

Monday, August 31, 2026 – Day 1

Welcome

- 9:00 – 10:00 (CEST) **Registration, mounting of posters**
First coffee then science
- 10:00 – 10:15 **Addresses of Welcome**
Prof. Dr. Alfred Blume (President PRC)
PD Dr. habil. Simon Drescher (Managing Director PRC)

Session 1: Crossing Biological Barriers: Intracellular Delivery and Permeation Concepts

Chair: Simon Drescher

- 10:15 – 10:45 **Intracellular delivery of biotherapeutics: exploring innovative materials and new physical methods**
Prof. Dr. Stefaan De Smedt – Ghent University/Belgium
- 10:45 – 11:00 **Design and Characterization of RNA-Lipid Nanoparticles for CNS-Targeting** (*selected short talk*)
Monika Aitenbichler – Paracelsus Medical Private University/Austria
- 11:00 – 11:30 **Phospholipases as versatile permeation enhancing agents**
Prof. Dr. Jean-Christophe Leroux – ETH Zurich/Switzerland
- 11:30 – 11:45 **Lipid Nanoparticle Endosomal Escape: Tracking Nucleic Acid Delivery Beyond Membrane Fusion** (*selected short talk*)
Jan Šimek – Charles University, Prague/Czech Republic
- 11:45 – 12:15 **Combination of lipids and surfactants in drug delivery systems**
Prof. Dr. Heiko Heerklotz – University of Freiburg/Germany
- 12:15 – 13:15 **Lunch Break**
- 13:15 – 14:00 **Poster Session and Industrial Exhibition**



Session 2: Targeted Nanomedicines and Advanced Therapies

Chair: Paola Luciani

- 14:00 – 14:30 (CEST) **CD3/CD7-targeted lipid nanoparticles for non-viral *in vivo* generation of CAR T cells by Sleeping Beauty transposition**
Prof. Dr. Raymond Schiffelers – UMC Utrecht/the Netherlands
- 14:30 – 15:00 **Poster Flash Talks (8 × 3 min)**
- 15:00 – 15:30 **Unlocking the cellular blueprint: Precision targeting of diseased tissues with biomimetic nanoparticles**
Prof. Dr. Assaf Zinger – Technion–Israel Institute of Technology, Haifa/Israel
- 15:30 – 15:45 **Global Spotlight Flash Talks (4 × 3 min)**
- 15:45 – 16:30 **Coffee Break**
Poster Session and Industrial Exhibition



Session 3: Membrane and Nano-Bio Interfaces

Chair: Heiko Heerklotz

- 16:30 – 17:00 **Understanding how the physico-chemical properties of lipid-based drug carriers shape their interactions in complex biological environments**
Prof. Dr. Anna Salvati – University of Groningen/the Netherlands
- 17:00 – 17:15 **Controlling Lamellarity in POPC Vesicles: The Combined Influence of Buffer Composition and Extrusion Conditions (*selected short talk*)**
Ana Luisa Schulze zur Wiesche – Bielefeld University/Germany
- 17:15 – 17:30 **Fluorescence cross-correlation spectroscopy (FCCS) for rapid characterization of the size and cargo loading or protein binding of various lipid particles (*selected short talk*)**
Prof. Dr. Kirsten Bacia – University of Halle/Germany
- 17:30 – 18:00 **The dual-face nature of biological membranes**
Prof. Dr. Milka Doktorova – Stockholm University/Sweden



Special Lecture: AI, Publishing, and Scientific Integrity

Chair: Heiko Heerklotz

- 18:00 – 18:30 **AI and Publishing 2.0 – Practical Help or Integrity Hazard?**
Dr. Christine Mayer – Wiley, Weinheim/Germany
- 19:00 – 21:30 **Come Together – Networking Buffet**
Poster Session and Industrial Exhibition

End of Day 1

Tuesday, September 01, 2026 – Day 2

Session 4: Immune Modulation and Tolerance by Lipid Systems

Chair: Assaf Zinger

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| 8:30 – 9:00
(CEST) | Adopting immune cell-phospholipids interaction to modulate tumor immunity
Prof. Dr. Jai Prakash – Radboud UMC, Nijmegen/the Netherlands |
| 9:00 – 9:15 | New amphiphilic patterns for the design of controlled drug delivery systems (<i>selected short talk</i>)
Dr. Edouard Badarau – University of Bordeaux/France |
| 9:15 – 9:30 | Design and optimization of a multi-peptide liposomal formulation for Multiple Sclerosis treatment (<i>selected short talk</i>)
Jorge Plaza – Ahead Therapeutics and University of Barcelona/Spain |
| 9:30 – 10:00 | The role of anionic phospholipids in lipid nanoparticle inverse vaccines
Dr. Naomi Benne – Utrecht University/the Netherlands |
| 10:00 – 11:00 | Coffee Break
Poster Session and Industrial Exhibition |



