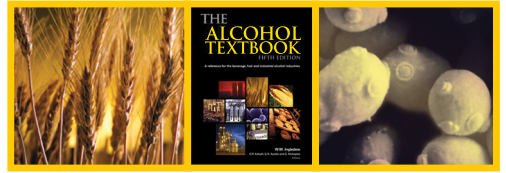


The Alcohol School 2010



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

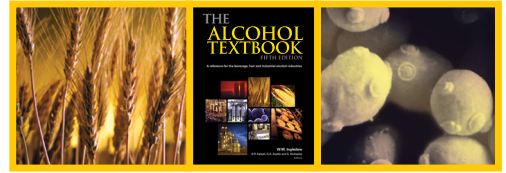
Hotel Map

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/

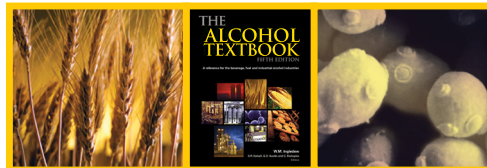
The Alcohol School 2010



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 Ingledew, 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 Beets, Cane Juice and Molasses for Fermentation <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 Widdon and Chris Richards, 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

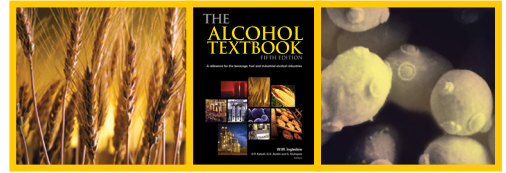


Monday

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	Mashing Technologies for Grain Used for Beverage Alcohol <i>Steve Wright, Lallemand Ethanol Technology & Spiritech</i>	Oratorio Room
4:40 pm – 5:30 pm	Distillation of Potable Beverages <i>Robert Piggot, Lallemand Ethanol Technology</i>	Oratorio Room
5:30 pm – 6:20 pm	Maturation and Blending <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

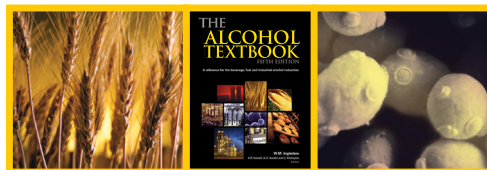


Tuesday

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 Preparation <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 and Fermentation <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

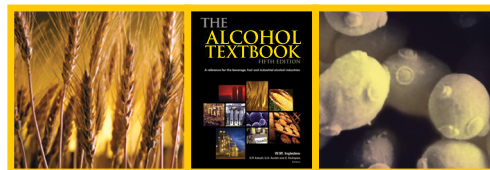
GROUP 1 APRIL 28, 2010

8:20 am – 8:50 am	Bus Trip to Lallemand, Blagnac	Bus
8:50 am – 10:20 am	Tour of Lallemand Blagnac Laboratories (DETAILS BELOW)	Lallemand
10:20 am – 10:50 am	Bus Returns to Hotel	Bus
10:50 am – 11:25 am	COFFEE	Auditorium Verdi
11:25 am – 12:15 pm	Challenges of Key Analytical Methods Used for Process Monitoring <i>Muriel de la Pinonnais and Craig Pilgrim</i> <i>Lallemand Ethanol Technology</i>	
12:15 pm – 1:05 pm	Batch and Continuous Propagators as Used in Fuel Alcohol Production <i>Chris Richards, Lallemand Ethanol Technology</i>	Hotel
1:05 pm – 2:20 pm	LUNCH	
2:20 pm – 3:10 pm	Stress Management and Control of Yeast <i>Mike Ingledew, Ethanol Technology Institute</i>	Auditorium Verdi
3:10 pm – 4:00 pm	Distillery Cleaning and Sanitation <i>Chris Richards, Lallemand Ethanol Technology</i>	
4:00 pm – 4:20 pm	COFFEE	
4:20 pm – 5:10 pm	Water, Energy and Mass Balance <i>Scott Kohl, ICM Inc</i>	

TOUR OF LALLEMAND BLAGNAC LABORATORIES (ORDER ROTATION TO VARY)

