

# 5<sup>th</sup> European Conference on Pharmaceutics

Ready for the future: innovative dosage forms and advanced technologies for modern therapeutics

## Porto Portugal 24 - 25 March 2025



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## Innovative dosage forms and advanced technologies for modern therapeutics 24 - 25 March 2025, Porto, Portugal

Dear Colleague,

Following the great success of the past European Conferences on Pharmaceutics, which were held in Reims, Krakow, Bologna and Marseille, it is our great pleasure to announce the fifth congress of this series of international meetings, which will be organised in Porto, Portugal, on 24-25 March 2025. It will be dedicated to "Innovative dosage forms and advanced technologies for modern therapeutics".

The European Conferences on Pharmaceutics are held every two years (in March/April of the uneven years). They are jointly organized by the APGI ("International Society of Drug Delivery Sciences and Technology"), APV ("International Association for Pharmaceutical Technology") and SITELF ("Italian Society of Pharmaceutical Technology and Legislation and Related Disciplines").

Generally, about 600 participants join the conference. Often, one third of them come from industry, one third have permanent position at academia, and one third are young scientists: PhD students & postdocs - the next generation of researchers in our field. The aim is to help bridging the gap between fundamental academic research and industrial applications, offering the opportunity to initiate fruitful exchange and cooperation between university and industry. The conference will be a perfect occasion for young as well as established scientists from all over the world to present their work, discuss most recent scientific findings, network and to share their experience with colleagues. World-wide leading experts in the field will give plenary lectures and invited talks on hot topics. They will give overviews on the current state of the art in the respective domains and outlooks on future perspectives. In addition, new research findings will be presented in the form of short talks, selected from submitted abstracts. Furthermore, poster presentations will give the opportunity to get an update on the most recent discoveries in pharmaceutics and to personally exchange with the authors.

An industrial exhibition will accompany the conference and allow learning about the current trends and newest products in the areas of pharmaceutical ingredients, analytical technologies, equipment, medicinal products, medical devices, contract manufacturing and many other fields.

Please note that all coffee and lunch breaks as well as the welcome reception will be included in the registration fees and will be held in the industrial exhibition & poster presentation area in order to facilitate discussions between participants, exhibitors and presenters.

We are very much looking forward to welcoming you to the 5th European Conference on Pharmaceutics in Porto in 2025!

Juergen Siepmann

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Sandra Klein President APV

MAKING SCIENCE WORK

Paola Minghetti



#### Chair and programme committee

#### Chair of the conference

Bruno Sarmento, University of Porto, Portugal

#### Programme committee

Paolo Caliceti, University of Padova, Italy Sandra Klein, University of Greifswald, Germany Paola Minghetti, University of Milan, Italy Olivier Rougeot, Sanofi, France Juergen Siepmann, University of Lille, France Alena Wieber, Merck, Germany



#### Programme

#### Monday, 24 March 2025



#### 09:00 Opening ceremony

#### Plenary lecture

- 09:30 A drug product in the GUT: an uncertain journey? Werner Weitschies, University of Greifswald, Germany
- 10:30 Coffee/exhibition/posters

## Invited talks: Challenges and innovation in oral drug delivery

- 11:00 Harnessing the potential of Room Temperature Ionic Liquids (RTILs) for oral solid dosage forms of poorly soluble drugs
  Anne Marie Healy, Trinity College Dublin, Ireland
- 11:40 New insights into the disintegration mechanism in uncoated and coated immediate release tablets

  Axel Zeitler, University of Cambridge, United Kingdom
- 12:20 Selecting the correct grade of excipients for use in pharmaceutical drug products Kevin Hughes, Colorcon and IPEC Europe, United Kingdom