Session 5: Nanomedicine for Diseased Tissues: Cancer and Genetic Disorders

Chair: Andreas Koeberle

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| 11:00 – 11:30 | Targeting key problems in cancer nanomedicine
Prof. Dr. Twan Lammers – RWTH Aachen University Clinic/Germany |
| 11:30 – 11:45 | Even two amino acids can make the difference: Tailoring the therapeutic success of nanotherapeutics to patients' genetic differences (<i>selected short talk</i>)
Michele Grünewald – Leiden University/the Netherlands |
| 11:45 – 12:00 | Attenuation of Ferroptosis Hallmarks in Liver Fibrosis Using Bioactive PPC-Rich Liposomes (<i>selected short talk</i>)
Assumpta Widak – University of Bern/Switzerland |
| 12:00 – 12:30 | Phospholipid nanoparticles for lipase deficiency gene replacement therapy
Prof. Dr. Davide Brambilla – University of Geneva/Switzerland |
| 12:30 – 13:30 | Lunch Break |
| 13:30 – 14:00 | Poster Session and Industrial Exhibition |



Session 6: Anti-Infective Lipid Systems and Host-Pathogen Interfaces

Chair: Christian Nehls

- 14:00 – 14:30 (CEST) **Engineering lipid-based nanocarriers for antimicrobial biotherapeutics delivery**
Prof. Dr. Oya Tagit – University of Applied Sciences and Arts
Northwestern Switzerland, Muttenz/Switzerland
- 14:30 – 14:45 **Liposomal formulations against bacterial biofilms** *(selected short talk)*
Dr. Zahra Gounani – University of Helsinki/Finland
- 14:45 – 15:15 **Probing the interaction of liposome delivery systems with Gram-negative bacterial cell envelopes: a comprehensive investigative approach**
Dr. Sarah Gordon – University of Birmingham/UK



Award Ceremony – Thudichum Life Awards

Chair: Alfred Blume

- 15:15 – 16:00 Lecture of the Thudichum Life Award Winner
Lipid Membrane Biophysics over the years: phase transitions, lateral diffusion, domain formation and barrier properties
Prof. Dr. Hans-Joachim Galla – University of Muenster/Germany
- 16:00 – 16:45 Lecture of the Thudichum Life Award Winner
A life with phospholipids
Prof. Dr. Gerrit L. Scherphof – University of Groningen/the Netherlands
- 16:45 **Group Photo**
De-mounting of posters
- 17:00 – 19:00 **Social Event** (Guided City Tour | Körperwelten | Free Time)
- 19:30 – 22:30 **Conference Dinner**



End of Day 2

Wednesday, September 02, 2026 – Day 3

Session 7: Lipid-Based Formulation, Processing, and Industrial Translation

Chair: Peter Hölig

- 8:30 – 9:00 (CEST) **Designing, Developing and Understanding Lipid Nanoparticles**
Dr. Marianne Ashford – AstraZeneca R&D, Macclesfield/UK
- 9:00 – 9:15 **Liposomal Drug Delivery: Improving Therapeutic Efficacy by Optimizing Pharmacokinetics** (*selected tech talk*)
Dr. Florian Umstätter – Lipoid GmbH, Ludwigshafen/Germany
- 9:15 – 9:30 **Tuning the wettability and biocompatibility of electrospun PLGA scaffolds using phospholipids** (*selected tech talk*)
Prof. Dr. Karsten Mäder – University of Halle/Germany
- 9:30 – 9:45 **How sterols can be omitted from LNPs, without compromising physicochemical properties, stability and function** (*selected tech talk*)
Dr. Rasmus Münter – Croda Pharma, Lyngby/Denmark
- 9:45 – 10:15 **Phospholipids in fluidized bed processes – downstream technologies**
Dr. Annette Grave – Glatt Pharmaceutical Services, Binzen/Germany
- 10:15 – 11:00 **Coffee Break**
Industrial Exhibition



