:50 pm | Troubleshooting in a Fuel Ethanol Production Facility | Ben Sunderhaus Lallemand Biofuels & Distilled Spirits |
| 1:50 pm - 2:05 pm | Fermentation Troubleshooting Quiz #1 | |
| 2:05 pm — 2:25 pm | Breakout Group Sessions #4 | LBDS Technical Team |
| 2:25 pm - 3:25 pm | Troubleshooting Exercise #1 - Panel | Ben Sunderhaus Lallemand Biofuels & Distilled Spirits |
| 3:25 pm - 3:40 pm | Break | |
| 3:40 pm - 4:20 pm | Yeast/Lab Biocatalysts | Jim Steele, Ph. D Lallemand Biofuels & Distilled Spirits |
| 4:20 pm - 5:00 pm | Ethanol Production from Cellulosic Substrates | Raquel Rodriguez, Ph. D Lallemand Biofuels & Distilled Spirits |
| 6:00 pm - 9:00 pm | Networking Reception | |





Day 2 - Wednesday September 15, 2021

| Time | Session Title | Speaker |
|---------------------|-----------------------------------------------|----------------------------------------------------------------|
| 8:30 am — 9:00 am | Breakfast | |
| 9:00 am — 10:00 am | Yeast Biochemistry | Matt Richards Mascoma |
| 10:00 am — 10:45 am | Enzyme Development | Anda Panaitiu, Ph. D Mascoma |
| 10:45 am — 11:30 am | Oil/Protein Recovery | Jennifer Aurandt-Pilgrim, Ph. D Marquis Energy |
| 11:30 am — 12:00 pm | Biobased Chemicals | Justin Van Rooyen Lallemand Biofuels & Distilled Spirits |
| 12:00 pm — 1:00 pm | LUNCH | |
| 1:00 pm — 1:30 pm | New Technologies | Jennifer Aurandt-Pilgrim, Ph. D Marquis Energy |
| 1:30 pm - 2:15 pm | Energy Inputs | TBD |
| 2:15 pm — 2:45 pm | Carbon Intensity (Sequestration, etc.) | Janet Fisher Lallemand Biofuels & Distilled Spirits |
| 2:45 pm - 3:25 pm | Panel Discussion | |
| 3:25 pm — 3:40 pm | Break | |
| 3:40 pm - 4:20 pm | Yeast/Lab Biocatalysts | Jim Steele, Ph. D Lallemand Biofuels & Distilled Spirits |
| 4:20 pm - 5:00 pm | Ethanol Production from Cellulosic Substrates | Raquel Rodriguez, Ph. D Lallemand Biofuels & Distilled Spirits |
| 6:00 pm - 9:00 pm | Networking Reception | |

Biotech Session





Day 3 - September 16, 2021

| Time | Session Title | Speaker |
|---------------------|--------------------------------------------------|------------------------------------------------------------|
| 7:30 am — 8:30 am | Breakfast | |
| 8:30 am — 9:20 am | Fundamentals of Distillation | John Cengel KATZEN |
| 9:20 am — 10:00 am | Understanding Fusel Implications | Matt Hawkins, Ph. D Lallemand Biofuels & Distilled Spirits |
| 10:00 am – 10:20 am | Breakout Group Session #4 | LBDS Technical Team |
| 10:20 am — 11:10 am | Dehydration/Troubleshooting | John Cengel KATZEN |
| 11:10 am — 12:00 pm | New Technologies | Jennifer Aurandt Pilgrim, Ph. D Marquis Energy |
| 12:00 pm — 1:00 pm | LUNCH | |
| 1:00 pm — 1:45 pm | Water Treatment and Environmental Regulations | Dustin Cunningham Veolia Water Technologies |
| 1:45 pm — 2:00 pm | Fermentation Troubleshooting Quiz #2 | |
| 2:00 pm — 2:20 pm | Breakout Group Sessions #5 | LBDS Technical Team |
| 2:20 pm — 3:10 pm | Energy Center: Boilers, Dryers & Troubleshooting | Wade Rummel Lallemand Biofuels & Distilled Spirits |
| 3:10 pm — 3:30 pm | BREAK | |
| 3:30 pm — 5:00 pm | Centrifugation | GJ Long Flottweg Separation Technology |





Day 4 - September 17, 2021

| Time | Session Title | Speaker |
|---------------------|---------------------------------------------------------------|-------------------------------------------------------|
| 7:30 am – 8:30 am | Breakfast | |
| 8:30 am – 9:15 am | Factoring Impacts of Yield Loss | Chris Ashworth Lallemand Biofuels & Distilled Spirits |
| 9:15 am — 9:30 am | Fermentation Troubleshooting Quiz #3 | LBDS Technical Team |
| 9:30 am — 10:10 am | Risk Reduction via Proactive EH&S Management | Jay Beckel ERI Solutions |
| 10:10 am — 10:30 am | Breakout Group Session #6 | LBDS Technical Team |
| 10:30 am — 11:00 am | Growth Energy | TBD Growth Energy |
| 11:00 am — 11:15 am | Take Home Troubleshooting Task & Hands-on Workshop Results | LBDS Technical Team |
| 11:15 am — 11:30 am | Raffle | |
| 11:30 am — 12:00 pm | Graduation/BFA-Certification | |

