

Newsletter

The International Lecithin and Phospholipid Society

August 2006

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OFFICERS ADDRESS Update

Chair - Joe Casey, The Solae Company, jcasey@solae.com

Vice-Chair – Lance Colbert, Archer Daniels Midland, colbert@admworld.com

Treasurer – Roger Lantz, American Lecithin Cy, roger.lantz@americanlecithin.com

Secretary – Moghis Ahmad, muathar@aol.com

Analytical Secretary – Bernd Diehl, Spectral Services, diehl@spectralservice.de

The officers hold a 2-year term and lead the ILPS through July 2007. The board also includes Members-at-Large, the former Chairs. Past chairs include:

Susan Gurkin, Cargill-DFI, susan_gurkin@cargill.com

Willem Van Nieuwenhuyzen, Lecipro Consulting, willem@leciopro.nl

Randy Zigmont, American Lecithin Co., randy.zigmont@americanlecithin.com

Bernie Szuhaj, Szuhaj & Associates, b.szuhaj@comcast.net

Walt Shaw, Avanti Polar Lipids, waltshaw@avantilipids.com

Michael Schneider, Lecithos, doc-schneider@t-online.de

ILPS PHOSPHOLIPIDS CONGRESS PECS2006 on schedule

The 9th Congress is jointly organized in conjunction with the ICBL Conference in Pecs, Hungary, Sept 8-10, 2006. In 4 sessions 25 world class speakers will present scientific evident topics on “Phospholipids for Health”

Registration is still on going. Information is available on the ILPS website.

Medio August the number of 75+ registrants from academia, institutes and industry exceeded the budget target number. Striking is the large number of delegates from Japan.

ILPS gratefully acknowledges the Silver Sponsorship of

-ADM Lecithin Group, Decatur, Ill

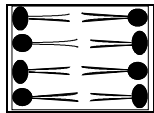
-Avanti Polar Lipids Inc, Alabaster, AL

-Spectral Service, Cologne Germany

QUEBEC SHORT COURSE on May 11-12, 2007

ILPS has agreed with Dr. Paul Angers and Dr. Joseph Arul of the Laval University of Quebec City, Canada to jointly organize a Lecithin Short Course “Lecithin Emulsification and Emulsion Technologies”. This 2 days short course is scheduled prior to the ISF – AOCS Oils & Fats Congress in Quebec City.

The target groups of attendants are product developers, QA managers, scientists, lab technicians and application technologists from academia, institutes and industry,



who are working with lecithins and emulsions in food, feed, pharmaceutical and technical products.

University class rooms and laboratories will be used for demonstrations. Lodging will be arranged in hotels close to the University facilities.

Scheduled key speakers-instructors are Paul van der Meeren, University of Ghent, Paul Angers and staff of Laval University and Willem van Nieuwenhuyzen, completed with experts from ILPS members. Currently the program is developed, so that this course can be proposed to the AOCS Board in September for inclusion in the ISF-AOCS program.

AOCS PHOSPHOLIPID 2007 SESSIONS

98th AOCS Annual Meeting & Expo is scheduled jointly with the ISF (International Society of Fat Science) May 13-17(May 2007) in Quebec City

The Phospholipid Division schedules following sessions:		Co-Chair
Monday Morning, May 14:	Ether Lipids,	Moghis Ahmad
Monday Afternoon:	Lecithin & Phospholipid Analysis	Bernd Diehl
Tuesday Morning:	Hot Topics	
Tuesday Afternoon:	Specialty Phospholipids	NN
Wednesday Morning:	General Phospholipids	Jonathan Maynes

The Japanese Oil Chemist Society (JOCS) will nominate co-chairs and has already indicated 12 papers and posters.

The call for papers and posters is open. Everybody is invited to submit the Declaration of Intent with just title and authors to www.aocs.org/meetings before October 2, 2006. After acceptance, the abstract should be submitted latest in January 2007.

EUROPEAN GHENT SHORT COURSE Scheduled for winter 2008

ILPS has agreed with the University of Ghent, Dept of Food and Engineering, Belgium to hold an second short course in late autumn 2007 / early 2008 after the success of the February 2005 course with over 80 participants.

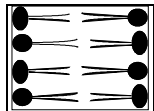
During the 2005 course ILPS asked with an inquiry form participants about their opinion and wishes. Overwhelming result was the request for spending more time in running trials with the sophisticated apparatus in preparing and characterization of emulsion stability.

Companies and institutes considered the 2005 course as an incentive and an excellent training and of their -young- staff members. Exact data will be announced on the website.

BEST AOCS PHOSPHOLIPID 2005 PAPER AWARD

Each year the ILPS sponsors a Best Paper Award at the annual American Oil Chemists' Society (AOCS) meeting. This award recognizes an outstanding published paper or monograph in the area of Phospholipid research or applications. The award includes a plaque, certificates for each author, and \$200 dollars.

The recipient at the 2006 AOCS meeting in St Louis, MI was Paul van der Meeren, Mamdouh El-Bakry, Nico Neiryck and Pascal Nappe
"Influence of Hydrolysed Lecithin Addition on Protein Adsorption and Heat Stability of a Sterilised Coffee Cream Simulant", International Dairy Journal [2005] 15,
> 1235-1243.



Dr. Paul van der Meeren presented the results of this paper during the AOCS Phospholipid Division Luncheon on May 1. Paul is full professor at the Department of Applied Analytical and Physical Chemistry, University of Ghent Belgium, speaker-instructor of the Ghent2005 lecithin course and scheduled speaker-instructor of the Quebec2007 and Ghent2008 short courses.

