



10th World Meeting on Pharmaceuticals, Biopharmaceuticals and Pharmaceutical Technology

4 Parallel Symposia on Basic Research, R&D, Industrial Practice and Analytics

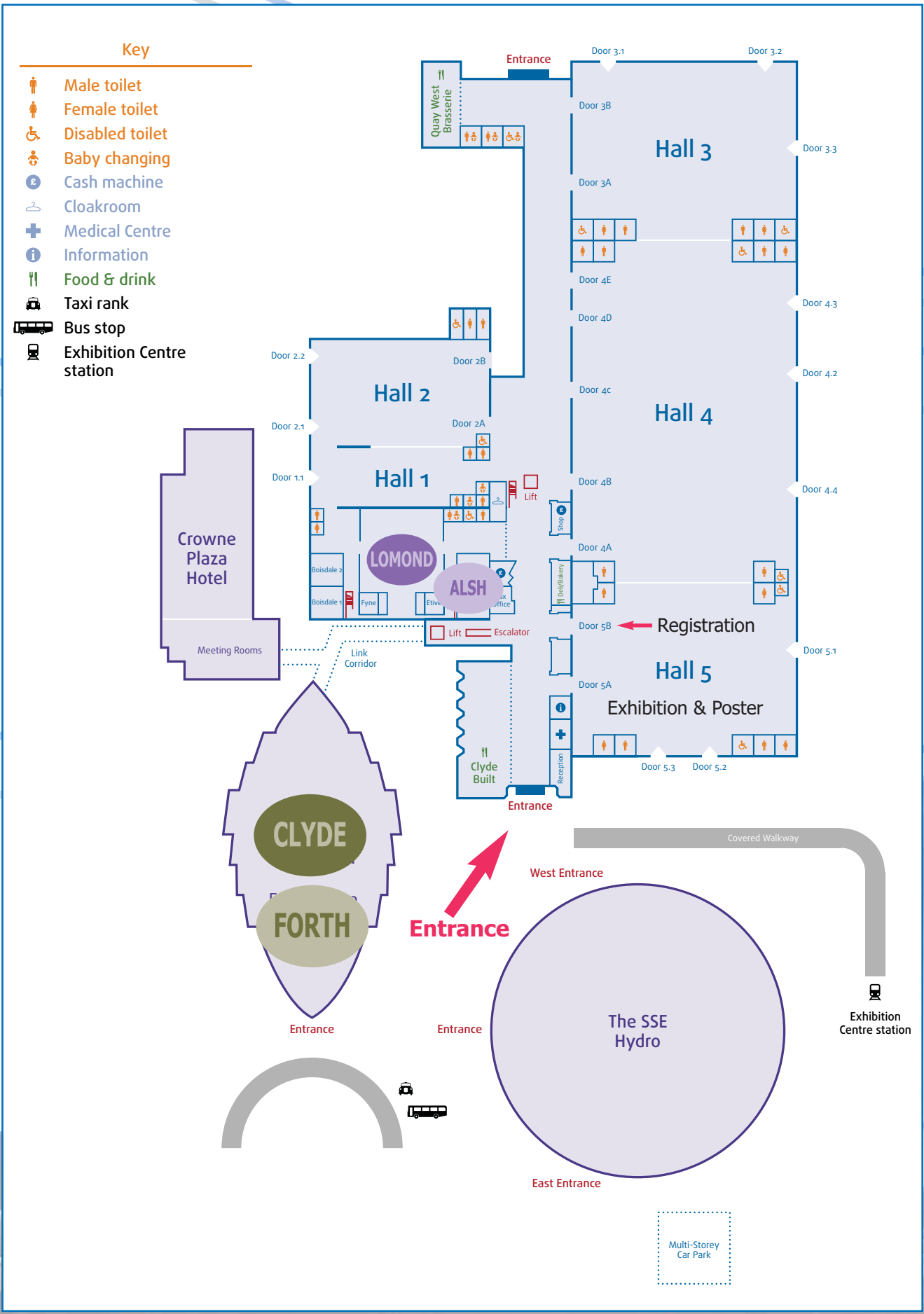
Glasgow, United Kingdom 4 to 7 April 2016

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Site Map



Welcome to Glasgow

10th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology

4 Parallel Symposia on Basic Research, R&D, Industrial Practice and Analytics

Glasgow, United Kingdom 4 to 7 April 2016

SECC Glasgow



How to get to from the Conference Centre to the Welcome Reception



You leave the building in direction to the Clyde River and walk across Bell's Bridge or Millenium Bridge, then turn right and you will reach the Glasgow Science Centre, 50 Pacific Quay, Glasgow G51 1EA.



Chair

Elias Fattal, Paris, France

Co-Chairs

Franco Alhaique, Rome, Italy
Joerg Breitzkreutz, Duesseldorf, Germany
Juergen Siepmann, Lille, France

Programme Committee

Elias Fattal, Paris, France
Rainer Alex, Basel, Switzerland
Lea Ann Dailey, London, United Kingdom
Massimo Fresta, Catanzaro, Italy
Marco Maria Gentile, Milan, Italy
Joel Richard, Dreux, France
Claire Thompson, London, United Kingdom

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Alastair Florence, Glasgow, United Kingdom

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Sven Stegemann, Aachen, Germany
Richard Storey, Leicester, United Kingdom
Piroska Szabó-Révész, Szeged, Hungary

Monday, 04 April 2016

- 18:00 **Welcome reception at the Glasgow Science Centre**
The Welcome Reception will be held in the Glasgow Science Centre. Enjoy a drink while networking with old and new friends.

Kindly sponsored by Lord Provost and Glasgow City Council



Wednesday, 06 April 2016

- 20:00 **Scottish Evening – the ultimate networking event dinner with Scottish flair**
Join us for our unmissable social networking event "Scottish Evening" at the charming historic building of Glasgow University on Wednesday 06 April 2016.

Experience Scotland on a higher level. Establish contacts in a relaxed atmosphere and enjoy with us the different types of music Scotland is offering. Taste a variety of canapés and typical snacks from the barbecue and choose your favourite delight between a Celtic band in Hunter Hall, a Ceilidh dance group in Bute Hall, an organist in University Chapel, a pianist in Concert Hall and a classic ensemble in Hunterian Museum, which is worth a visit.

Join and enjoy typical snacks and music!

Opening hours: business office and registration desk

Sunday	03 April 2016	14:00 to 18:00
Monday	04 April 2016	10:00 to 17:00
Tuesday	05 April 2016	08:00 to 17:00
Wednesday	06 April 2016	08:00 to 17:00
Thursday	07 April 2016	08:00 to 17:00

Monday, 04 April 2016

CLYDE

13:30 Opening ceremony

Sadie Docherty, The Right Honourable Lord Provost of Glasgow and Lord-Lieutenant of the County of the City of Glasgow
Prof. Dr. Elias Fattal, University of Paris-Sud
Prof. Dr. Alastair Florence, University of Strathclyde Glasgow
Prof. Dr. Jörg Breitzkreutz, President of APV
Prof. Dr. Franco Alhaique, Past-President of A.D.R.I.T.E.L.F.
Prof. Dr. Jürgen Siepmann, President of APGI

Awards

- EJPB Best Paper Awards
- Maurice Marie Janot Award*

Kindly sponsored by



14:30 Key note lecture
Chair: E. Fattal

The evolution of formulating protein drug products
Hanns-Christian Mahler, Lonza AG, Switzerland

15:15 Maurice Marie Janot award lecture
Chair: J. Siepmann

I've got you under my skin
Richard Guy, University of Bath, United Kingdom

15:45 Coffee break
Industrial exhibition ResearchPharm®



Hot topic session
Chairs: F. Alhaique/J. Breitzkreutz

16:30 Continuous manufacturing of solid dosage forms
Peter Kleinebudde, University of Düsseldorf, Germany

* Maurice Marie Janot Award kindly sponsored by Sanofi

Programme

- 17:15** **Printing medicines: Challenges and future opportunities**
Simon Gaisford, FabRx, United Kingdom
- 18:00** **Welcome Reception at the Glasgow Science Centre**

Tuesday, 05 April 2016

CLYDE

Symposium: Poorly soluble drugs

Chairs: C. von Corswant / A. Müllertz

- 09:00** **How to formulate poorly soluble drugs - an industrial perspective**
René Holm, H. Lundbeck A/S, Denmark
- 09:40** **Role of excipients in solubility enhancement of poorly soluble drugs**
Ali Rajabi-Siahboomi, Colorcon, United States
- 10:20** **Cyclodextrins as pharmaceutical solubilizers**
Thorsteinn Loftsson, University of Iceland, Iceland

- 11:00** **Coffee break**
Poster session and industrial exhibition ResearchPharm®

ResearchPharm®
International Exhibition for R&D

- 11:30** **APV Awards* (Clyde)**
Kindly sponsored by  Bayer HealthCare  EVONIK INDUSTRIES

- 11:45** **Plenary lecture (Clyde)**
Chair: J. Breitzkreutz

Gastro-intestinal behavior of low solubility compounds
Patrick Augustijns, University of Leuven, Belgium

- 12:45** **Lunch break**
Poster session and industrial exhibition ResearchPharm®

ResearchPharm®
International Exhibition for R&D

Symposium: Oral controlled delivery

Chairs: A. Florence / M. Walter

- 15:00** **Oral administration of polymeric micelles for locoregional and systemic treatments**
Carmen Alvarez Lorenzo, University of Santiago de Compostella, Spain

* APV Award for the Most Outstanding Doctoral Thesis in the Pharmaceutical Sciences in the Years 2014/2015 kindly sponsored by Evonik Industries AG.
APV Research Award for Outstanding Achievements in the Pharmaceutical Sciences kindly sponsored by Bayer Bayer Pharma AG.