### Short talks: Nanoparticles; siRNA delivery; Mucosal drug delivery

- 11:00 Lipid Nanoparticles Decorated With A CD13 Ligand As A Novel Approach To Selectively Target The Tumor Vasculature Giulia Anderluzzi, University of Milan, Italy
- 11:10 Comparative Analysis Of Soft And Hard Nanoparticles: A Multi-technique Approach To Explore Physicochemical Characteristics And In Vitro Behavior Eleonora D'Intino, Sapienza, University of Rome, Italy
- 11:20 Highly Biocompatible Polyphosphoesterstabilized Cubosomes As A Strategy To Deliver A Novelly Synthesized Ru(II) Complex For The Photodynamic Therapy Of Lung Adenocarcinoma Luca Casula, University of Cagliari, Italy

- 11:30 Targeted Nanodrugs For Inhaled Therapy Of Inflammatory Lung Diseases
  Eleonora Maretti, University of Modena and Reggio Emilia, Italy
- 11:40 A DC-targeted Nano-vaccine To Overcome Immune Suppression And Enhance The SoC Efficacy For PDAC Ron Kleiner, Tel Aviv University, Israel
- 11:50 Intranasal Self-Microemulsifying Drug Delivery System Improves Nestorone® Brain Delivery And Confers Neuroprotection Adriana O. Santos, University of Beira Interior, Portugal
- 12:00 Peptide-directed Nanoemulsions Natasa Holler, University of Graz, Austria
- 12:10 Pulmonary Delivery of siRNA Anti-TNFα-loaded Lipid Nanoparticles For Rapid Recovery In Murine Acute Lung Injury Elias Fattal, University Paris Saclay, France
- 12:20 Modulating The Architecture Of Oligocationic Polymers Enables Efficient siRNA Delivery Joachim Arikibe, University of Padova, Italy
- 12:30 Targeted Inulin-based Polycations For siRNA
  Delivery In Colon Cancer
  Carmela Mazzacano, University of Salerno, Italy
- 12:40 Mucoadhesive Polymer-coated Liposomes As A Potential Strategy For The Treatment Of Aerobic Vaginitis Sara Lugli, University of Bologna, Italy
- 12:50 Propranolol HCL-loaded Electrospun Mucoadhesive Films For Intranasal Delivery Konstantina Chachlioutaki, Aristotle University of Thessaloniki, Greece
- 13:00 Lunch/exhibition/posters

## Invited talks: Delivery of biologics: From ATMP to oligonucleotides

- 15:00 Formulation-driven DNA or mRNA delivery Nathalie Mignet, University of Paris-Descartes, France
- 15:40 Next-generation delivery systems for mRNA accines
  Camilla Foged, University of Copenhagen,
  Denmark
- 16:20 Antibody–drug conjugates: Next generation magic bullets

  Carl Deutsch, NBE Therapeutic, Germany

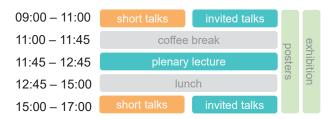
## Short talks: Advanced drug delivery systems, Bioavailability enhancement

Developing Innovative Cannabidiol Drug
 Delivery Systems For Therapeutical Use
 E. Socrates Tabosa do Egito, Federal University
 of Rio Grande do Norte - UFRN, Brazil

