

The Alcohol School 2010



Agenda

Toulouse

Mercure Toulouse Atria

April 26–April 30, 2010



ETHANOL
TECHNOLOGY
INSTITUTE

6120 West Douglas Avenue
Milwaukee, WI 53218 USA
414 393-0410 | Fax 414 358-8012
www.ethanoltech.com

Ethanol Technology Institute Staff

W. M. (Mike) Ingledew, Ph.D.

Scientific Director
mingledew@lallemand.com

Nadya Antoniadis

Administrative Director
nantoniades@lallemand.com

Ethanol Technology Institute

6120 West Douglas Avenue
Milwaukee, WI 53218 USA
+1 414 393-0410 or +1 414 358-5304
Fax +1 414 358-8012
www.ethanoltech.com
institute@ethanoltech.com

Hotel Information

Hotel Mercure Toulouse Atria Compans Caffarelli

Boulevard Lascrosses
8, Esplanade Compans Caffarelli
31000 Toulouse
France

Phone +33 (0) 5 61.11.09.09

Fax +33 (0) 5 61.23.14.12

Website www.mercure.com/mercure/fichehotel/gb/mer/1585/fiche_hotel.shtml

E-mail H1585@accor.com

Alcohol School File Reference Number: C6G-0M3U

Facility Visit

Lallemand S.A.S. Lab

Lallemand S.A.S.

19, rue des Briquetiers
B.P. 59
31702 Blagnac, Cedex, France
+33 (0) 5 62.74.55.55
www.lallemand.com

Toulouse and Transportation Information

Toulouse Tourist Office

www.ot-toulouse.fr

Hotel Map

www.mercure.com/mercure/fichehotel/gb/mer/1585/fiche_hotel.shtml
(click on Location and Access icon in menu bar at left)

Shuttle Bus

www.navette-tisseo-aeroport.com/en/

The Alcohol School 2010



Monday fuel alcohol APRIL 26, 2010

10:45 am – 12:45 pm	REGISTRATION AND LUNCH IN TERRACE FOYER	Terrace Foyer
12:45 pm – 1:05 pm	AUDITORIUM VERDI: Welcome <i>Bill Nankervis, General Manager, Lallemand Ethanol Technology</i>	Auditorium Verdi
1:05 pm – 1:20 pm	Introduction to the Programme <i>Mike Ingledeu, Ethanol Technology Institute</i>	
1:20 pm – 1:50 pm	The Global Fuel Alcohol Industry <i>Craig Pilgrim, Lallemand Ethanol Technology</i>	
1:50 pm – 2:40 pm	Sugar Fermentation: Beet, Cane Juice and Molasses <i>Robert Piggot, Lallemand Ethanol Technology</i>	
2:40 pm – 3:00 pm	COFFEE	
3:00 pm – 3:50 pm	Grain Receiving, Storage and Milling <i>Robert Piggot, Lallemand Ethanol Technology</i>	
3:50 pm – 4:40 pm	Mashing Technologies for Grain Used for Fuel Ethanol <i>Garth Whiddon, Lallemand Ethanol Technology</i>	
4:40 pm – 5:30 pm	Feedstocks for Fuel Alcohol Production <i>Dale Monceaux, AdvanceBio LLC</i>	
5:30 pm – 6:20 pm	Fractionation Technologies for Grain to Ethanol Processing <i>Vijay Singh, University of Illinois</i>	
7:30 pm – 10:00 pm	WELCOME RECEPTION Everyone welcome – complimentary hors d'oeuvres and beverages	