Lab Visit I	<i>Microscopy/Genetics</i>	<ul style="list-style-type: none"> A) Demonstration of serial dilutions, inoculation, plating and identification tests B) Demonstration of cell count and viability on yeast and bacteria; fluorescence microscope C) Overview of genetics use for identifying and differentiating yeast strains in the ethanol industry
Lab Visit II	<i>Bacteria Pilot Fermentation</i>	<ul style="list-style-type: none"> A) Demonstration of lyophilizers and their use B) Tour of the fermentors; demonstration of techniques used – turbidity, conductivity and pH
Lab Visit III	<i>Yeast Pilot Fermentation</i>	<ul style="list-style-type: none"> Demonstration of the production, fermentation and drying processes Overview of R&D and basic analysis methods
Lab Visit IV	<i>Alcoholic Fermentation Cold Room</i>	Demonstration of mass balance method for ethanol measurement

The Alcohol School 2010



Wednesday

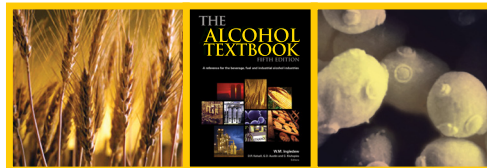
GROUP 2 APRIL 28, 2010

8:30 am – 9:20 am	Challenges of Key Analytical Methods Used for Process Monitoring <i>Muriel de la Pinsonnais and Craig Pilgrim</i> <i>Lallemand Ethanol Technology</i>	Auditorium Verdi
9:20 am – 10:10 am	Batch and Continuous Propagators as Used in Fuel Alcohol Production <i>Chris Richards, Lallemand Ethanol Technology</i>	
10:10 am – 10:30 am	COFFEE	
10:35 am – 11:05 am	Bus to Lallemand Blagnac Laboratories	Bus
11:05 am – 12:45 pm	Tour of Lallemand Blagnac Laboratories (DETAILS BELOW)	Lallemand
12:45 pm – 1:15 pm	Bus Returns to Hotel	Bus
1:15 pm – 2:30 pm	LUNCH	Hotel
2:20 pm – 3:10 pm	Stress Management and Control of Yeast <i>Mike Ingledew, Ethanol Technology Institute</i>	Auditorium Verdi
3:10 pm – 4:00 pm	Distillery Cleaning and Sanitation <i>Chris Richards, Lallemand Ethanol Technology</i>	
4:00 pm – 4:20 pm	COFFEE	
4:20 pm – 5:10 pm	Water, Energy and Mass Balance <i>Scott Kohl, ICM Inc</i>	

TOUR OF LALLEMAND BLAGNAC LABORATORIES (ORDER ROTATION TO VARY)

Lab Visit I	<i>Microscopy/Genetics</i>	A) Demonstration of serial dilutions, inoculation, plating and identification tests B) Demonstration of cell count and viability on yeast and bacteria; fluorescence microscope C) Overview of genetics use for identifying and differentiating yeast strains in the ethanol industry
Lab Visit II	<i>Bacteria Pilot Fermentation</i>	A) Demonstration of lyophilizers and their use B) Tour of the fermentors; demonstration of techniques used – turbidity, conductivity and pH
Lab Visit III	<i>Yeast Pilot Fermentation</i>	Demonstration of the production, fermentation and drying processes Overview of R&D and basic analysis methods
Lab Visit IV	<i>Alcoholic Fermentation Cold Room</i>	Demonstration of mass balance method for ethanol measurement

The Alcohol School 2010



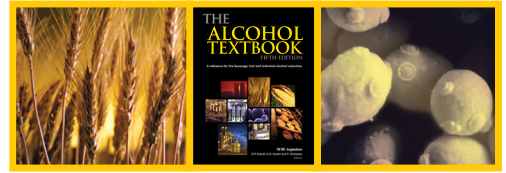
Thursday

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>Glen Austin and 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	

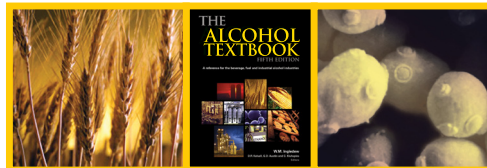
The Alcohol School 2010



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>Glen Austin and 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	

The Alcohol School 2010



Friday

APRIL 30, 2010

8:30 am – 9:25 am	Troubleshooting an Alcohol Plant - An 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	Ethanol from Cellulosic Biomass <i>Frédéric d'Aoust, Lallemand Ethanol Technology</i>	
11:35 am – 12:30 pm	Technical Opportunities & Challenges in the Industry <i>Phil Madson, KATZEN International</i>	
12:30 pm	Course Wrap-up and Presentation of Certificates <i>Mike Ingledew and Staff</i>	