- 15:10 3D-printed Polyurethane Vascular Stent-graft With Enhanced Antithrombotic Properties Kim Vanden Broeck, University of Lille, France
- 15:20 Mechanochemical Induced Swelling-activation Of A Gastric-deployable 4D Printed Polypill Inspired By Natural Hygromorphic Actuators Christina Karavasili, Aristotle University of Thessaloniki, Greece
- 15:30 Design And Evaluation Of Thermo-responsive Lipid-needle Patches For Enhanced Transdermal Delivery Of Lipophilic Drugs Matteo Tollemeto, Technical University of Denmark, Denmark
- 15:40 A Multifunctional Mucoadhesive Patch For Enhanced Delivery Of Peptides Margarida Sacramento, University of Aveiro, Portugal
- 15:50 Assemblable System For Ultra-long Gastric Delivery Of Aciclovir: Combining 4D Printing And Tableting Marco Uboldi, University of Milan, Italy
- 16:00 Patient-derived Melanoma Tumoroids For Cutaneous Melanoma Modelling And Screening Of Therapies Juliana Viegas, Institute for Research and Innovation in Health - i3s, Portugal
- 16:10 Enhancing Lipid Formulations With Zwitterionic Surfactants: A Step Towards Superior Drug Delivery Antonio Lopalco, University of Bari Aldo Moro, Italy
- 16:20 Bridging The Gap Between In Vitro And In Vivo Solubility-permeability Interplay Kohsaku Kawakami, National Institute for Materials Science, Japan
- 16:30 Peptide Release From Minitablets In Biorelevant Media: Impact Of Permeation Enhancers Andrew Fagan, University College Cork, Ireland
- 16:40 In Vitro-in Vivo Correlation Of Amorphous Solid Dispersion Enabled Itraconazole Tablets James Polli, University of Maryland, United States
- 16:50 Preparation Of Indomethacin Nanoparticles By Wet Milling Stephane Scheele, Invite GmbH, Germany
- 17:00 Welcome reception



#### Tuesday, 25 March 2025



Invited talks: Special administration routes – biopharmaceutical aspects and regulatory challenges

- 09:00 Dry powders for lung delivery of biopharmaceuticals
  Ruggero Bettini, University of Parma, IT
- 09:40 Long acting injectables
  Aldofo Lopez Noriega, MedinCell, FR
- 10:20 Regulatory strategies for the development of inhaled, cutaneous and gastrointestinal locally acting generic products
  Alfredo García Arieta, Consultant for the WHO Prequalification Programme of Medicines, ES

Short talks: Pharmaceutical manufacturing; Physical pharmacy

- 09:00 Optimizing Processes And Improving Quality In Tablet Compression And Encapsulation -- A New Way Of Supervised Machine Learning?
  Thomas Brinz, Syntegon Technology GmbH, Germany
- 09:10 Elucidating Batch Heterogeneity During Freeze-Drying Using Infrared Thermography And Mechanistic Modeling Leif-Thore Deck, University of Cambridge, United Kingdom
- 09:20 Combination Of A Pre-Emulsification
  Microsystem With A Premix Membrane
  Emulsification
  Daniel Jupke, Technical University Braunschweig,
  Germany
- 09:30 Influence Of Filter Cleaning Frequency On The Residence Time Of Granules In Continuous Wet Granulation Alana Delvos, University of Düsseldorf, Germany
- 09:40 Evaluation Of Different Fluid Bed Settings For Powder Coating Of Pellets With Ethylcellulose Matteo Cerea, University of Milan, Italy
- 09:50 How To Configure The Performance In A Single Stage Continuous Melt Granulation With Planetary Roller Systems
  Jens Bartsch, Technical University Dortmund, Germany

- 10:00 Preformulation Studies And DPE 3D Printing Of Olaparib: A Novel Approach To Enhance Solubility And Bioavailability Nunzio Denora, University of Bari Aldo Moro
- 10:10 3D Printed Gastroretentive Dosage Forms For Timed Multidrug Release Jonas Adriaenssens, KU Leuven, Belgium
- 10:20 Cyclodextrin-based Formulations For Delivering Broad-spectrum Nerve Agent Antidote To The BBB: Physicochemical Characterization, Application In A Human BBB Model And In Vivo Toxicity Study Léa Thiberville, University Paris Saclay, France
- 10:30 Towards Amorphous Engineering: Can PolyAmorphs Be Stabilized By A Co-former Molecule? Inês C. B. Martins, University of Copenhagen, Denmark
- 10:40 Physical Stability Of Ibuprofen-HPMCAS Solid Dispersion As Function Of Solvent Type Elzbieta Maria Gniazdowska, Riga Stradins University, Latvia
- 10:50 Paving the way towards sustainable pharmaceuticalsMike Kleinert, University of Bergen, Norway
- 11:00 Coffee/exhibition/posters

#### Plenary lecture

- 11:45 From Data to Drugs: Predictive and Generative AI in Pharma
  Finn Bauer, Croda Europe, UK
- 12:45 Lunch/exhibition/posters

## Invited talks: Innovation in process development and manufacturing

- 15:00 What's new in PAT?