The Alcohol School 2010



Monday

beverage alcohol APRIL 26, 2010

10:45 am – 12:45 pm	REGISTRATION AND LUNCH	Terrace Foyer
12:45 pm – 1:05 pm	Welcome <i>Bill Nankervis, General Manager, Lallemand Ethanol Technology</i>	Auditorium Verdi
1:05 pm – 1:20 pm	Introduction to the Programme <i>Mike Ingledew, Ethanol Technology Institute</i>	Auditorium Verdi
1:20 pm – 1:50 pm	The Global Beverage Industry <i>Steve Wright, Lallemand Ethanol Technology & Spiritech</i>	Oratorio Room
1:50 pm – 2:40 pm	Raw Materials in Beverage Alcohol Processing <i>Steve Wright, Lallemand Ethanol Technology & Spiritech</i>	Oratorio Room
2:40 pm – 3:00 pm	COFFEE	Auditorium Verdi
3:00 pm – 3:50 pm	Grain Receiving, Storage and Milling <i>Robert Piggot, Lallemand Ethanol Technology</i>	Auditorium Verdi
3:50 pm – 4:40 pm	Grain Mashing in the Beverage Industry <i>Steve Wright, Lallemand Ethanol Technology & Spiritech</i>	Oratorio Room
4:40 pm – 5:30 pm	Beverage Alcohol Distillation <i>Robert Piggot, Lallemand Ethanol Technology</i>	Oratorio Room
5:30 pm – 6:20 pm	Maturation and Blending: The Master Blender's Challenge <i>Jonathan Miles, Anchor Yeast</i>	Oratorio Room
7:30 pm – 10:00 pm	WELCOME RECEPTION Everyone welcome – complimentary hors d'oeuvres and beverages	Patio sous verrière

The Alcohol School 2010



Tuesday

APRIL 27, 2010

8:30 am – 9:20 am	Enzymes: Introduction and Usage for Starch Hydrolysis <i>Christoph Kunzmann, Novozymes Europe</i>	Auditorium Verdi
9:20 am – 10:10 am	Enzymes as Process Aids: Viscosity, Protein Hydrolysis, Phytases & Cellulases <i>Pauline Teunissen, Genencor, A Danisco Company</i>	
10:10 am – 10:30 am	COFFEE	
10:30 am – 11:20 am	Small Grains: The Impact of Mash Composition on Milling, Cooking, Liquification, Fermentation, and Downstream Processes <i>Dale Monceaux, AdvanceBio LLC</i>	
11:20 am – 12:10 pm	Wet Milling of Maize and Mash Production <i>Scott Kohl, ICM Inc</i>	
12:10 pm – 1:25 pm	LUNCH	Hotel
1:25 pm – 2:15 pm	Yeast Production: Strains and Formulations for Fuel and Beverage Alcohol Producers <i>Bill Nankervis, Lallemand Ethanol Technology</i>	Auditorium Verdi
2:15 pm – 3:05 pm	Fermentation Design <i>Glen Austin and Z. Zhang, Lallemand Ethanol Technology/Lallemand</i>	
3:05 pm – 3:25 pm	COFFEE	
3:25 pm – 4:15 pm	Yeast: Inoculation, Biochemistry, Fermentation and Introductory Nutrition <i>Mike Ingledew, Ethanol Technology Institute</i>	
4:15 pm – 5:05 pm	Bacterial Contamination and Control <i>Glen Austin, Lallemand Ethanol Technology</i>	
5:30 pm – 7:00 pm+	Potable Beverage Tasting – Scotch Whisky <i>Jonathan Miles, Anchor Yeast, South Africa</i>	Oratorio Room

The Alcohol School 2010



Wednesday

APRIL 28, 2010

8:20 am – 9:15 am	Challenges of Key Analytical Methods Used for Process Monitoring <i>Muriel de la Pinsonnais, Lallemand Ethanol Technology</i>	Auditorium Verdi
9:15 am – 9:30 am	COFFEE	
9:30 am – 10:00 am	Bus to Lallemand Blagnac Laboratories	Bus
10:00 am – 12:15 pm	Tour of Lallemand Blagnac Laboratories (DETAILS BELOW)	Lallemand
12:15 pm – 12:45 pm	Bus Returns to Hotel	Bus
12:45 pm – 2:00 pm	LUNCH	Hotel
2:00 pm – 2:55 pm	Propagators as Used in Fuel Alcohol Production <i>Chris Richards, Lallemand Ethanol Technology</i>	Auditorium Verdi
2:55 pm – 3:50 pm	Stress Management and Control of Yeast <i>Mike Ingledew, Ethanol Technology Institute</i>	
3:50 pm – 4:10 pm	COFFEE	
4:10 pm – 5:05 pm	Distillery Cleaning and Sanitation <i>Chris Richards, Lallemand Ethanol Technology</i>	
5:05 pm – 6:00 pm	Energy, Mass and Water Balance in an Ethanol Plant <i>Scott Kohl, ICM Inc</i>	

