



ILPS



## Short Course: Lecithin & Phospholipids in Emulsions

Thursday and Friday 5-6 June 2008, Ghent, Belgium

The International Lecithin and Phospholipid Society (ILPS) and Ghent University organize this short course in University Conference Building "Het Pand", Onderbergen 1, Ghent with laboratory demonstrations in the Laboratory of Food Technology.

### Who should attend

Scientists, product developers, QA /QC managers, lab technicians, application technologists, plant supervisors and sales managers, working with lecithins, phospholipids, emulsifiers and emulsions in the food, pharmaceutical and other industries, institutes and academia.

### Organizers

W. van Nieuwenhuyzen, Course leader, ILPS Executive Director, Lecipro Consulting,  
P. Van der Meeren, Ghent University, Dept. of Applied Analytical and Physical Chemistry  
K. Dewettinck, Ghent University, Dept. of Food Technology and Nutrition.

### Technical Program

Thursday 5 June , Registration 8.30 H, Start 9.00 H

#### Session I: Lecithin Characterization

- Welcome
- Lecithin production, modification, emulsifying properties
- Methods of Analysis: Phospholipid composition and QA

W. van Nieuwenhuyzen

#### Session II: Emulsion Preparation and Stabilization

- Emulsions from a physic-chemical point of view
- Emulsion preparation principles (surfactants)
- Emulsion preparation equipment
- Emulsion stabilization principles (stabilizers)
- Surface activity evaluation

P. van der Meeren

Lunch

#### Session III: Laboratory Demonstrations

- Lecithin characterization in solvents and emulsion tests
- Particle size characterization, Malvern Multisizer, Zetasizer
- Homogenization: Microfluidizer, Lumifuge
- Emulsion characterization: TA rheometer, DSC, pfg-NMR
- HPLC - ELSD

Instructors:  
University Staff,  
Lecithin Experts

*Changing Group  
demonstrations*

*!! Participants may bring own lecithin sample for testing !!*

#### Session IV: Emulsion Characterization

- Particle size distribution (including NMR)
- Rheology
- Microscopy Techniques for Food Emulsions

P. van der Meeren

J. Nijse

Buffet reception with food in Het Pand, 18.30 H

Friday 6 June, Start 8.30 H

**Session V: Food Applications**

- Lecithin in Food Emulsions.
- Production and application of fat derived emulsifiers
- Phospholipid-protein interactions in dairy technology

W. van Nieuwenhuyzen  
J. van Peij – Visser  
P. van der Meeren

**Session VI: Legislation**

- Regulative aspects lecithin and food additives
- IP Traceability
- Allergenicity – residual protein analysis

R. Lange

Lunch

**Session VII: Applications II**

- Influence of Emulsifiers on Crystallization Kinetics of Fats
- Phospholipids from different sources – applications in pharmaceuticals and nutrition
- Feed Applications
- Closing

K. Dewettinck  
M. Schneider

W. van Nieuwenhuyzen

Guided Walking Tour through Historic Ghent, 16.00-18.00 H

**Short Course Instructors / Coordinators**

- Prof. Dr. Koen Dewettinck, Ghent University, Belgium
  - Dr. Jaap Nijssse, Unilever Research, Vlaardingen, The Netherlands,
  - Dr. Reinhard Lange, Cargill Texturant Systems, Hamburg, Germany,
  - Mrs. Saskia Rombaut – Van der Looven, Ghent University, Belgium
  - Dr. Michael Schneider, Lecithos, Freinsheim, Germany
  - Prof. Dr. Paul Van der Meeren, Ghent University, Belgium
  - Ir. Willem van Nieuwenhuyzen, Lecipro Consulting, Limmen, The Netherlands
  - Mrs. Ir. Judith van Peij – Visser, Kerry Bioscience, Zwijndrecht, The Netherlands
- Visit website for Speaker's biographies and expertise.

**Call for posters – Best ILPS Poster Award:**

Under the theme: "Students meet Industry" MSc and PhD students are encouraged to submit posters on related topics. Participation can be rewarded with 3 ECTS points depending on the Universities requirements. Poster abstracts should be e-mailed to the organizers before 15 April 2008 for acceptance. The Best Poster Award will be presented at the end of the course. Poster review during the breaks.

