

**Fourth Symposium  
on  
Phospholipids in Pharmaceutical Research**

**21<sup>st</sup> – 22<sup>nd</sup>, September 2015  
Heidelberg, Germany**

**3rd Circular**



**Phospholipid**  
Forschungszentrum/Research Center  
Heidelberg





## **Introduction**

Phospholipids excipients are worldwide being used in many registered pharmaceutical products. Because of their physiological occurrence, they are well tolerated, toxicologically harmless and suitable for any administration route.

In pharmaceutical technology, phospholipids are used as wetting agents, emulsifiers and solubilizers and formers of mesophases like liposomes. The nature of the polar head group and fatty acid composition, determines the physico-chemical properties of phospholipids. Combining the right phospholipid excipient with drug substances, to accommodate the intended use and properties of the drug substance, requires an adequate understanding of the properties of the phospholipids.

The fourth symposium “Phospholipids in Pharmaceutical Research” presents the latest advances in industrial and academic research on phospholipid-based formulations and products intended for oral, parenteral and topical administration. This research illustrates how phospholipids can be used in many types of dosage forms for pharmaceutical technological reasons and to optimize the activity, bioavailability and reduce toxicity of drug substances.

The seminars are given by reputed industrial and academic scientists experienced in the research with phospholipids and development of phospholipid based dosage forms.

A general aim of the symposium is to provide a platform for discussion and contact between academia, industry and regulatory authorities throughout all areas of interests of phospholipid scientists and formulators.



**Program Monday, September 21, 2015**

*In the morning from 8.30 a.m. on registration*

9.00 Address of welcome by Dr. Herbert Rebmann - Phospholipid Research Center

**SESSION: Parenteral Administration of Phospholipids**

9.15 **Dr. Frank Schubert - Lipoid AG - Switzerland**

"Phospholipids in Parenteral Emulsions"

9.45 **Prof. Dr. Thomas Andresen - Technical University Denmark**

"Induction of cytokines by Toll-like receptor signaling using engineered liposomes"

10.15 Coffee break with poster session

11.00 **Prof. Dr. Yuhong Xu - Shanghai Jiao Tong University - China**

"Probing the factors affecting liposomal drug distribution after i.v. administration"

11.30 **Dr. Daryl Drummond - Merrimack Pharmaceuticals, Inc. - USA**

"Development and Clinical Translation of Lipid-based Nanotherapeutics"

12.00 Lunch

13.00 Poster presentation

14.00 **Dr. Paola Luciani - ETH Zürich - Switzerland**

"Liposomes: detecting, treating, detoxifying"

14.30 **Prof. Dr. Giuseppe de Rosa - University of Naples - Italy**

"Self-assembling lipid-based nanoparticles for drug delivery: potentialities and issues"

15.00 Coffee break with poster session

16.00 **Prof. Dr. Yechezkel Barenholz - Hebrew University - Israel**

"Relevant physicochemical and biophysical characteristics as the foundation of the development and approval of liposome based Nano-Drugs"

16.45 **Prof. Dr. Daan Crommelin - Utrecht University - The Netherlands**

"Laudation Thudichum Award and Award Ceremony"

17.15 End of first day

18.15 Reception and Dinner at Castle of Heidelberg



**Program Tuesday, September 22, 2015**

**SESSION: Oral Administration of Phospholipids**

- 9.00 **Prof. Dr. Anette Müllertz - University Copenhagen - Denmark**  
"Is there an advantage of incorporating lyso-phospholipids into self-nanoemulsifying drug delivery systems?"
- 9.30 **Prof. Dr. Martin Kuentz - University of Applied Sciences Northwestern Switzerland**  
"Use of mono- and diacyl phosphatidylcholine in concentrated solid drug dispersions"
- 10.00 Coffee break with poster session
- 10.45 **Prof. Dr. Annette Bauer Brandl - University Southern Denmark**  
"Solid Phospholipid Nanoparticles (SPLN) – a formulation concept for enhanced oral absorption of poorly soluble drugs"
- 11.15 **Prof. Dr. Rolf Schubert - University Freiburg i.Br. - Germany**  
"Enhancing the oral bioavailability of drugs: selected phospholipids as inhibitors of the intestinal P-glycoprotein"
- 11.45 **Prof. Dr. Gert Fricker - University Heidelberg - Germany**  
"Oral peptide delivery by use of tetraetherlipids"
- 12.15 Lunch-Poster session

**SESSION: Topical Administration of Phospholipids**

- 13.15 **Dr. Jan Holmbäck - Lipidor AB - Sweden**  
"AKVANO – a novel lipid layer forming dosage form"
- 13.45 **Prof. Dr. Claudia Valenta - University Vienna - Austria**  
"Monoacylphosphatidylcholine based microemulsions and skin delivery"
- 14.15 **Dr. Thomas Tarara - Novartis Pharmaceuticals - USA**  
"The PulmoSphere™ platform, engineered phospholipid particles for pulmonary drug delivery"
- 14.45 **Dr. Igor Gonda - Aradigm Corporation - USA**  
"Development of inhaled liposomal formulations (Pulmaquin® and Lipoquin®) for the prevention and treatment of severe respiratory infections"



**“YOUNG SESSION**

- 15.15 “The authors of six of the best poster will be invited to give a 10 min (max) seminar”
- 16.15 Coffee break with poster session
- 16.45 Award Ceremony Best Poster
- 17.00 Concluding Remarks: PD Dr. P. van Hoogevest - Phospholipid Research Center
- 17.15 End of Symposium

**Poster session**

Phospholipid scientists are encouraged to make a poster presentation.

**Please provide the poster abstract before August 1<sup>st</sup>, 2015**



## General Information

*Scientific guidance of the symposium is provided by the Scientific Advisory Board of the Phospholipid Research Center:*

Prof. Dr. Alfred Blume, University Halle, Germany  
Prof. Dr. Gert Fricker, University Heidelberg, Germany  
Dr. Frank Martin, Delpor, Inc., San Francisco  
Prof. Dr. Christel Müller-Goymann, University Braunschweig, Germany  
Dr. Ralf-Olaf Quinkert, Lipoid GmbH, Ludwigshafen, Germany

### *Organization and Information:*

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### *Venue:*

University of Heidelberg  
Lecture Center Chemistry / Hörsaalzentrum Chemie  
Lecture Room West / Hörsaal West  
Im Neuenheimer Feld 252  
D-69120 Heidelberg  
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### *Registration:*

Participants are requested to use the registration form supplied with this information flyer or to register by e-mail: [info@phospholipid-institute.com](mailto:info@phospholipid-institute.com) **until July 1<sup>st</sup>, 2015**

Registration confirmation and invoice are sent upon receipt of registration

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