Programme

- 15:40** **Oral controlled drug delivery in the pharmaceutical industry – New insights into existing technologies and future perspectives**
Gerard Byrne, Merck Sharpe and Dohme, United Kingdom
- 16:20** **Oral drug delivery systems: controlled drug absorption and impact of GI physiology**
Henning Blume, SocraTec C&S, Germany
- 17:00** **End of session**

LOMOND

Short lectures: Oral formulations and Oral Controlled Drug Delivery

Chairs: G. Verreck / M. Repka

- 09:00** **Prolonged release properties for orodispersible films combining solvent casting and melt extrusion**
I. Speer, M. Preis and J. Breitzkreutz
- 09:20** **Development of micromolded capsular devices for colonic delivery based on a combined time/microbiological approach**
F. Casati, L. Zema, A. Maroni, A. Melocchi, S. Moutaharrik and A. Gazzaniga
- 09:40** **Melt-extruded Solid Lipid Matrices and the Role of Filler Excipients**
S. Li, G. Sweeney, D. Jones and G. Andrews
- 10:00** **Hydrophilic thermoplastic polyurethanes for the manufacturing of highly dosed oral sustained release matrices via hot melt extrusion and injection molding**
G. Verstraete, T. De Beer, C. Vervaet and J. P. Remon
- 10:20** **The assessment of water migration in the sodium alginate matrix tablets containing model active substances of different solubility using magnetic resonance imaging (MRI) and Karl-Fischer titration**
E. Juszczuk, P. Dorozynski, G. Wyszogrodzka, P. Kulinowski, E. García Montoya, J. M. Suñé Negre, P. Pérez Lozano, M. Miñarro and J. R. Ticó
- 10:40** **Experimental and modeling description of hydrogel-based controlled release systems**
D. Caccavo, S. Cascone, G. Lamberti and A. A. Barba
- 11:00** **Coffee break**
Poster session and industrial exhibition ResearchPharm®
- 11:30** **APV Awards* (Clyde)**
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Programme

11:45 **Plenary lecture (Clyde)**

Chair: J. Breitzkreutz

Gastro-intestinal behavior of low solubility compounds

Patrick Augustijns, University of Leuven, Belgium

12:45 **Lunch break**

Poster session and industrial exhibition ResearchPharm®

ResearchPharm®
International Exhibition for R&D

Short lectures: Pediatric formulations and pulmonary drug delivery

Chairs: B. Evrard / J. Breitzkreutz

15:00 **Flexible Dosing of Enalapril by Orodispersible Minitablets: Paediatric Concept, Drug Development and PIP Approval**

Y. Thabet, I. Speer, K. Bartscher, W. Wiedey and J. Breitzkreutz

15:20 **Formulation of orodispersible film with API for pediatric therapy- Investigation of feasibility and stability**

Z. Senta-Loys, S. Bourgeois, S. Briancon and H. Fessi

15:40 **Development of an in vitro gastro-intestinal digestion model simulating the young infant pediatric population**

R. Berthelsen, D. Kamstrup, M. K. Jensen, P. Sassene, A. Selen and A. Müllertz

16:00 **Preliminary Biopharmaceutical Classification of Antibiotics for Pulmonary Delivery**

S. Marchand, J. Brillault, N. Gregoire, I. Lamarche, P. Gobin and W. Couet

16:20 **Comparative study on the aerosolisation performance of engineered theophylline microcomposite particles and adhesive mixtures with lactose carrier**

M. Malamataris, S. Somavarapu, M. Bloxham, K. M. Taylor and G. Buckton

16:40 **Investigation of most common errors in using dry powder inhalers**

S. von Schantz, N. Katajavuori and A. M. Juppo

17:00 **End of session**

ALSH

Symposium: Advanced formulations for dermal and transdermal delivery

Chairs: V. Jannin / M. Lane

09:00 **Innovative nanocarrier for dermal and transdermal administration of drugs**

Donatella Paolino, University of Catanzaro, Italy

Programme

09:40 Transdermal administration: efficient and effective drug delivery

Hanshermann Franke, LTS Lohmann, Germany

10:20 Drug delivery improvements for topic formulation obtained by double layered hydroxides technology

Maria Bastianini, Prolabin & Tefarm, Italy

11:00 Coffee break

Poster session and industrial exhibition ResearchPharm®

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International Exhibition for R&D

11:30 APV Awards* (Clyde)

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11:45 Plenary lecture (Clyde)

Chair: J. Breitzkreutz

Gastro-intestinal behavior of low solubility compounds

Patrick Augustijns, University of Leuven, Belgium

12:45 Lunch break

Poster session and industrial exhibition ResearchPharm®

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Short lectures: QbD & PAT

Chairs: B. Abrahamsson / W. Schlindwein

15:00 Comparison of science-based calibration and PLS for coating thickness determination using Raman spectroscopy

S. Barimani and P. Kleinebudde

15:20 UV imaging versus terahertz pulsed imaging for analysis of tablet coating

A. Novikova, J. M. Carstensen, J. A. Zeitler, T. Rades and C. S. Leopold

15:40 Fast in-line NIR and imaging in continuous processing for improved understanding of powder mixing and sampling.

R. Besseling, A. Gerich, M. Damen, S. Simonaho, O. Korhonen, M. Toiviainen, T. Ervasti and J. Ketolainen

16:00 In-line solutions for real-time NIR monitoring in a continuous from-powder-to-tablet line

F. De Leersnyder, E. Peeters, N. Nicolai, K. Hong, S. Hammond and T. De Beer

16:20 Post Process Controlling of Printed ODF with Nondestructive Methods

M. Wimmer-Teubenbacher, H. Pichler, M. Kerschhaggl, D. Markl, C. Planchette, H. Gruber-Wölfler, W. K. Hsiao, A. Paudel, J. Khinast and S. Stegemann

16:40 A Novel Tool for Online Monitoring of Tg' in Freeze-Drying

J. Horn, M. Resch and W. Friess

17:00 End of session

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FORTH

Short lectures: Nanoparticles & Vesicles I

Chairs: H. Hillaireau / M.-C. Jones

- 09:00** **Nanotheranostic approach based on mesoporous silicon nanocarrier**
V.-P. Lehto, T. Nissinen, H. Santos, M. Kettunen and W. Xu
- 09:20** **Novel isoprenoyl nanoassembled prodrug for paclitaxel delivery**
S. Mura, F. Zouhiri, S. Lerondel, A. Maksimenko, J. Mougin, C. Gueutin, D. Brambilla, J. Caron, D. Desmaele and P. Couvreur
- 09:40** **Development of a novel nano-chemotherapeutic approach to potentiate cancer immunotherapy**
G. Lollo, M. S. Sasso, M. Pitorre, S. Solito, G. Bastiat, S. Mandruzzato, V. Bronte, I. Marigo and J. P. Benoit
- 10:00** **Lipid Bilayer Coated Mesoporous Silica Nanoparticles for Targeted Delivery of Zoledronic Acid**
D. Desai, J. Zhang, J. Sandholm, J. Lehtimäki, J. Tuomela and J. Rosenholm
- 10:20** **Nanoliposomes as Multidrug Therapy for Anticancer Treatment**
C. Celia, Y. Huang, D. Paolino, D. Cosco, J. Wolfram, L. Di Marzio, F. Cilurzo, M. C. Cristiano, H. Shen and M. Fresta
- 10:40** **Liposomal encapsulation of 6BrCaQ, an hsp90 inhibitor reveals promising anti-cancer effects and a better understanding of its mechanism of action**
F. Sauvage, S. Franzè, A. Bruneau, S. Denis, V. Nicolas, S. Lesieur, F.-X. Legrand, G. Barratt, S. Messaoudi and J. Vergnaud-Gauduchon

- 11:00** **Coffee break**
Poster session and industrial exhibition ResearchPharm®

- 11:30** **APV Awards* (Clyde)**
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- 11:45** **Plenary lecture (Clyde)**
Chair: J. Breitkreutz

Gastro-intestinal behavior of low solubility compounds
Patrick Augustijns, University of Leuven, Belgium

- 12:45** **Lunch break**
Poster session and industrial exhibition ResearchPharm®

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Programme

Symposium: Intraocular drug delivery and ophthalmic formulations (on-top, inside, behind the vitreous)

Chairs: A. Bochot / M. M. Gentile

- 15:00** **Cationic nanoemulsions: a versatile platform for topical ocular delivery**
Frédéric Lallemand, Santen France, France
- 15:40** **Intravitreal drug delivery: Pharmacokinetics and delivery strategies**
Arto Urtti, University of Helsinki, Finland
- 16:20** **How to deliver a drug into the eye - an industrial perspective**
Heiko Kranz, Bayer Pharma AG, Germany
- 17:00** **End of session**

Wednesday, 06 April 2016

CLYDE

Short lectures: Nanoparticles & Vesicles II

Chairs: M. Fresta / J. Hanes

- 09:00** **Impact of soft core versus hard core micelles on cellular uptake**
V. Nguyen, G. Borchard and M. Möller
- 09:20** **Apo E-modification of PLA-nanoparticles enhances cellular uptake into brain endothelium**
B. Raudszus, D. Mulac and K. Langer
- 09:40** **Fucoidan-coated liposomes: a promising approach to intracellular targeting of macrophages**
R. Ferraz, M. Lira-nogueira, V. Passos Gibson, T. Salviano, M. Pereira, J. Aguiar, F. Aguiar, T. Silva, A. Goes and N. Santos-Magalhaes
- 10:00** **Is the unintended ovarian and adrenal accumulation of polymeric and lipid Nano-DDS a common phenomenon?**
K. Mäder, H. Lucas, V. Weiss, A.-K. Heinrich, T. Wersig, P. Chytil, T. Etrych, K. Ulbrich, J. Kressler and T. Müller
- 10:20** **Encapsulation of dexamethasone palmitate into polymeric nanoparticles for a targeted delivery in rheumatoid arthritis**
R. Simón-Vázquez, M. Lorscheider, P. Calleja, L. Mousnier, N. Tsapis and E. Fattal

Programme

10:40 In vivo study of the mucus-permeating properties of PEG-coated nanoparticles following oral administration

L. Inchaurrega, N. Martin-Arbella, V. Zabaleta, G. Quincoces, I. Peñuelas and J. M. Irache

11:00 Coffee break

Poster session and industrial exhibition ResearchPharm®

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International Exhibition for R&D

11:30 JDDST Award / APGI thesis Award (Clyde)

11:45 Plenary lecture (Clyde)

Chair: J. Siepmann

Nanomedicine: Translation of nanotechnologies from concept to clinical trials

Justin Hanes, John Hopkins University, United States

12:45 Lunch break

Poster session and industrial exhibition ResearchPharm®

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Symposium: Pediatric formulations

