SURFACTANTS AND POLYMERS IN AQUEOUS SOLUTION

October 18–22, 2010
Hotel Sofitel Lisboa
Lisbon – Portugal

Lisbon tiles

Organized by
CALMIA AB
Lund, Sweden

in collaboration with
Surface and Colloid Center
Lund University, Lund, Sweden

Dept. of Applied Surface Chemistry
Chalmers University of Technology,
Göteborg, Sweden

CALMIA
EDUCATION CENTER

Surfactants and Polymers in Aqueous Solution

October 18–22, 2010 · Hotel Sofitel Lisboa
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Course description and whom it is intended for

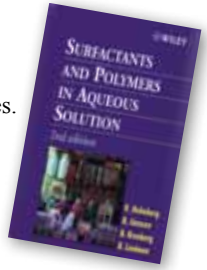
This five-day intensive course provides a comprehensive overview of surface chemistry related to surfactant properties and behaviour in aqueous solutions, surfactant and polymer adsorption and microemulsions.

Surface chemistry problems are encountered in a variety of technological fields. Surfactants are often used as tools to control the physico-chemical properties of aqueous formulations. Examples are areas as diverse as detergents, pharmacy, paints, foods, etc. Also, a formulation usually contains a combination of surfactants and water-soluble polymers. Together the surfactant and polymer provide the properties needed for the specific application.

The course gives an up-to-date description of the underlying physical chemistry, emphasizing on practical examples of industrial relevance.

The course concepts presented are related to processes and products in important fields such as detergents, cosmetics, foods, pharmaceuticals, pulp and paper, paints and inks.

The course is of interest to scientists and engineers working in these or related areas. The applicants are required to have a general academic training in chemistry, but no particular formal education in surface chemistry.



The book ***Surfactants and Polymers in Aqueous Solution*** (2nd edition, Wiley, 540 pages) covers the contents of the lectures. This book will be used as course material. ***A copy of the book is included in the registration fee and it will be sent in advance to the participants.***

All lectures and notes are in English.

This course is being offered for the 19th consecutive year. In previous years, the course has attracted participants from almost every European country as well as scientists from USA, Mexico, Venezuela, Brazil, China and South Korea.

Course lecturers

Prof. Krister Holmberg

Professor in Applied Surface Chemistry at Chalmers University of Technology, Göteborg, Sweden and the Dean of the School of Chemical and Biological Engineering. He is a former Director of the Institute for Surface Chemistry in Stockholm (1991–1998).

Prior to this he has worked in industry for 24 years, most recently as Research Director at Berol Nobel, a Swedish surfactants company (nowadays Akzo Nobel Surfactants).

Today he is the head of a large research group and his research interest covers surfactant chemistry, with an emphasis on environmentally benign surfactants, synthesis and applications of nanomaterials, use of microemulsions as reaction media, and biotechnological surface chemistry.

Prof. Holmberg has published about 200 papers and is the author or editor of 6 books and the inventor or co-inventor of 36 patents. He is Editor of Current Opinion in Colloid and Interface Science and a member of the Editorial Board of several other journals. Presently he is the President of the Swedish Chemical Society and a past President of the International Association of Colloid and Interface Scientists 1996–1998.

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Course outline – Program

- Introduction to surfactants
- Association of surfactants
- New surfactants
- Phase behaviour of concentrated surfactant systems
- Physico-chemical properties of surfactants and polymers containing oxyethylene groups
- Mixed micelles
- Intermolecular interactions and regular solution theory
- Polymers in solution
- Surface active polymers
- Rheological behaviour of polymers and surfactants in solution
- Surfactant-polymer systems
- Surfactant-protein systems
- Surface tension and adsorption at the air-water interface
- Adsorption of surfactants at solid surfaces
- Wetting and wetting agents
- Interaction of polymers with surfaces
- Foaming of surfactant solutions
- Polymerizable surfactants
- Use of surfactants as emulsifiers
- Microemulsions
- Microemulsions for oil and soil removal
- Chemical reactions in microemulsions

Course Timetable

Registration at 08:30 on Monday the 18th of October
The course ends at 12:15 on Friday the 22nd of October
On Wednesday the 20th the afternoon is free for excursions.

Prof. Björn Lindman

Professor in Physical Chemistry at the University of Lund, Sweden, where he has built up and is the head of a large international research group focusing on colloid and interface science.

Over the years he has been a Visiting Professor at several top universities all over the world and has received several prestigious honours and awards. He is the President-elect of the International Association of Colloid and Interface Scientists.

Prof. Lindman has published more than 500 papers, and co-authored 3 books and edited more than 10 books in the field of surface and colloid chemistry.

Furthermore he is on the editorial and advisory boards for a number of international journals and a well known lecturer and consultant world-wide.

Prof. Lindman has carried out extensive research in the areas of surfactant self-assembly, polymer-surfactant interactions, lipid organization, microstructure determination, microemulsions, and surfactants, polymers and their mixtures at interfaces.

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Course Fee and Payment

EUR 2650
EUR 2250 (Universities and Government Institutes)

The course fee includes: Tuition, copies of all PowerPoint presentations, the book **Surfactants and Polymers in Aqueous Solution** and certificate. Beverages and snacks at breaks, and course Dinners on Monday and Thursday.

The registrations will be confirmed with a course schedule, the course book and some practical information. We will send an **Invoice** to the amount of the Course Fee. Accommodation is not included in the course fee.

VAT (Moms) will be added for applicants domicile in Sweden.

Course Location and Hotel

The course is held at
Hotel Sofitel Lisboa, Lisbon – Portugal
October 18–22, 2010

Accommodation is available at a reduced rate at the Hotel.

EUR 155 single room per night incl. breakfast and VAT
EUR 173 double room: per night incl. breakfast and VAT

Cancellation

Cancellations before the 18th of September will be refunded.

No refunds will be made for those who do not attend the scheduled course and/or cancel after September 18.

Substitutions are allowed at any time from the same company or institute.

Registration must be made before September 18, 2010

How to register

- **On-Line registration**
  www.calmia.se
- **Fax or Mail**
  A Registration Form can be printed from each PDF-file.

Hotel Sofitel Lisboa
Avenida da Liberdade, 127
1269-038 Lisbon, Portugal
www.sofitel.com
Tel: +351 21 322 83 00

NOTE
To obtain the reduced price for accommodation, reservations must be made through Calmia.

Questions

For general questions please contact
Mrs Gunlög Tånge-Henderson
calmia@calmia.se
Tel/fax: +46-46 211 00 20

For Scientific questions do not hesitate to contact any of the lecturers
Prof. Krister Holmberg
kh@chem.chalmers.se
Tel: +46-31 772 2969

Prof. Björn Lindman
bjorn.lindman@fkem1.lu.se
Tel: +46-46 222 8160

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Registration Form

Registration before September 18, 2010

Please print!

The number of participants is limited.

I wish to attend the course:

Surfactants and Polymers in Aqueous Solution
October 18–22, 2010
Hotel Sofitel Lisboa – Lisbon, Portugal

Reserve on my behalf at the Hotel Sofitel Lisboa

☐ Single room ☐ Double room

From (date) _____ To (date) _____ Number of nights: _____

☐ Late arrival (after 18:00)

The hotel bill should be paid directly to Hotel Sofitel Lisboa on the day of departure

Surname _____

Given Name _____

Job Title _____ ☐ Ms ☐ Mr

Company/Institute _____

Address _____

Country _____

Tel/fax _____ E-mail _____

Purchase Order number _____ (If required from your company)

Invoice address if different from the one above:

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