  Johannes Khinast, Technical University Graz, AT
- 15:40 Benefits of modeling and continuous manufacturing for drug product development, clinical supply and industrial transfer Sophie Martin, Sanofi, FR
- 16:20 Electrospinning process in the biomedical and pharmaceutical fields
  Bice Conti, University of Pavia, IT

#### Short talks: Miscellaneous

- 15:00 Novel pullulan/hyaluronic acid based hydrogel formulations for microneedle development Boyan Wang, Queen's University Belfast, United Kingdom
- 15:10 Physicochemical Characterization And Preformulation Hydrogel Based On Sericin At Different Molecular Weights Maria Rosa Gigliobianco, University of G. d'Annunzio of Chieti and Pescara, Italy

- 15:20 Bi-Gel: Revolutionizing Topical Experience With A Unique Structural Design
  Elise Dauphin-Chanard, Gattefosse SAS, France
- 15:30 Development Of Extended-release Lipid Matrix Tablets Tailored For Paediatric Use Stefanie Broocks, University of Greifswald, Germany
- 15:40 Lipid Nanocarriers For Therapy During Pregnancy Karine Andrieux, University Paris Cité, France
- 15:50 Activity Evaluation Of A Memantine Prodrug Microemulsion In A Rat Model Of Tendinopathy Giulia Vanti, University of Florence, Italy
- 16:00 Establishing And Characterizing A Physiologically Relevant 3D Gut-on-a-chip Model Based On Centrifugal Microfluidics Juliane F Christfort, Technical University of Denmark, Denmark
- 16:10 A Simplified Method To Interpret Drug Release From Thin Polymeric Films By Drug Diffusivity Measurements Karin Korelc, University of Oslo, Norway
- 16:20 Key Parameters For Nasal Dry Powders
  Performance Characterization
  Cláudia Costa, Hovione FarmaCiência, Portugal
- 16:30 Optical Coherence Tomography In Thin Film Analysis: A Novel Approach To Characterizing Drug Delivery Systems Eleftheria Pantazoglou, Technical University of Denmark, Denmark
- 16:40 Quantitative Nuclear Magnetic Resonance
  Spectroscopy For Excipient Profiling And
  Deformulation
  Isha Saraf, Research Centre for Pharmaceutical
  Engineering, Austria
- 16:50 Automated In Silico Phase Diagram Prediction For Solid Dispersions Martin Hofsäss, BASF SE, Germany
- 17:00 End of the conference



#### Abstract submission

#### Submission closed.

#### Acceptance of abstracts

Authors have been notified of acceptance of their abstracts on 13 December 2024.

#### Oral short talk presentations

There are 48 slots for short talks. The time slot for oral contributions will be exactly 10 minutes: the duration of your talk is calculated for exact 7 minutes talking time and 2 minutes for question and answer, 1 minutes for speaker changes. Authors can make use of video projection.

#### Poster presentations

Posters will be presented during one specific day with special times for poster presentation during coffee and lunch breaks. Please bring a poster with the size of DIN A0 (portrait format).

#### Registration of presenters

Short talk and poster presenters have to register to the conference until 31 January 2025 and pay the registration fee until 15 February 2025. Otherwise the abstracts will be deleted.

#### Registration fee

All coffee and lunch breaks as well as the welcome reception are included in the registration fees and will be held in the industrial exhibition and poster presentation area in order to facilitate discussions between participants, exhibitors and presenters.