Chairs: R. Alex / C. van Hemelrijck

15:00 Recent achievements in formulating better medicines for children

Jörg Breitzkreutz, University of Düsseldorf, Germany
Jenny Walsh, Jenny Walsh Consulting, United Kingdom

15:40 Industry strategies for developing medicines for children

Terry Ernest, GSK, United Kingdom

16:20 PIPs after the new guideline on pharmaceutical development of paediatric medicines

Sandrine Chiappini, EMA, United Kingdom

17:00 End of session

20:00 Scottish Evening at Glasgow University

LOMOND

Symposium: 2D and 3D printing in drug delivery

Chairs: N. Genina / M. Preis

09:00 Fabrication of 3D tissue

Jordan Miller, MIT, United States

Programme

09:40 Engineering inkjet technologies for different purposes

Wouter Brok, Meyer Burger, The Netherlands

10:20

Printing APIs

Carole Planchette, TU Graz / RCPE, Austria

11:00

Coffee break

Poster session and industrial exhibition ResearchPharm®

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11:30

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11:45

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Short lectures: Pharmaceutical Manufacturing & Engineering

Chairs: D. Djuric / J. Khinast

15:00

Pharma 4.0 – Manufacturing and Quality in the Digital Age

R. Gaertner

15:20

QbD Case Study: Identification of Critical Process Parameters (CPPs) for the Commercial Drug Product Manufacturing Process

M. Wunderlich, L. Jerke, L. Bonaga, B. Stuck-Sailer, M. Gottschall, J. Lamerz, G. Thureau, T. Jung, O. Kalb and D. Singhal

15:40

Portable, Continuous, Miniature and Modular (PCMM) – why this will be the pharmaceutical factory of the future

K. Schoeters and G. Van Vaerenbergh

16:00

Gluing Pills: An Innovation in Multilayer Tableting

V. Wahl, S. Salar-Behzadi, S. Stranzinger, J. Lingitz, S. Sacher and J. Khinast

16:20

Raman mapping for detection of low-dose API in drug products prepared using inkjet printing on tablets

M. Edinger, N. Genina and J. Rantanen

16:40

Hot-melt extruded filaments based on pharma-grade polymers for 3D printing by Fused Deposition Modeling

A. Melocchi, F. Parietti, A. Maroni, A. Gazzaniga and L. Zema

17:00

End of session

20:00

Scottish Evening at Glasgow University

ALSH

Symposium: Bioanalytics, advanced analytics / new analytical methods in particular for large molecules

Chairs: H.-C. Mahler / J. Richard

09:00 **New analytical/biophysical methods to characterize aggregation of large molecules – Focus on the effects of interactions with plasma**
Tudor Arvinte, Therapeomic Holding AG, Switzerland

09:40 **Emerging methods for the characterization of aggregates and subvisible particles for biopharmaceutical products**
Tim Menzen, Coriolis Pharma Research, Germany

10:20 **Use of bioanalytical methods in the development of engineered albumins for optimized serum half-life**
Phil Morton, Novozymes A/S, Denmark

11:00 **Coffee break**
Poster session and industrial exhibition ResearchPharm®

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International Exhibition for R&D

11:30 **JDDST Award / APGI thesis Award (Clyde)**

11:45 **Plenary lecture (Clyde)**
Chair: J. Siepmann

Nanomedicine: Translation of nanotechnologies from concept to clinical trials
Justin Hanes, John Hopkins University, United States

12:45 **Lunch break**
Poster session and industrial exhibition ResearchPharm®

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Symposium: Inhalation

Chairs: R. Bettini / L. A. Dailey

15:00 **Spray-drying pharmaceuticals for optimal delivery to the lungs: From drying droplets to in vivo evaluation**
Nicolas Tsapis, University of Paris Sud, France

15:40 **Dissolution testing for inhaled pharmaceuticals: Mibbes aye, mibbes naw**
Ben Forbes, Kings College London, United Kingdom

Programme

- 16:20** **The development of a novel inhaled bifunctional drug for the treatment of asthma and COPD**
Clive Page, Sackler Institute of Pulmonary Pharmacology, United Kingdom
- 17:00** **End of session**
- 20:00** **Scottish Evening at Glasgow University**

FORTH

Short lectures: Oral formulations

Chairs: H. Lindner / M. Wunderlich

- 09:00** **Highly Resistant Capsules With Genipin-Cross-Linked Double Poly-L-Lysine Membranes For In Vivo Imaging In The Far-Red Fluorescence Range**
E. Santos, A. González-Pujana, M. Virumbrales-Muñoz, H. Haley, I. Ochoa, L. Fernández, G. Luker, R. M. Hernández, G. Orive and J. L. Pedraz
- 09:20** **Equivalent glucose-lowering effects of orally and endoscopically delivered insulin in fasting dogs**
M. Kidron and Y. Greenberg-Shushlav
- 09:40** **Hot Melt Extrusion as a new Method to Form Inclusion Complexes with Cyclodextrins**
J. Thiry, F. Krier, S. Ratwatte, J.-M. Thomassin, C. Jérôme and B. Evrard
- 10:00** **Posaconazole behavior in the human intestine: suspension versus solution versus solid dispersion**
B. Hens, J. Brouwers, M. Corsetti and P. Augustijns
- 10:20** **Amorphous and Recrystallized Itraconazole-Loaded Sucrose Microfibers with Enhanced Dissolution Performance**
S. Marano, S. A. Barker, B. T. Raimi-Abraham, S. Missaghi, A. R.-S. Rajabi-Siahboomi and D. Q. Craig
- 10:40** **Investigation of downstream processing of itraconazole solid dispersion prepared by high speed electrospinning**
B. Démuth, A. Farkas, G. Marosi, Z. K. Nagy, J. Bertels, I. Van Assche, J. Mensch and G. Verreck
- 11:00** **Coffee break**
Poster session and industrial exhibition ResearchPharm®
- 11:30** **JDDST Award / APGI thesis Award (Clyde)**
- 11:45** **Plenary lecture (Clyde)**
Chair: J. Siepmann

ResearchPharm®
International Exhibition for R&D

Nanomedicine: Translation of nanotechnologies from concept to clinical trials

Justin Hanes, John Hopkins University, United States

12:45

Lunch break

Poster session and industrial exhibition ResearchPharm®

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Short lectures: In-vitro/In-vivo correlations & Bioavailability

Chairs: S. Klein / C. Wilson

15:00

IVIVC development in the pharmaceutical industry – Results of a survey among EFPIA companies

M. A. Nguyen, T. Flanagan, F. Kesiosoglou, M. Brewster, J. Biewenga, J. Crison, R. Holm, R. Li, A. Van Peer and P. Langguth

15:20

In vitro and in silico simulation of human GI behavior in pharmacokinetic studies

S. Cascone, D. Caccavo, G. Lamberti and A. A. Barba

15:40

An Integrated Approach to Mechanistically Model In-Vitro Experiments and Incorporate Drug-specific Parameter Estimates within a PBPK Framework to Simulate In-Vivo Drug Dissolution

S. Pathak, N. Patel, B. Liu, D. Turner, A. Ruff, E. Kostewicz and M. Jamei

16:00

Nifedipine Solid Dispersion using HPMCAS: Preparation by HME and Downstream Processing

A. Sauer, K. Kirchhöfer, C. Maker and S. Mistry

16:20

Long-Chain Triglyceride Formulation Enhances Oral Bioavailability of Cannabidiol by Facilitating Intestinal Lymphatic Transport

A. Zgair, J. B. Lee, J. Wong, P. Fischer, D. Barrett, C. Constantinescu and P. Gershkovich

16:40

Evaluation of the supersaturated state and precipitation kinetics of two poorly soluble weak bases using colloids

Á. López Mármol, K. Box and K. G. Wagner

17:00

End of session

20:00

Scottish Evening at Glasgow University

Thursday, 07 April 2016

CLYDE

Short lectures: Peptide and protein formulation & Nucleic acid delivery

Chairs: W. Friess / J. Siepmann

- 09:00** **Impact of Polysorbat 80 on Liquid-Air Interfacial Behavior of Human IgG**
E. Koepf, R. Schroeder, G. Brezesinski and W. Friess
- 09:20** **Protein aggregates and their association with immunogenicity – could bedside filtration reduce the risk?**
B. Werner and G. Winter
- 09:40** **Improving Release Completeness of Ovalbumin from PLGA-based Implants**
L. Duque and R. Bodmeier
- 10:00** **Biodegradable nanocarriers for nucleic acid delivery**
B. Loretz, H. Yamada, C. Thiele, B. Mostaghaci, E. Malaeksefat, N. Kunschke and C. M. Lehr
- 10:20** **In vitro and in vivo targeted gene silencing in cancer cells using anti-CD44 aptamer-functionalized liposomes**
W. Alshaer, H. Hillaireau, J. Vergnaud, S. Ismail and E. Fattal
- 10:40** **A novel tyrosine-modified LMW polyethylenimine (P10Y) for efficient siRNA delivery in vitro and in vivo**
A. Ewe and A. Aigner

11:00 **Coffee break**
Poster session and industrial exhibition ResearchPharm®

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11:45 **Plenary lecture (Clyde)**
Chair: F. Alhaique

Gene therapy for cystic fibrosis: moving towards the clinic
Uta Griesenbach, Imperial College London, United Kingdom

12:45 **Lunch break**
Poster session and industrial exhibition ResearchPharm®

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Programme

Short lectures: Preformulation & physical pharmacy

Chair: C. Schmidt

- 15:00** **Stability Prediction of Amorphous Drug Molecules**
J. Sibik, M. Ruggiero and A. Zeitler
- 15:20** **Mechanochemical Synthesis of Pharmaceutical Cocrystal Suspensions via Hot Melt Extrusion: Feasibility Studies and Physicochemical Characterisation**
N. Heron, D. Jones and G. Andrews
- 15:40** **Emerging ways in suppression of re-crystallization of amorphous anti-cholesterol agents**
J. Knapik, Z. Wojnarowska, K. Grzybowska, K. Jurkiewicz and M. Paluch
- 16:00** **Investigating the physical stability of the amorphous paracetamol printed as microarray using ink-jet printing**
M. Algahtani, M. Alexander, M. Davies and J. Burley
- 16:20** **Effect of biorelevant albumin concentration in simulated plasma on the solubility and stability of Amphotericin B**
R. Díaz de León-Ortega, D. M. D'Arcy and N. Fotaki
- 16:40** **Production and stabilization of olanzapine nanosuspensions by Rapid Expansion of Supercritical Solutions into aqueous solution (RESSAS)**
M. Paisana, K. Muellers, M. Wahl and J. Pinto
- 17:00** **End of session**