Award Ceremony – Thudichum Young Scientist Award and Prizes

Chair: Alfred Blume

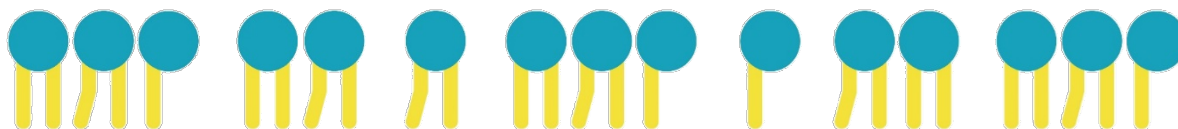
- 11:00 – 11:30 **Prizes for Best Short Talk, Best Flash Talk, Best Poster Presentation, and Best Global Spotlight Flash Talk**

Poster Prize donated by Wiley – Advanced Therapeutics as Tango Reward Links®
- 11:30 – 12:00 **Lecture of the Thudichum Young Scientist Award Winner**

From Computational Design of Responsive Liposomal Depots to Predictive Microfluidic Manufacturing
Dr. Remo Eugster – University of Bern/Switzerland
- 12:00 **Concluding Remarks**
- 12:15 **Packed Lunches & Departure**

End of Symposium

9th International Symposium on Phospholipids in Pharmaceutical Research



The Poster Flash Talks

Monday, August 31, 2026: 14:30-15:00

Flash Talks are concise **three-minute** presentations highlighting selected research submitted to the symposium. The audience will vote for the most compelling presentation, and the winner will receive the **Best Flash Talk Award**.

Here is the list of flash talks:

Viktoria Bayer (German Cancer Research Center (DKFZ), Heidelberg/Germany): *Optimization of xenon host loading in POPC liposomes as functionalizable MRI contrast agents*

Edward Katgert (University of Twente, Enschede/the Netherlands): *Investigating Lipid-mRNA Self-Assembly Kinetics During Microfluidic Lipid Nanoparticle Formation Using FRET Imaging*

Xinyu Ma (University of Groningen/the Netherlands): *Effect of Liposome Rigidity on Corona Formation and Its Implications for Uptake by Cells*

Chloé Muzard (Université Paris Cité and Neovacs, Paris/France): *Development of lipidic formulations for the delivery of mRNA immunotherapeutic in the context of chronic inflammatory diseases*

Deborah Sia Nicdao (Chalmers University of Technology, Gothenburg/Sweden): *The Role of Membrane Asymmetry on Vesicle-Mediated In Vitro Delivery of Nucleic Acid Cargo*

Magdalena Przybylo (Wroclaw University of Science and Technology/Poland): *The Role of Membrane Protrusions in Albumin Anchoring: Biophysical Mechanisms and Consequences for Liposome Biodistribution*

Christian Schwieger (Martin Luther University Halle-Wittenberg, Halle/Germany): *A Phospholipid Triple-Layer Membrane System for studying membrane proteins and lipid exchange*

Samuel Theuerkauf (Paul-Ehrlich-Institut, Langen/Germany): *ApoE-DARPin fusion proteins enable selective RNA transfer to target cells by lipid nanoparticles*

The Global Spotlight Flash Talks

Monday, August 31, 2026: 15:30-15:45

New in 2026, the Global Spotlight Flash Talks recognize the exceptional geographical diversity of this year's symposium. Selected participants will present their research in concise three-minute talks, highlighting perspectives from across the international phospholipid community.

The most compelling presentation will receive the **Global Spotlight Award**, including complimentary registration for the next symposium.

Here is the list of global spotlight flash talks:

Harry McLellan (University of Otago, Dunedin/**New Zealand**): *Incorporation of Rigid Bolalipid Analogues into Liposomes*

Fatma Zahra Hab (University Abderrahmane Mira of Béjaïa/**Algeria**): *Phase-Dependent Partitioning of a Hydrophobic Drug in DPPC Membranes: Implications for Lipid-Based Drug Delivery*

Helene Greige (Lebanese University, Jdaidet El-Matn/**Lebanon**): *Phospholipid structure organization in deep eutectic solvents: Impact on drug solubilization*

Samira Suleymanova (Ministry of Science and Education of Azerbaijan Republic, Baku/**Azerbaijan**): *Colloid-chemical peculiarities of the dispersions based on L- α -phosphatidylcholine from egg yolk and cholesterol according to data of Dynamic Light Scattering and Zeta potential*