Full participation		until 31 January 2025	from 01 February 2025
Student <sup>1</sup>	member <sup>2</sup>	210.00 €*	260.00 €*
	non-member	410.00 €*	460.00 €*
Academia	member <sup>2</sup>	410.00 €*	510.00 €*
	non-member	710.00 €*	810.00 €*
Industry	member <sup>2</sup>	1,340.00 €*	1,440.00 €*
_	non-member	1,640.00 €*	1,740.00 €*

- 1 Students are requested to send a copy of their valid student card/pass or a written confirmation of their supervisor. Student rate only available for full time students.
- 2 Members of all participating societies
- \* all prices excluding 21% Portuguese VAT.

#### Accomodation

#### Headquater hotel

#### Neya Porto Hotel

Rua do Monchique 35-41 4050-394 Porto Portugal

www.porto.neyahotels.com/en/ Promotional code: ECP2025

#### Discount:

- 20% off on the best available rate until 15.01.2025, can be accumulated with discount NEYA Exclusive
- 10% off on the best available rate between
  16.01.2025 and 31.01.2025, can be
  accumulated with discount NEYA Exclusive
   5% off on the best available rate between
- 01.02.2025 and 28.02.2025, can be accumulated with discount NEYA Exclusive

For booking: Please choose your check-in and check-out dates and go to "Book now", afterward you can enter the promotional code ECP2025 and have to go to "Check availability".

Further recommendation on hotels and promotional codes on our homepage: europeanmeeting.org.



#### Venue

#### Alfândega do Porto

Centro de Congressos Rua Nova da Alfândega Edifício da Alfândega 4050-429 Porto Portugal

www.ccalfandegaporto.com

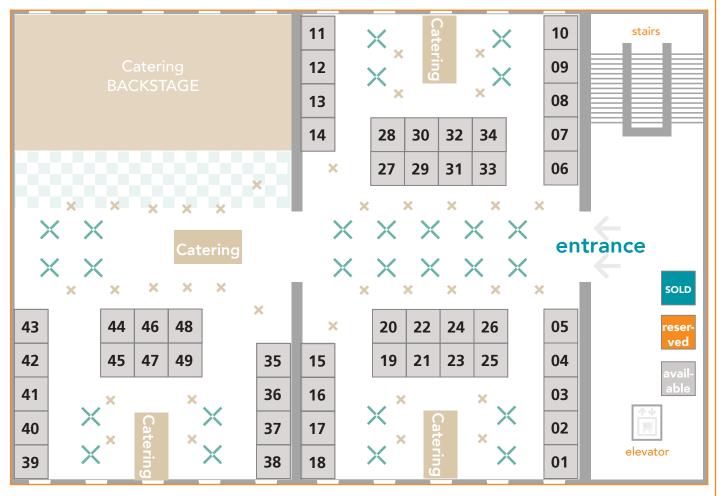
#### Accompanying exhibition ResearchPharm®



We invite you to join this state-of-the-art industrial exhibition

Take advantage of this great event to showcase your company and your products to a very versatile and international audience!

Coffee and lunch breaks as well as the welcome reception are included in the registration fee and will be integrated in the exhibition/poster area to create as much networking opportunities around the booths as possible.



You can find the current floorplan with available booths on our website: www.researchpharm.org

For more information please contact:

Valentina Marinkova





#### **Sponsoring**

The attractive sponsorship packages spotlight your company and your products. Increase your visibility and communicate your brand values to your target group in the pharma community before, during and after the meeting. Please have a look at the further pages for various opportunities to contribute to this meeting. Our support structure offers you a variety of packages starting from  $500.00 \in$ .

Sponsoring options are for example:

- Lanyards (reserved)
- Conference APP
- Meeting bags (sold)
- Insert in bags
- Welcome reception
- Coffee breaks

- Pens and notepads
- Lunch break
- Ads in the conference book

To discuss any of the sponsorship and exhibition opportunities in more detail or if there is a promotion your organisation is interested in, please contact the organising team:

Anna-Maria Pötzl mail poetzl@apv-mainz.de phone +49 6131 9769 10 europeanmeeting.org