LOMOND

Short lectures: Controlled drug delivery

Chairs: H. Kranz / M. Lück

- 09:00** **Hyaluronic acid liposomal gel, a promising approach to sustain the delivery of a corticoid to the inner ear**
A. Bochot, N. El Kechai, E. Mamelle, Y. Nguyen, N. Huang, V. Nicolas, P. Chaminade, S. Yen-Nicolay, E. Ferrary and F. Agnely
- 09:20** **Examination of the influence of the test design on the in vitro release behavior of drug-eluting stents**
A. Seidlitz, R. Schilling, M. Wentzlaff and W. Weitschies
- 09:40** **Release and long-term-stability of Gonadorelin-[6-D-Phe]- loaded lipid microparticles produced by spray-congealing**
K. Hoffmann, W. Zaremba, J. Kauffold and W. Frieß

Programme

- 10:00** **Fundamental understanding of drug absorption from a parenteral oil depot**
R. Kalicharan, C. Oussoren and H. Vromans
- 10:20** **Poly(ethylene glycol) degradable microspheres as anti-angiogenic carriers for chemoembolization**
L. Bédouet, E. Servais, A. Beilvert, S. Louguet, A. Laurent and L. Moine
- 10:40** **Microcontainers as an oral drug delivery system**
L. Hagner Nielsen, R. Singh Petersen, P. Marizza, S. Sylvest Keller, A. Melero, T. Rades, A. Müllertz and A. Boisen
- 11:00** **Coffee break**
Poster session and industrial exhibition ResearchPharm®
- 11:45** **Plenary lecture (Clyde)**
Chair: F. Alhaique
- Gene therapy for cystic fibrosis: moving towards the clinic**
Uta Griesenbach, Imperial College London, United Kingdom
- 12:45** **Lunch break**
Poster session and industrial exhibition ResearchPharm®
- Short lectures: Topical and mucosal delivery**
Chair: S. Reichl
- 15:00** **Biorelevant characterisation of mucoadhesive oromucosal films containing desmopressin acetate**
S. Lindert and J. Breitzkreutz
- 15:20** **Inkjet Printing of Biologics Inks and Biologics-Loaded Nanodispersions on Polymeric Films as Potential Buccal Drug Delivery Systems**
J. Morales, M. Montenegro-Nicolini, F. Campano-Hantscheruk and V. Miranda
- 15:40** **Hybrid fibers with bio-adaptive mechanics - advances and perspectives for the application as wound dressing**
V. Planz, S. Seif, B. Vukosavljevic and M. Windbergs
- 16:00** **Comparing the intradermal micro- and nanoparticle delivery depth after different microneedle treatments**
L. Engelke and G. Winter
- 16:20** **Microneedle Arrays for Nanoparticle Vaccination**
R. Donnelly
- 16:40** **Novel nanocarrier systems for the transport of dexamethasone into the skin analyzed by Electron Paramagnetic Resonance (EPR) spectroscopy**
S. Lohan, A. Solik, S. Saeidpour, P. Dong, R. Bodmeier, R. Haag, J. Lademann, C. Teutloff, R. Bittl and M. Meinke
- 17:00** **End of session**

ResearchPharm®
International Exhibition for R&D

ResearchPharm®
International Exhibition for R&D

ALSH

Symposium: Oral and mucosal dosage forms

Chairs: K. Bartscher / F. Varum

- 09:00** **Drug permeation through oral mucosa**
Eva Roblegg, University of Graz, Austria
- 09:40** **Formulation development and manufacturing of orodispersible tablets**
Philipp Hebestreit, BASF SE, Germany
- 10:20** **Formulation development and manufacturing of oral film preparations**
Andreas Krekeler, Sandoz, Germany

- 11:00** **Coffee break**
Poster session and industrial exhibition ResearchPharm®

ResearchPharm®
International Exhibition for R&D

- 11:45** **Plenary lecture (Clyde)**
Chair: F. Alhaique

Gene therapy for cystic fibrosis: moving towards the clinic
Uta Griesenbach, Imperial College London, United Kingdom

- 12:45** **Lunch break**
Poster session and industrial exhibition ResearchPharm®

ResearchPharm®
International Exhibition for R&D

Symposium: Polymer and other macromolecule conjugate

Chair: P. Matricardi

- 15:00** **Polymer conjugates as nano-sized medicines: from single agents to combination therapies**
Maria Jesus Vicent Docon, Príncipe Felipe Research Centre, Spain
- 15:40** **Tailored engineering of pharmaceutical peptides**
Jesper Lau, Novo Nordisk, Denmark
- 16:20** **Drug-initiated synthesis of polymer prodrug nanoparticles**
Julien Nicolas, University Paris-Sud, France
- 17:00** **End of session**

FORTH

Symposium: Continuous manufacturing

Chairs: P. Kleinebudde / S. Page

09:00 **Continuous manufacturing - Critical steps and possible solutions**
Johannes Khinast, RCPE Graz, Austria

09:40 **Control strategies for continuous processes**
Markus Krumme, Novartis, Switzerland

10:20 **Continuous secondary manufacture: Practical implementation**
Indrajeetsinh Yadav, GSK, United Kingdom

11:00 **Coffee break**
Poster session and industrial exhibition ResearchPharm®

ResearchPharm®
International Exhibition for R&D

11:45 **Plenary lecture (Clyde)**
Chair: F. Alhaique

Gene therapy for cystic fibrosis: moving towards the clinic
Uta Griesenbach, Imperial College London, United Kingdom

12:45 **Lunch break**
Poster session and industrial exhibition ResearchPharm®

ResearchPharm®
International Exhibition for R&D

Symposium: Particle engineering (nanomilling, micronisation)

Chairs: C. Mühlenfeld / T. Rades

15:00 **Enhancing dissolution of poorly soluble drugs through jet-milling**
Salvatore Mercuri, Micro-Macinazione SA, Switzerland

15:40 **Role of particle engineering in state-of-the-art drug delivery –
Most promising technologies and platforms**
Filipe Gaspar, Hovione, Portugal

16:20 **PRINT Particle engineering technology for drug delivery systems**
Benjamin Maynor, Liquidia Technologies, United States

17:00 **End of session**



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Posters

Exhibited continuously from 9:00 to 17:00, with special sessions with authors present from 12:30 to 15:00. The number indicates the number displayed on the poster panel.

Nanoparticles & Vesicles I

- 1 A systematic analysis of the manufacture of polymeric nanoparticles by solvent shifting nanoprecipitation
M. Jara, J. Catalan-Figueroa, M. Landin and J. Morales
- 2 Anti-inflammatory loaded-nanoparticles for ocular use: development studies
C. Cañadas-Enrich, A. C. Calpena Campmany, R. Sanz Casañas, A. Parra Coca, H. L. Alvarado Bonilla and G. Abrego Escobar
- 3 Antioxidant and cytotoxic activities of natural mixture of oleanolic and ursolic acid isolated from *Plumeria obtusa*
H. L. Alvarado Bonilla, G. Abrego Escobar, A. Parra Coca, B. Clares Naveros, M. L. Garduño Ramirez, M. L. Garcia Lopez and A. C. Calpena Campmany
- 4 Aspherical, Nanostructured Microparticles As Drug Delivery System
M. Möhwald, M. Pourasghar and M. Schneider
- 5 BIOADHESIVE CLOTRIMAZOLE-LOADED NANOPARTICLES AS A POTENCIAL VAGINAL DELIVERY SYSTEM: PREPARATION, CHARACTERIZATION AND MICROBIOLOGICAL EVALUATION
B. MARTÍNEZ-PÉREZ, D. QUINTANAR-GUERRERO, F. A. GANEM-RONDERO, M. G. NAVA-ARZALUZ and E. PIÑÓN-SEGUNDO
- 6 Blue fluorescent polymer particles for tracking in LIVE/DEAD stained pathogenic biofilms in lungs
J. Ernst, M. Klinger-Strobel, O. Makarewicz, M. Pletz and D. Fischer
- 7 Development of a new ocular drug delivery system for antibiotherapy
M. Dubald, S. Bourgeois, V. Andrieu, C. Chatard-Baptiste, C. Gard, M. Claret and H. Fessi
- 8 Development of novel nano-biotechnology tools targeting opioid receptors
J. FENG, S. LEPETRE and P. COUVREUR
- 9 Development of polymeric nanoparticle based on hyaluronic acid as a new technological platform for targeted drug delivery
F. I. Boni, L. N. Pedreiro, F. G. Prezotti, B. S. F. Cury and M. P. D. Gremião
- 10 Doxorubicin loosely bound to the nanoparticle surface contributes to the anti-tumoural activity of nanoparticles against an intracranial tumour
S. Gelperina, A. Khalansky, O. Maksimenko, E. Shipulo, J. Malinovskaya, V. Fedoseeva, V. Razzhivina, V. Balabanyan, J. Kreuter and O. Makarova

- 11 Dynamic PEGylated Dextran-based Nanoparticles for In Vitro and In Vivo Delivery of siRNA
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- 12 Effect of ferulic acid-loaded nanostructured lipid carriers on tissue transglutaminase overexpression in human glioblastoma cell lines
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- 13 Encapsulation of propranolol in Janus dendrimersomes
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- 14 Equilibrium and thermodynamic aspects of isoniazid adsorption by halloysite nanotubes
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- 15 Formulation of polymeric nanoparticles loaded with quercetin using a factorial experimental design
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- 16 How to reduce the toxicity of doxorubicin?
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- 17 Hyaluronan functionalized nanoparticles for glaucoma therapy
M. Guter, R. Liebl and M. Breunig
- 18 Hyperforin loading of albumin (BSA) nanoparticles
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- 19 Impact of polymer molecular weight on physicochemical properties of poly (butyl cyanoacrylate) nanoparticles
B.-L. Keller, T. Müller, A. Curic, J. Rosenberg and G. Fricker
- 20 Implication of lipoproteins in the anticancer efficacy of gemcitabine-squalene nanoparticles
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- 21 In vivo studies of pranoprofen loaded-biodegradable nanoparticles for ocular delivery
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- 22 Influence of pH and Gelatin Concentration on the Size and Zeta Potential of Gelatin Colloidal Dispersions
L. Mallia, E. Sinagra and C. Farrugia
- 23 Innovative redispersible spray-dried lipid-core nanocapsules for oral drug delivery
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- 24 Intravenous formulations of rifabutin: in vivo efficacy and biodistribution
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- 25 Microfluidic synthesis improves polydispersity of PLGA blended PEG-PLA nanoparticles
K. Abstiens and A. Goepferich