TOUR OF LALLEMAND BLAGNAC LABORATORIES (ORDER ROTATION TO VARY)

Lab Visit I	A) <i>Microbiology:</i>	Demonstration of serial dilutions, inoculation, plating and identification tests
	B) <i>Microscopy:</i>	Demonstration of cell count and viability on yeast and bacteria strains in the ethanol industry
	C) <i>Laboratory Fermentation:</i>	Tour of the fermentors and demonstration of measurement techniques used – turbidity, conductivity and pH
Lab Visit II	A) <i>Genetics:</i>	Overview of genetics used for identifying and differentiating yeast strains in the ethanol industry
	B) <i>Fluorescence Microscope:</i>	Demonstration of fluorescence microscope and techniques
Lab Visit III	A) <i>Yeast Pilot:</i>	Demonstration of the production, fermentation and drying processes
	B) <i>Bacteria Pilot:</i>	Demonstration of lyophilizers and their use, measurement and extracts
	C) <i>Alcoholic Fermentation Room:</i>	Demonstration of mass balance method in climate controlled environment for ethanol measurement

The Alcohol School 2010



Thursday fuel alcohol APRIL 29, 2010

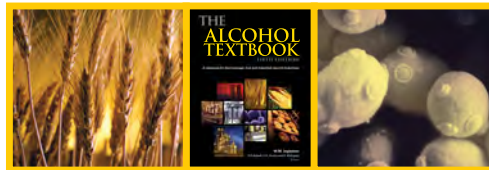
8:30 am – 9:25 am	Troubleshooting Concepts for Alcohol Plants <i>Chris Richards, Lallemand Ethanol Technology</i>	Auditorium Verdi
9:25 am – 10:20 am	Dryhouse Technologies in Distilleries <i>Dale Monceaux, AdvanceBio LLC</i>	
10:20 am – 10:40 am	COFFEE	
10:40 am – 12:00 pm	Distillation and Molecular Sieves: A Practical Viewpoint <i>Phil Madson, KATZEN International</i>	
12:05 pm – 1:10 pm	LUNCH	Hotel
1:15 pm – 2:10 pm	Yeast Nutrition for Fermentation Performance <i>Mike Ingledew, Lallemand Ethanol Technology</i>	Auditorium Verdi
2:15 pm – 3:50 pm	Round Table Fuel - Items of Interest to the Fuel Alcohol Industry <i>List of topics (List TBA)</i>	
4:00 pm – 6:30 pm	Walking Tour of Toulouse	
7:00 pm – 10:00 pm	Dinner on a Canal Boat	

GUIDED WALKING TOUR OF TOULOUSE AND CANAL BOAT DINNER CRUISE

The guided walking tour will depart the Mercure Hotel at 16h00. As we walk toward the historical part of the city to admire its main monuments, our guide will begin to reveal the secrets of the largest of the “Pink Cities”, Toulouse, enabling us to have a much better idea of the architectural and cultural richness of the city. This bustling regional capital has much to offer the visitor. We will discover the Saint Sernin Basilica, Europe's most imposing Romanesque Basilica, built to welcome the many pilgrims following the trail of Saint James. Then we will visit Capitole Square and its Town Hall that houses paintings of Henri Martin and Paul Gervais. Finally, we will head toward the Jacobins convent; head church of the Dominican order during the 13th century and established to combat the Cathar heresy. The tour will end at around 18h30 at the Quai de la Daurade.