**Registration**

| Registration fee in Euro                  | <u>By 1 April 2008</u> | <u>After 1 April 2008</u> |
|---|------------------------|---------------------------|
| Short Course Participant                  | € 490                  | € 590                     |
| Student (accompanied by University proof) | € 150                  | € 200                     |

Registration fee includes: • presentations and laboratory demonstrations, • course book + CD-ROM, • two lunches, • buffet reception, • coffee breaks • guided city tour.

Registration administration and payments: Please download registration form from ILPS homepage and fax/mail the filled form to the registration secretariat. Payments should be made according to the instruction on the registration form.

**Course Homepage**

Program updates, registration form, hotel and travel information are available at <http://www.ilps.org>. For further information contact [lecithin@lecipro.nl](mailto:lecithin@lecipro.nl); Tel +31 72 5055617; Fax +31 72 5055618

## Hotel booking

For period 4-7 June contingents rooms are reserved at preferred rates as long as available, if booked before 15 April. For booking please contact directly the hotels.

- IBIS\*\*-Opera, Nederkouter 24/26, 9000 Ghent, Tel. +32 9 2250707, Fax +32 9 2235907, at € 85 per night (Friday €75) excl. breakfast (€ 12). ( [www.accorhotels.com](http://www.accorhotels.com), [www.ibishotels.com](http://www.ibishotels.com)). Booking only via e-mail [H0961-Re@accor.com](mailto:H0961-Re@accor.com) or fax +32 9 2331000 with code: 'Lecithin course'. Hotel is located in the center on walking distance from conference venue.
- Best Western Chamade\*\*\*, Koningin Elisabethlaan 3, 9000 Ghent, Tel: +32 9 2201515, Fax +32 9 2219766, at € 89 (single) and € 101 (double/twin) including breakfast ([www.chamade.be](http://www.chamade.be)). Booking via [info@chamade.be](mailto:info@chamade.be) or fax with reservation code: 'UGent - Lecithin Course'. Hotel is situated in a residential area near Sint-Pieter train station. With tram line 1 you can reach Ghent centre and the conference venue in 5 minutes.
- For other hotels in all classification groups please visit the website [www.trabel.com](http://www.trabel.com).

## Transportation to Het Pand Conference Venue

Ghent is situated on 50 km west of Brussels. By car you may reach from Brussels on Motorway E40 and from Antwerp and Paris- Lille Motorway E17, take exit Ghent Centrum; follow the parking-route to public P7, "Sint Michiels Parking". This parking is only 50 m away from 'Het Pand'.

Ghent has good hourly train connections from Brussels Central and Brussels – Zaventem Airport.

### -Arriving at Brussels airport:

The airport City Express leaves from within the airport building (floor -2) and takes you to one of the main stations in Brussels (subsequently Noord/Nord, Centraal/Central and Zuid/Midi), where you can switch to one of the many intercity trains(IC) to, or via "Gent-Sint-Pieters, Ghent's main railway. Some trains run directly from the airport to "Gent-Sint-Pieters.

### -Arriving by train in Brussels:

Switch to one of the many intercity trains (IC) to, or via "Gent-Sint-Pieters, Ghent's main railway station (Directions Brugge, Knokke, Blankenberghe, Oostende all stop in Ghent). Ghent is on the crossroads of the international lines "London - Brussel - Köln" and "Paris - Lille - Antwerpen"

### - From the railway station "Gent Sint-Pieters":

Hotels and Conference Building can be reached from the Ghent Train station by taxi or tram. For "Het Pand" take Tram 1, 10, 11 or 12 from the tunnel under the railway station (every 6 minutes), get off at the "Korenmarkt" and cross the river "Leie" via the bridge "Sint-Michiëlshelling". Turn left around the Sint Michaels church. "Het Pand" is situated next to the church.

## Websites

"Het Pand" (historic) information: <http://www.ugent.be/en/visitstaff/services>

Tourist and Hotel information (Dutch): <http://www.gent.be>

Tourist and Hotel information (English): [www.trabel.com](http://www.trabel.com)

International Lecithin and Phospholipid Society: <http://www.ilps.org>

Ghent University- Faculty of Bioscience Engineering: <http://www.fbw.UGent.be>

Dept. of Food Safety and Food Quality: <http://www.foodscience.UGent.be>

Laboratory of Applied Physical Chemistry <http://www.paint.UGent.be>

## ILPS & Ghent University