Posters

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- 27 Nanocapsules: hard shell, powerful centre?
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- 28 Nanofabrication of Highly Selective Luminescent Nanostructures for Mitochondria Imaging and Targeting
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- 30 Nanoparticle formulation for ultrasound triggered drug delivery to tumor tissue
A. Grebner, C. Coussios and G. Lee
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- 41 Positively charged nanoparticles of simvastatin acid/chitosan as drug delivery for bone tissue engineering
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- 110 Polyanions effectively prevent protein activity loss during hydrogel cross-linking
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- 113 Thermal stability studies of β -galactosidase aimed for spray-dried isomalt, melibiose, sucrose, trehalose and hydroxypropyl- β -cyclodextrin formulations
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- 122 Non-viral gene therapy: Successful uptake and improved transfection efficiency by plasmid-loaded protein-nanoparticles modified with cell penetrating peptides
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- 123 PEG density of anti-HPV PEG-lipoplexes influences siRNA efficiency and cytotoxicity: In vitro and ex-vivo studies
A. Lechanteur, T. Furst, B. Evrard, P. Delvenne, P. Hubert and G. Piel
- 124 Preparing Polyphosphazene-based Polyplexes via Thiol-ene Chemistry for the Delivery of Gene Medicines
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- 126 Carboxymethyl beta cyclodextrin to protect DNA formulations
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- 127 Contribution of hyperlipidemia to statin-induced myotoxicity
D. Taha, C. De Moor, D. Barrett and P. Gershkovich
- 128 Isolation and characterization of porcine cerebral endothelial cells, pericytes and astrocytes for an In-vitro blood-brain barrier model
V. Ledwig and S. Reichl
- 129 Multiplex coherent anti-Stokes Raman scattering (CARS) microscopy as a visualisation technique to probe drug nanocrystal–cell interactions
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- 130 The effect of nuclear localization sequence density on targeting efficiency of chitosan nanoparticles to nuclei of cancer and normal cells
S. Tammam, H. Azzazy and A. Lamprecht

Pulmonary delivery

- 131 In vitro and in vivo biopharmaceutical evaluation of microparticles loaded with ciprofloxacin for inhalation.
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- 132 Influence of different inhalers on fine particle fraction of mannitol carriers in dry powder inhaler formulations
N. Rhein, G. Birk and R. Scherließ
- 133 Influence of fines on commercial lactose carriers and their dry powder inhalation performance
M. Hertel, R. Scherließ, E. Schwarz, E. M. Littringer, M. Dogru, S. Hauptstein and H. Steckel
- 134 Influence of lactose polymorphism on drug aerosolization from binary DPI formulations
A. Della Bella, M. Muller, L. Soldati and R. Bettini
- 135 Investigating the influence of carrier surface roughness on drug delivery by DPIs
N. Renner, R. Scherließ and H. Steckel
- 136 New co-culture model of human airway epithelial cells infected with *Pseudomonas aeruginosa* to test novel drug delivery systems
J. Juntke, N. Günday Türeli, C. Carvalho-Wodarz, M. Schneider, N. Schneider-Daum and C.-M. Lehr
- 137 Physicochemical and micromeritic characterisation of polymorphic forms of mannitol as a carrier for dry powder inhalers
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- 138 Physicochemical properties of orally inhaled drugs at 37 °C in Simulated Lung Fluid
A. Llinàs, R. Ruiz, J. Comer and K. Box
- 139 Physiologically-based pharmacokinetic (PBPK) model to describe absorption and disposition of inhaled capreomycin
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- 140 Pulmonary pharmacokinetics of levofloxacin after administration of sustained-release PLGA microspheres into the rat lungs
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- 141 Sodium hyaluronate respirable dry powders for targeted drug delivery
F. Martinelli, A. G. Balducci, B. Forbes, R. Bettini and F. Buttini
- 142 Spray dried mannitol carriers in inhalation – the influence of surface energy and API distribution on drug detachment
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- 143 The influence of storage on the performance of DPI formulations when using intrinsic and extrinsic fines
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- 144 Toxicological profile of lung-delivered PLGA nanoparticles: in vitro and in vivo evaluation
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- 145 Trojan microparticles containing ciprofloxacin nanoparticles produced via media milling
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- 151 Innovational Eye Movement System
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- 153 Thermosensitive hydrogels based on chitosan and its derivatives containing medicated nanoparticles for the transcorneal administration of 5-fluorouracil
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- 155 Development of a dynamic blood compatibility in vitro assay for intravenous formulations
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- 157 Lecithin-based parenteral nanoemulsions of risperidone: physicochemical and pharmacokinetic study
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- 158 Pressurised bone void filler formulation
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- 159 Sterile Filtration of Sodium Carboxymethylcellulose Based Solutions – Factors Affecting Filterability
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K. Nielsen, B. Nielsen, M.-L. Stahl and B. Andersen
- 163 Development and evaluation of ghrelin-loaded liposomes for nose to brain delivery
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- 164 Development of hydrogels containing local anesthetics for topical application in the oral mucosa.
B. Muniz, M. C. Volpato, L. Serpe, B. Sorato, C. Cubayachi and M. Franz-Montan
- 165 Development of Novel Nanocarriers for Buccal Delivery
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A. Hoffmann and R. Daniels
- 167 Exploring cellulose discs as carriers in oromucosal drug delivery
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- 168 In vitro permeation of lidocaine and prilocaine encapsulated in poly- ϵ -caprolactone nanocapsules in hydrogels through pig buccal mucosa.
S. Santos, B. Muniz, L. Serpe, B. Sorato and M. Franz-Montan
- 169 IN VIVO EVALUATION OF MUCOADHESIVE BUCCAL FILMS WITH CICLOPIROX OLAMINE IN RABBITS
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- 170 Instant ODFs – Process integration and development of an intermediate, nanoparticle based product platform for individualized medication
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- 171 Intranasal tadalafil nanoemulsions for treatment of erectile dysfunction
B. Elbardisy, S. Galal, D. Abdelmonsif and N. Boraie
- 172 MANUFACTURING AND CHARACTERIZATION OF POLYMERIC THIN FILMS FOR BUCCAL DELIVERY OF DRUGS
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- 173 Mucoadhesive properties of carvedilol-loaded nanocapsules and drug permeability across sublingual mucosa
P. Chaves, L. Frank, S. Guterres, A. Pohlmann and R. Beck
- 174 Next generation of buccadhesive excipient
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- 175 NiM powders for nasal vaccination - insights into particle forming process
J. Heidland and R. Scherließ
- 176 Non-woven carmellose textile in mucoadhesive oral films containing nystatin: in vitro and in vivo evaluation
D. Vetchý, M. Gajdošová, J. Gajdziok, J. Muselík, J. Zeman, P. Doležel, Z. Knotek, K. Hauptman and V. Jekl
- 177 Poloxamer bioadhesive hydrogel for buccal drug delivery: Cytotoxicity evaluations using TR146 human buccal epithelial cell line
N. Zeng, N. Mignet, M. Maury, P. Rat and V. Boudy
- 178 Resveratrol solid lipid microparticles for nasal delivery
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- 179 Taste panel studies evaluating suppression of the bitter taste in human volunteers
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- 180 A New Colitis Treatment: Microparticles loaded with the parasite enzyme P28 for Oral Colon Delivery
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- 181 Chlorhexidine-loaded, in-situ forming implants for periodontitis treatment: Importance of the drug form
T. RONGTHONG, J. SIEPMANN and F. SIEPMANN
- 182 Controlling the dissolution rate of APIs by formulation on porous nano- and microcarriers
M. Soltys, P. Kovacic, J. Beranek and F. Stepanek
- 183 Degradable embolization microspheres for local doxorubicin delivery in HCC
S. Louguet, E. Servais, A. Beilvert, L. Bédouet, V. Verret, J.-P. Pelage, M. Wassef, A. Laurent and L. Moine
- 184 Design, characterization and in vitro evaluation of microspheres of Eudragit® and L-arginine
C. G. Pérez, L. M. Melgoza, E. Hernández and Á. H. Sandoval
- 185 Development of gel formulations for localized release of metformin
S. Baldassari, I. Croce, M. Yan, S. Pastorino, E. Russo, G. Zuccari, B. Parodi, T. Florio and G. Caviglioli
- 186 DEVELOPMENT OF ORAL FOAMS FOR TOPICAL TREATMENT OF THE INFLAMMATORY BOWEL DISEASE
D. Haznar-Garbacz, M. Sager, F. Schneider, G.-M. Rappen, G. Garbacz and W. Weitschies
- 187 DEVELOPMENT OF PROPOLIS ETHANOLIC EXTRACT LOADED MICROSPONGES FOR TOPICAL DELIVERY
M. Glavas Dodov, M. Nuhiu, B. Koprivica, R. Slaveska Raicki, N. Geskovski and M. Simonoska Crcarevska
- 188 Ear Cubes: A New Approach for Local Controlled Drug Delivery to the Inner Ear
M. Gehrke, J. Sircoglou, D. Gnansia, G. Turrel, C. Vincent, J. Siepmann and F. Siepmann
- 189 Formulation of enoxaparin sodium loaded polymeric microspheres for colon-specific delivery by DoE
D. Hales, L. Vlase, S. A. Porav, L. Barbu-Tudoran, M. Achim and I. Tomuță
- 190 Genipin-crosslinked gelatin microspheres for intraperitoneal drug delivery and prevention of postsurgical peritoneal adhesions
K. De Clercq, W. Ceelen, C. Vervaet and J.-P. Remon
- 191 Hybrid Ear Cubes for Controlled Dexamethasone Delivery to the Inner Ear
M. Gehrke, J. Verin, D. Gnansia, G. Turrel, C. Vincent, J. Siepmann and F. Siepmann
- 192 In situ forming poly(ϵ -caprolactone) microspheres for transarterial embolization therapy
A. Salis, I. Nikolakakis, G. R. Fois, E. Gavini, R. Langasco, A. I. Cornaglia, M. Maestri and P. Giunchedi
- 193 In Vitro Release of Na-Fluorescein from pH Responsive Microgels
C. McCoy, M. Bayan, M. Rahman and G. Andrews
- 194 In-situ forming implants containing drug-loaded microparticles for periodontitis treatment
T. RONGTHONG, J. SIEPMANN and F. SIEPMANN
- 195 In-situ Forming Trans-Oval-Window Implants for Controlled Drug Delivery to the Inner Ear
J. Sircoglou, M. Gehrke, M. Tardivel, F. Siepmann, J. Siepmann and C. Vincent