The evening will be spent enjoying a scenic boat ride on the Garonne River or the peaceful Canal du Midi (depending upon water levels). The cruise will depart at 19h00 where we will be able to admire, from the water, some of the beautiful monuments of the city - Pont Neuf, the Fine Art School, la Grave and St James Hospital, the Modern Art museum, and more - which line the river. Cocktails, appetizers and a buffet dinner will be available in a panoramic setting allowing guests to circulate either inside the boat or outside on the deck at their leisure. We will return back to the Quai de la Daurade at 22h00, and after a short walk, we will return to the hotel at 22h30.

The Alcohol School 2010



Thursday

beverage alcohol

APRIL 29, 2010

8:30 am – 9:25 am	Troubleshooting Concepts for Alcohol Plants <i>Chris Richards, Lallemand Ethanol Technology</i>	Auditorium Verdi
9:20 am – 10:20 am	Quality Control in the Beverage Industry <i>Steve Wright, Lallemand Ethanol Technology & Spiritech</i>	Oratorio Room
10:20 am – 10:40 am	COFFEE	
10:40 am – 11:25 am	Specialty Yeasts for Beverage Alcohols <i>Sylvie Van Zandycke, Lallemand Inc.</i>	
11:25 am – 12:05 pm	Whisk(e)ys around the World <i>Jonathan Miles, Anchor Yeast</i>	
12:05 pm – 1:10 pm	LUNCH	Hotel
1:15 pm – 2:10 pm	Yeast Nutrition for Fermentation Performance <i>Mike Ingledew, Lallemand Ethanol Technology</i>	Auditorium Verdi
2:15 pm – 3:50 pm	Round Table Beverage - Items of Interest to the Beverage Industry List of Topics (List TBA)	Oratorio Room
4:00 pm – 6:30 pm	Walking Tour of Toulouse	
7:00 pm – 10:00 pm	Dinner on a Canal Boat	

GUIDED WALKING TOUR OF TOULOUSE AND CANAL BOAT DINNER CRUISE

The guided walking tour will depart the Mercure Hotel at 16h00. As we walk toward the historical part of the city to admire its main monuments, our guide will begin to reveal the secrets of the largest of the "Pink Cities", Toulouse, enabling us to have a much better idea of the architectural and cultural richness of the city. This bustling regional capital has much to offer the visitor. We will discover the Saint Sernin Basilica, Europe's most imposing Romanesque Basilica, built to welcome the many pilgrims following the trail of Saint James. Then we will visit Capitole Square and its Town Hall that houses paintings of Henri Martin and Paul Gervais. Finally, we will head toward the Jacobins convent; head church of the Dominican order during the 13th century and established to combat the Cathar heresy. The tour will end at around 18h30 at the Quai de la Daurade.

The evening will be spent enjoying a scenic boat ride on the Garonne River or the peaceful Canal du Midi (depending upon water levels). The cruise will depart at 19h00 where we will be able to admire, from the water, some of the beautiful monuments of the city - Pont Neuf, the Fine Art School, la Grave and St James Hospital, the Modern Art museum, and more - which line the river. Cocktails, appetizers and a buffet dinner will be available in a panoramic setting allowing guests to circulate either inside the boat or outside on the deck at their leisure. We will return back to the Quai de la Daurade at 22h00, and after a short walk, we will return to the hotel at 22h30.

The Alcohol School 2010



Friday

APRIL 30, 2010

8:30 am – 9:25 am	Troubleshooting an Alcohol Plant - A Practical Exercise <i>Chris Richards and staff, Lallemand Ethanol Technology</i>	Auditorium Verdi
9:25 am – 10:20 am	A Nutritionist's View of Distillers Grains <i>Mark Corrigan, Lallemand Animal Nutrition NA</i>	
10:20 am – 10:40 am	COFFEE	
10:40 am – 11:35 am	2nd Generation Biofuels: Ethanol from Lignocellulosics <i>Frédéric d'Aoust, Lallemand Ethanol Technology</i>	
11:35 am – 12:30 pm	Technical Opportunities in the Industry: Where are we going? <i>Phil Madson, KATZEN International</i>	
12:30 pm	Course Wrap-up and Presentation of Certificates <i>Mike Ingledew and Staff</i>	