For the 2006 Best Paper Award Competition you are invited to send nominations to sebree@admworld.com (AOCS Phospholipid Division Chair) or jcasey@solae.com (Chair Best Paper Award Committee).

PhD Dissertation on Sphingolipids defended

Roeland Rombaut of the University of Ghent defended his PhD Thesis "Enrichment of nutritionally advantageous milk fat globule membrane fragments present in dairy effluents" on June 12, 2006 for an international examination committee. Promoter was Dr Koen de Wettinck. Bernd Diehl was member of the examination committee because of his expertise on phospholipid analysis and the Spectral Service analytical support to this project. Roeland developed a HPLC-ELSD chromatographic separation method for the analysis of polar lipids in dairy products. With this method the phospho- and sphingolipid concentration during the processing of milk could be followed. The MFGM fraction with enriched PL and SPH-L could be concentrated with membrane technology, coagulation and centrifugation techniques.

Roeland was co-organizer and speaker of the ILPS Ghent2005 Lecithin course and presented results on various conferences, among them AOCS Phospholipid sessions.

ANALYTICAL NEWS

ILPS EUROPEAN ANALYTICAL SUBGROUP MEETING

The most recent ILPS European Analytical Subgroup meeting was held in Cologne, Germany, February 9, 2006. Hosts were Dr Bernd Diehl and Dr Werner Ockels from Spectral Services in their new laboratory facilities in Cologne - South.

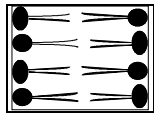
Dr. Werner Ockels presented new results of an APCI =Atmospheric Pressure Chemical Ionization/LC/MS method that enables separation and analysis of individual fatty acid composition and position in the glycerol backbone.

Dr. Dirk Cremer, Degussa (now Cargill), presented data on residual solvents in lecithins. Dr Volker Goetz, Altana informed about new EU legislative topics with relevance for pharmaceutical and functional food products.

The ILPS Working group Residual Proteins in Lecithin will initiate analyses of selected lecithins by 4 laboratories in succession of the 2004 analyses by the Dutch TNO – Food Institute.

HPLC – LSD Method submitted to AOCS

ILPS Analytical Method AM 01 on HPLC – Light Scattering Detection for Lecithin Phospholipids was developed in the 1990ties with final round robins in 12 laboratories. This method was already accepted as official unified DGF method F- I-6a by the German Association of Fat Chemistry in 1998. Rumors said that AOCS approval would need a larger round robin. Recent meetings with Dr. Hans-Jochen Fiebig of the BFEL Institute of Lipid Research, Münster, Germany and member of the ISO?TC 34/SC 11 committee and Dr



Richard Cantrill, Technical Director of AOCS learned that the round robin results would fit in the ISO/IUPAC/AOCS International Harmonized Protocol. In August the draft method, re-edited in AOCS style, has been submitted to AOCS.

Residual Proteins in Lecithin

Allergenic labeling information has been requested by the Codex Alimentarius Committee. As a result the EU legislation requires now the labeling of ingredients and additives, derived from 12 classes of foods including milk, wheat and soy. On food product labels the consumers find information whether the lecithin is from soy or other sources. Just the information "contain lecithin" is not sufficient anymore, if soy lecithin is used. USA legislation will also require labeling information as from 2007.

Therefore it is important to have reliable methods of determination of residual proteins in lecithin. ILPS sponsored the analysis of 4 selected lecithins (a liquid with high HI/TI%, a liquid filtered product with low HI/TI%, a deoiled lecithin and a PC enriched alcohol soluble fraction) by 4 independent laboratories, using their own developed methods. Eppendorf Clinic of Hamburg University (ELISA), TNO Netherlands (ELISA), WEJ-Eurofins Hamburg Laboratory (Lowry method) and Genescan Freiburg Laboratory (DNA) received the samples under code. Dr Reinhard Lange, QA manager of Cargill Lecithin - formerly Degussa - Hamburg initiated this action and presented the results at the AOCS Phospholipid Session on May 3, 2006 in St Louis. The results are scattered. Reinhard will send more samples to the laboratories to get more data.

31P-NMR Ring test scheduled

At request of the AOAC (American Organization of Analytical Chemists), Bernd Diehl, member of the AOAC Phosphatidylserine PS working group, is organizing a 31P-NMR round robin with agreed participation of 17+ laboratories. Samples will be analyzed in the 4th Quarter 2006. The aim is to get a validated method, to be submitted for official approval by AOAC and DGF. ILPS may support Bernd's initiative to issue it also as ILPS method and to draft a method for AOCS approval.

Spectral Service issued 2 validation studies

ILPS member Spectral Service has finalized two extensive validation studies in June 2006:

- Phosphatidyl-Serine PS, Validation of 31P-NMR Quantification Method
- Soy Lecithin Oil Mixtures in Gelatin Capsules, Validation of 31P-NMR Quantification Method.

Interested members may contact for further information Dr Bernd Diehl diehl@spectralservice.de or Dr Werner Ockels ockels@spectralservice.de .

Structure of Phospholipids

Soon the ILPS website www.ilps.org section [Standards](#) will give links to a number of websites with information on the LC-MS structure of phospholipids, prepared by Dr. Craig Byrdwell of ARS-USDA Beltsville.

www.ilps.org