- 196 Influence of process parameters and composition on water content and hygroscopicity of mupirocin microparticles
M. Lusina Kregar, A. Rožman, B. Cetina-Čižmek and J. Filipović-Grčić
- 197 Intravesical therapy of bladder diseases: A targeted Poly-(L)-glutamic acid drug delivery system
C. Apfelthaler, C. M. Pichl, M. Anzengruber, P. Gassenbauer, F. Gabor and M. Wirth
- 198 Manufacturing Softgels with Solid Lipid Formulations: Effect of Lipid Ageing on API Dissolution Release Rate
A. Bernaerts, M. Piest and S. de Cock
- 199 Multi-Parametric SPR – In vitro Characterization Method for Biopharmaceuticals and Drug Delivery systems
A. Jokinen, N. Granqvist, T. Rojalin, J. Kuncová-Kallio and J. Sadowski
- 200 Pharmacokinetics of nalbuphine from a week-long acting formulation
C.-J. Li, Y.-E. Tien, Y.-F. Hsu, T.-H. Kuo, W.-C. Huang, H.-Y. Kuo, W. Huang and J.-d. Huang
- 201 Physico-chemical characterization and evaluation of anti-inflammatory activity of rutin loaded chitosan microparticles
D. Cosco, P. Failla, N. Costa, M. C. Cristiano, R. Mare, S. Pullano, A. Fiorillo, M. Fresta and D. Paolino
- 202 PLGA Microspheres Produced Using a Membrane Emulsification Process
R. Ferreira, I. Matos and M. Temtem
- 203 PLGA-PEG and PLGA-Poloxamer Implants for Controlled Drug Delivery
M. C. HAMOUDI-BENYELLES, V. TRAN TAN, F. DANEDE and J. SIEPMANN
- 204 Poloxamer-hyaluronic acid hydrogels as lidocaine delivery systems for the treatment of postoperative pain
M. H. Monteiro do Nascimento, E. de Paula, C. Bertachini Lombello and D. Ribeiro de Araujo
- 205 RHEOLOGICAL AND MECHANICAL PROPERTIES OF BIOADHESIVE THERMORESPONSIVE SYSTEM CONTAINING HYPERICIN
M. L. Bruschi, F. B. Borghi Pangoni and M. V. Junqueira
- 206 Rheological and physicochemical characterization of a thermosensitive and bioadhesive gel for postoperative pain management and determination of the effect of Polyethylene glycol in the formula
D. Arbealez-Camargo, J. M. Suñé-Negre, M. Roig Carreras, E. Garcia-Montoya, P. Pérez-Lozano, M. Miñarro-Carmona and J. R. Ticó
- 207 Ropivacaine-hydroxypropyl- β -cyclodextrin in poloxamer 407-hydrogels for pain treatment: physico-chemical characterization and in vitro release studies
G. Kogempa Garcia, A. C. Santos Akkari, E. de Paula and D. Ribeiro de Araujo
- 208 Sirolimus-loaded in situ forming implants for regional immunosuppression in reconstructive transplantation
J. T. Schnider, D. Sutter, D. Dzhonova, J. Denoyelle, A. Taddeo, E. Vögelin, J. A. Plock, J.-C. Leroux and P. Luciani

Posters

- 209 Spray drying of silica microparticles for sustained release application with a new sol-gel precursor
B. Wang and W. Friess
- 210 Understanding gelatin/pectin interactions in capsule shell formulations: a multivariate FTIR spectroscopic study
C. Klein, F. Polyak and G. Reich
- 211 Effect of Coating Weight Gain and Pore-Former Level on Drug Release with a Fully Formulated Ethylcellulose Barrier Membrane Coating System
M. Ghimire, L. Martin, J. Teckoe and A. Rajabi-Siahboomi
- 212 Dual chlorhexidine digluconate – sodium EDTA loaded thermosensitive ocular gel for Acanthamoeba keratitis treatment
A. Cucina, A. Risler, S. Filali, C. Febvay, D. Salmon, C. Pivot, M. Pelandakis, F. Pirot and P. Kirilov
- 213 Microbubbles stabilized by Lipid Nanocapsules for drug triggering release
C. R. A. MOUZOUVI, A. UMERKA, F. FOUCHET, A. BIGOT, P. SAULNIER and A. Umerska

Wednesday, 06 April 2016

Posters

Exhibited continuously from 9:00 to 17:00, with special sessions with authors present from 12:30 to 15:00. The number indicates the number displayed on the poster panel.

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- 1 An accelerated in vitro dissolution method for a parenteral levonorgestrel butanoate suspension in USP apparatus IV
K. Tietz, T. McCormick and S. Klein
- 2 Antimicrobial drug release and characterisation of pHEMA films using Raman spectroscopy
B. McGeever, G. Andrews and D. Jones
- 3 Antimicrobial Extruded Medical Device
G. Procter, G. Andrews and D. Jones
- 4 Applicability of bottom view cameras for evaluation of tablet performance during dissolution testing
T. Felicijan, A. Krese, A. Mrhar and M. Bogataj
- 5 Bilayer tablets with carbamazepine as a biphasic quick/slow delivery system
J. Conceição, F. Bastos, J. Rocha, P. Costa and J. M. Sousa Lobo
- 6 Biomedical applications of the Diels–Alder “click” reaction: Opportunities and challenges
F. Brandl, M. Gregoritzka and A. Goepferich

- 7 Coated pellets for controlled drug delivery: How the starter core material might affect drug solubility and release
J. Fahier, S. Muschert, G. Byrne, F. Siepmann and J. Siepmann
- 8 Controlled Release Coatings of Ethylcellulose on Drug Loaded Multiparticulates: A Comparison of a Novel Rotor Dry Powder Layering Process to a Traditional Wurster Bottom Spray Coating Process
S. Engels, B. Jensen, C. Schoener and S. Khot
- 9 Controlled release of dexketoprofen trometamol from plastics matrices tablets containing Eudragit and Kollidon
I. C. Rodriguez Galán, A. D. Bonillo Martínez, M. Acosta García and M. V. Margarit Bellver
- 10 Design and evaluation of reservoir floating tablets using low density foam powder
S. Sunghongjeen and S. Puttipatkhachorn
- 11 Development and in vivo evaluation of a novel triphasic release oral tablet formulation using gamma scintigraphy
F. MacDougall, H. Stevens, C. Ordoyno and A. Mullen
- 12 Development of a discriminative in vitro drug release method for levonorgestrel butanoate injectable suspensions in USP apparatus IV
K. Tietz, T. McCormick and S. K.
- 13 Eliminating Burst Release of Highly Soluble Drug from Hydrophilic Matrix Tablets
M. Ghimire, M. Rane and A. Rajabi-Siahboomi
- 14 ETHANOL AS POTENTIAL TOOL FOR EXTENDING THE RELEASE RATE OF THEOPHYLLINE FROM ETHYLCELLULOSE-CONTAINING PELLETS, PREPARED BY EXTRUSION/SPHERONIZATION
T. Popova, M. Dimitrov and N. Lambov
- 15 Evaluation of curcumin floating matrix tablets based on polypropylene foam powder
S. Treesinchai, S. Puttipatkhachorn, T. Pitaksuteepong and S. Sunghongjeen
- 16 Floating matrix tablets prepared by HME: Importance of the type and amount of foam powder
W. Kriangkrai, S. Puttipatkhachorn, P. Sriamornsak, F. Siepmann, J. Siepmann and S. Sunghongjeen
- 17 Gellan Gum Microcapsules Coated with Resistant Starch/Pectin Films: In Vitro Insulin Release and Study of Permeation by Everted Rat Intestine.
A. B. Meneguín, A. M. dos Santos, F. I. Boni, F. K. dos Santos and B. S. F. Cury
- 18 How is drug release controlled from PEO hot-melt-extrudates?
O. Cantin, F. Siepmann, Y. Karrout and J. Siepmann
- 19 How to mimic the release kinetics of an OROS® formulation with EUDRAGIT® polymers
F. Hofmann, M. Arndt, D. Juenemann and T. Kuntz
- 20 In-silico dissolution study of a new biopolymer to be used as matrix excipient
M. D. Campiñez, M. Kuentz, M. Puchkov and I. Caraballo

- 21 Influence of alcohol and pepsine presence on tramadol hydrochloride release from hydrophilic matrix tablets
K. Myslíková, A. Komersová, V. Lochař and J. Mužíková
- 22 Influence of ethanol on swelling and erosion properties of hypromellose matrix tablets
A. Lazzari, K. Knop and P. Kleinebudde
- 23 INVESTIGATIONS ON THE IN VITRO RELEASE MECHANISM OF SODIUM ALENDRONATE FROM MODIFIED RELEASE PARTICLES BASED ON MESOPOROUS SILICA
L. Ochiuz, I. Stoleriu, M. Moscalu, G. Tantaru and A. Stefanache
- 24 Mechanical properties of gastroresistant gelatin films prepared with bovine, pork and fish gelatin
B. Maciejewski and M. Sznitowska
- 25 Mechanical properties of venlafaxine hydrochloride matrix formulations prepared with hot-melt extrusion, hot-compression and direct compression
T. AVGERINOS, A. PANAGOPOULOU and I. NIKOLAKAKIS
- 26 Model for confined geometries to explain sub-diffusive transport of particles in mucus
M. Ernst, T. John, C. Wagner, M. Günther, U. F. Schäfer and C.-M. Lehr
- 27 pH-Independent Extended Release from Tablets Containing a Weakly Basic Drug at High Drug Loading
M. Walther, A. Dashevskiy and R. Bodmeier
- 28 Robustness of drug release from PEO-based hot-melt-extrudates
O. Cantin, F. Siepmann, Y. Karrout and J. Siepmann
- 29 Suitability of indifferent insoluble fillers for a reduction of burst effect of very soluble drug from Eudragit® NE, NM /hypromellose matrix tablets
K. Kubova, D. Peček, P. Doležel, M. Pavelková, J. Vysloužil, J. Muselík and D. Vetchý
- 30 Sustained release tablets using PVA DC formulation – alcohol dose dumping under control –
G. Modellmog, G. Birk, T. Wedel and D. Lubda
- 31 Swelling, erosion and release profile studies of melatonin hydrophilic matrix tablets.
M. Vlachou, A. Siamidi and V. Ioannidou
- 32 The effect of inert polymers blend on dexketoprofen trometamol controlled release from matrices
M. V. Margarit Bellver, M. Acosta García, A. D. Bonillo Martínez, I. C. Rodríguez Galán and A. A. López Navarro
- 33 Use of Magnetic Resonance Imaging in studying the Effect of Viscosity Grade of Polymer on Swelling Kinetics
M. Gajdošová, D. Pěček, N. Sarvašová and F. Štěpánek
- 34 Validation of the IntelliCap system, a tool to quickly evaluate extended release profiles in vivo and de-risk modified release development
C. von Corswant, E. Soderlind, B. Abrahamsson, F. Erlandsson, C. Wanke and V. Jordanov

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E. Ramsay, A. Thomas, K. Ou, T. Leaver, A. Wild and R. Taylor
- 36 A SCALABLE, MICROFLUIDICS-BASED PLATFORM FOR THE MANUFACTURE OF RNA LIPID NANOPARTICLES
E. Ramsay, A. Ansari, A. White, K. Ou, A. Thomas, T. Leaver, A. Wild and R. J. Taylor
- 37 Acoustic spectroscopy for the characterization of doxorubicin-loaded liposomes
D. R. Perinelli, F. Rendina, M. Cespi, G. Bonacucina, S. Logrippo, L. Casettari and G. F. Palmieri
- 38 Application of quality by design (QbD) to formulation of long-circulating liposomes loaded with prednisolone
B. Sylvester, A. Porfire, D.-M. Muntean, M. Achim, L. Vlase and I. Tomuță
- 39 Characterization and evaluation of remote-loading liposomes containing dibucaine
V. M. Couto, L. N. Ribeiro, C. C. Silva, V. A. Guiherme and E. de Paula
- 40 CHARACTERIZATION AND OPTIMIZATION OF RITONAVIR NANOSUSPENSION FORMULATIONS USING DIFFERENT SURFACTANTS: III. APPLICATION OF THE DESIGN OF EXPERIMENTS
A. Karaküçük and N. Çelebi
- 41 CHITOSAN-COATED NON-IONIC SURFACTANT VESICLES: PREPARATION AND CHARACTERIZATION
P. N. Hanieh, M. Pianella, F. Rinaldi, M. Di Francesco, C. Marianecchi and M. Carafa
- 42 Collateral sensitivity to Metal-based (M2L4) coordination capsules in resistant AML cell lines
I. Zhelezova, R. Mihaylova, D. Momekova, A. Ismailova and G. Momekov
- 43 Controllable bio-inspired silica as a drug delivery system (DDS)
S. Davidson, D. Lamprou, M. H. Grant and S. Patwardhan
- 44 Cryopelletization: an innovative nanocrystals drying process
A. Touzet, F. Pfefferlé, Y. Pellequer and A. Lamprecht
- 45 Development and characteristics of novel electrosprayed artesunate-loaded nanoparticles
N. Hoang Ho, J. Heinämäki, I. Laidmäe, K. Kogermann, A. Lust, A. Meos and C. Ngoc Nguyen
- 46 Development and characterization liposomes conventional and elastic formulated with Copaiba Oil
I. Blanco, J. Rios, E. Velozo, S. Melo and E. Albuquerque
- 47 Development and evaluation of propolis extract and silver nanoparticles containing nanofibers
V. Briedis, V. Juškaitė, E. Adomavičiūtė, S. Stanys and M. Žilius
- 48 Development of injectable liposomes entrapping apigenin for brain-targeted delivery as glioblastoma treatment
R. Karim, C. Palazzo, N. Dubois, V. Bours, C. Passirani, B. Evrard and G. Piel
- 49 Development of nanostructured lipid carriers and influence of constituents in particle size
S. Carneiro, R. Cruz and O. Santos

- 50 Development, characterization and cytotoxicity of nanoemulsions with pilocarpine hydrochloride
K. Carvalho, G. Pinto, G. Souza and O. dos Santos
- 51 Directional liposome functionalization using enzyme – mediated single-domain antibody conjugation
S. Wöll, S. Schiller and R. Scherließ
- 52 Drug release studies from lipid nanoparticles by DSC
E. Roese and H. Bunjes
- 53 Drug-Loaded PCL Electrospun Nanofibres for Hernia Repair
I. J. Hall Barrientos, R. Black, D. A. Lamprou and C. G. Wilson
- 54 Effect of cyclodextrins on characteristic properties of multivesicular liposomes containing Dexamethasone sodium phosphate
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- 2 Alginate-based antireflux suspensions: understanding process and formulation variables versus functionality
F. Onofre, G. Macleod, V. Muley, S. Torne and R. Paralapu
- 3 Biodegradable microparticles loaded with SBA-Taxol as anticancer carriers
P. Sifaka, C. Koulouktsi, S. Nanaki, E. Koutris, E. Karavas and D. Bikiaris
- 4 Colloidal structures characterized by electron microscopy in relation to human intestinal fluid composition
D. Riethorst, P. Baatsen, C. Remijn, A. Mitra, J. Brouwers and P. Augustijns
- 5 Combined high-resolution manometry and intraluminal sampling to evaluate gastric drug distribution in man
J. Van Den Abeele, J. Brouwers, J. Tack and P. Augustijns
- 6 Combining dry granulation and hot-melt coating for a patient centric medicine of ibuprofen sodium
D. G. Lopes, D. Haack, M. Stehr, A. Zimmer and S. Salar-Behzadi
- 7 Compaction equation and its use in the determination of compressibility of pharmaceutical materials
P. Ondrejček, P. Svačinová, B. Vraníková, O. Holas, M. Rabišková and Z. Šklubalová

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- 9 Design and evaluation of modified soy protein microparticles for oral controlled delivery of hydrophobic drugs
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- 11 Dissolution Enhancement of Tadalafil by Liquisolid Technique
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- 12 Drying of oral films: influence on drug release
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- 18 Evaluation of a film-coating system for heat sensitive products
P. Lefevre, G. Le Bihan, T. Smith, B. Jensen, C. Popescu, X. Parissaux and S. Croquet
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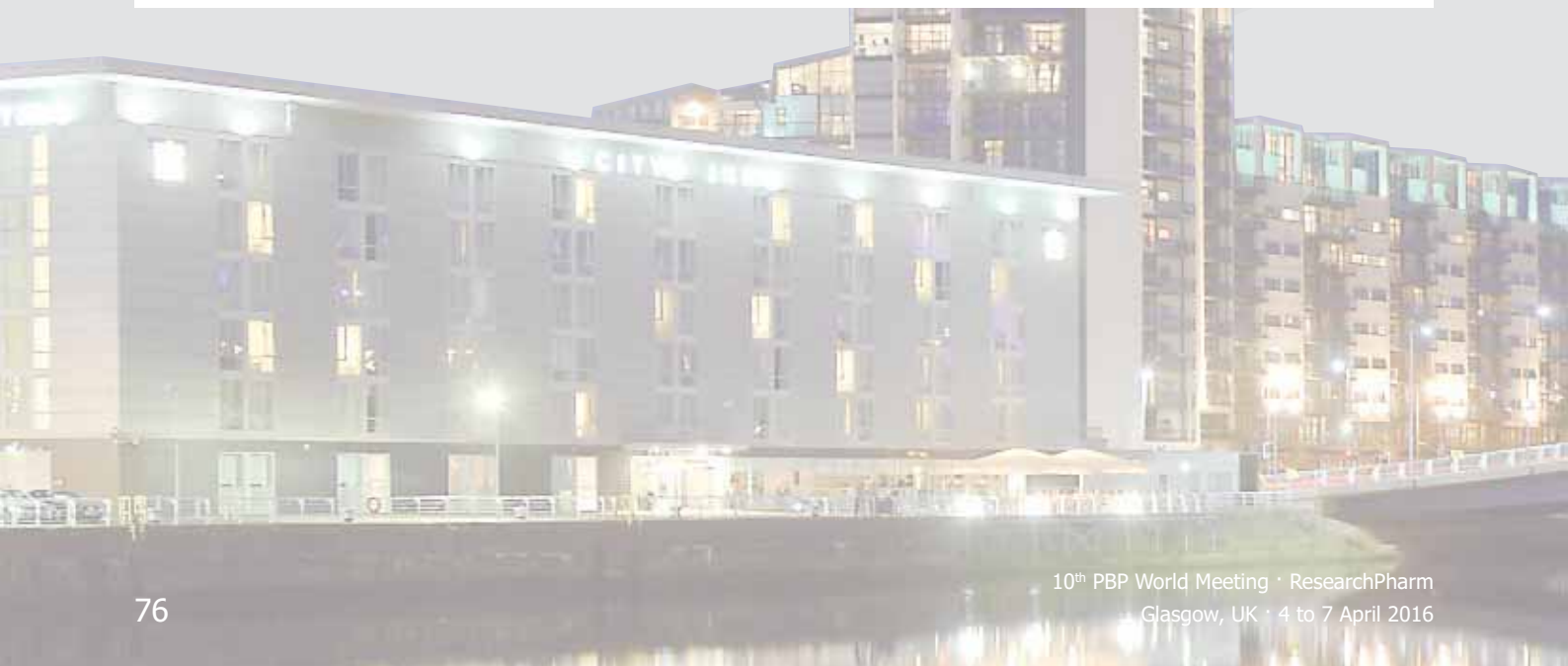
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APGI

The APGI (Association de Pharmacie Galénique Industrielle/International Society of Drug Delivery Sciences and Technology) was created in 1964 in Paris, and is an association accessible to all, academics and individuals in industry, who are concerned with pharmaceutical technology and the design, formulation and pharmacotechnical, biopharmaceutical and pharmacokinetic assessment of dosage forms and delivery systems, whether pharmaceutical or dermopharmaceutical. The APGI has members covering more than thirty different nationalities and counts contacts and friends in over fifty countries. The APGI is a member of the FIP (Fédération Internationale Pharmaceutique).



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BASF SE – Booth 11 & 16

BASF offers comprehensive solutions to the pharmaceutical industry, ranging from a broad, high-quality excipients portfolio to APIs. With its expertise in polymer chemistry, its worldwide R&D capabilities and the company's commitment to developing value-adding excipients, BASF continuously creates solutions to challenges related to Instant & Modified Release, Solubilization, Softgels and Skin Delivery.

The BASF logo features a red square with a white square inside it, followed by the word "BASF" in a bold, white, sans-serif font. Below the logo, the tagline "We create chemistry" is written in a smaller, white, sans-serif font.

Exhibited articles and services

- Instant & Modified Release
- Solubilization
- Skin Delivery

Contact

67056 Ludwigshafen
Germany

Phone: +49 6 21 60 0
E-mail: pharma-ingredients@basf.com
www.pharma-ingredients.basf.com

Bayer – Booth 20

Bayer is an innovation company with a more than 150-year history and core competencies in the fields of health care and agriculture. We develop new molecules for use in innovative products and solutions to improve the health of humans, animals and plants. Our research and development activities are based on a profound understanding of the biochemical processes in living organisms. At Bayer you have the opportunity to be part of a culture where we value the passion of our employees to innovate and give them the power to change.



We are looking forward to informing you about entry and career opportunities at Bayer.

Exhibited articles and services

- Entry and career opportunities at Bayer
- Future Leadership Programme for Pharmacists in Product Supply

Contact

Bayer University &
Talent Relations
Hauptstraße 105
51368 Leverkusen
Germany

Phone: +49 2 14 30 64 00 0
E-mail: universitymarketing@bayer.com

www.career.bayer.de

BDD Pharma LTD – Booth 60

BDD is a specialist drug formulation company providing expertise across all areas of drug delivery. We offer a full service package to fit individual needs from troubleshooting, formulation development, in vitro and in vivo testing and full technology transfer. Our patented delayed release technology Oralogik™ provides unrivalled control of drug release at the right place and time. Our clinical division provides a full clinical package, including protocol development, study documentation design and regulatory authority submission, through to close out and production of ICH GCP-compliant clinical study report. We specialise in gamma scintigraphy, a powerful and versatile technology used to investigate the in vivo behaviour of your formulation. Coupled with pharmacokinetic data, this technique can be used to provide information on time /site of disintegration, gastric emptying, GI transit and intra/ inter individual differences.



Exhibited articles and services

- Gamma Scintigraphy
- Formulation Development
- Controlled Release

Contact

Calum Stevens

Phone: +44 141 552 7752

Fax : +44 141 552 8791

Basement Medical Block

E-mail: calum.stevens@bddpharma.com

84 Castle Street

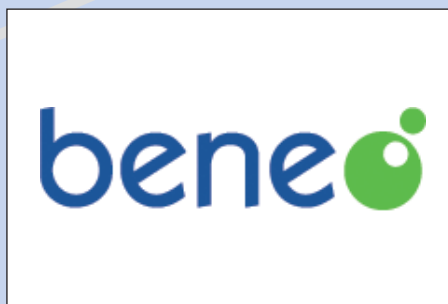
Glasgow

United Kingdom

www.bddpharma.com

BENE0 GmbH – Booth 45

BENE0's excipient galenIQ™ (Isomalt Ph Eur, BP, USP-NF, JPE and approved in China with an Import Drug License) is a range of water-soluble filler-binders. Derived from beet sugar it has a sweet taste and promotes a pleasant, well-balanced gustatory profile in pharmaceutical formulations. Due to these unique sensorial properties it is an optimal choice for solid and liquid oral applications, and especially those in combination with active ingredients or plant extracts which have a bitter and / or unpleasant flavour. Being a member of the International Pharmaceutical Excipients Council (IPEC) the company produces galenIQ™ under GMP conditions for pharmaceutical excipients.



Exhibited articles and services

- Excipient supplier
- Sachets and syrups
- Bitterness suppressor
- Isomalt (USP-NF, BP,JPE)
- Soluble filler-binder for tablets
- Palatability enhancer
- GalenIQ™

Contact

Dr. Michael Black

Maximilianstr. 10
68165 Mannheim
Germany

Phone: +49 621 421 138
Fax : +49 621 421 7138
E-mail: michael.black@beneo.com

www.galeniq.com

BIOGRUND GmbH – Booth 22

Filmcoating excellence is BIOGRUND's core business. Our unique and ready-to-use film coating, sugar-coating, tableting, colouring and excipient products guarantee optimized results in a short time. Easy, fast and reliable!

BIOGRUND assists the nutritional supplement and pharmaceutical industries in the development and production of solid oral dosage forms. We help our customers improve running production processes and cooperate with them in the research for new solutions. Furthermore, our product development benefits from the expertise we have gained in over 15 years of experience.



Exhibited articles and services

- Ready-to-use film coating powder compounds for solid oral dosage forms
- Tableting, Sugar-Coating & Colouring

Contact

Neukirchner Str. 5
65510 Hünstetten
Germany

Phone: +49-6126 952 63 0
Fax: +49-6126 952 63 33
E-mail: info@bioground.com

www.bioground.com

BioNavis LTD & Fintiede Solutions LTD – Booth 64

BioNavis is a Finnish manufacturer of MP-SPR Navi™ research instruments which is a powerful label-free method for drug delivery and targeting studies. Our instruments are based on Multi-Parametric Surface Plasmon Resonance (MP-SPR) that allows to:

- Optimize targeting from small molecule weight drugs up to nanoparticles and viruses
- Evaluate affinity and kinetics of the molecular binding events
- Quantify drug-target, drug-lipid membranes and even drug-living cell monolayer interactions
- Distinguish paracellular and transcellular drug uptake
- Monitor drug release from polymer film in real time
- Reduce bulk effect by in-line measurements
- Understand better your molecules with kinetics and dynamic conformation change information from MP-SPR.

Exhibited articles and services

- Surface plasmon resonance and surface interactions
- Nanolayer properties
- Biomolecular analysis
- Measurement instrument

Contact in UK

27 Falkland Avenue
Newton Mearns, Glasgow
United Kingdom

Phone: +44-7977 926 418
E-mail: info@fintiedesolutions.com
www.fintiedesolutions.com



BÜCHI Labortechnik AG – Booth 12

Are you looking for fast and reliable solutions to dry or encapsulate your API at lab scale? For a variety of reasons, spray drying and encapsulation are popular and valued processes in the development of new drug formulations. For more than 35 years, BUCHI Spray Drying and Encapsulation Solutions have been appreciated by pharmaceutical scientists worldwide. Many scientific publications and patents endorse our competence in this field. BUCHI provides you Spray Drying and Encapsulation Instruments with a variety of glassware, nozzles and accessories enabling particles ranging from nano- to millimeter scale. A highly professional support group and a large application database help you master your challenge in pharmaceutical research.

Exhibited articles and services

- Spray drying and encapsulation solutions
- Evaporation Solutions

Contact

Meierseggstrasse 40
9230 Flawil
Switzerland

Phone: +41-7139 46 363
E-mail: info@buchi.com
www.buchi.com



Capsugel – Booth 36

Capsugel is a global leader in delivering high-quality, innovative dosage forms and solutions to its customers in the healthcare industry. The company's Hard Capsule business unit offers customers the broadest portfolio of gelatin, vegetarian, and other specialized capsule technologies. Capsugel's Dosage Form Solutions business unit utilizes an array of proprietary technologies and specialized manufacturing capabilities to solve customers' most pressing product development challenges, including bioavailability enhancement, modified release, abuse deterrence, biotherapeutic processing, and inhalation formulation. The company's fast-to-clinic program streamlines product development from pre-formulation through clinical and commercial supply for finished dosage forms. Headquartered in Morristown, N.J., Capsugel serves more than 4,000 customers in more than 100 countries.

The logo for Capsugel, featuring the word "CAPSUGEL" in a bold, serif, all-caps font with a registered trademark symbol (®) to the upper right.

Contact

Leen Peersman

Phone: +32-389 005 10

Fax: +32-388 926 22

Rijksweg 11
2880 Bornem
Belgium

E-mail: marketing.emea@capsugel.com

www.capsugel.com

Colorcon – Booth 42

Colorcon is a world leader in the development, supply and technical support of formulated film coating systems, modified release technologies, and functional excipients for the pharmaceutical industry. Our best-in-class products and technologies are complemented by our extensive application data and value-added services to support all phases of solid oral dose design, development and manufacture. Our focus on market issues and technology development has earned Colorcon an international reputation as a pharmaceutical supplier of choice. That reputation is based on superior product quality, unparalleled technical support, extensive regulatory assistance and reliable supply from multiple locations. Colorcon has 19 technical service laboratories globally and more than 1200 employees exclusively dedicated to its customer base.

The logo for Colorcon, featuring the word "Colorcon" in a bold, sans-serif font. Above the letter "o" is a stylized graphic of a pill or capsule with a rainbow-colored gradient and a registered trademark symbol (®) to its upper right.

Contact

Justine Kennelly

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Fax: +44-1322 627 200

Flagship House, Victory Way,
DA2 6QD, Dartford, Kent
United Kingdom

E-mail: JKennelly@colorcon.com

www.colorcon.com

Croda Europe LTD – Booth 23

Croda contributes to a healthier world by offering ingredients and formulation expertise which help our pharmaceutical customers get the best performance from their active ingredients.

Our excipient portfolio is designed to meet customer needs across all delivery forms. We offer high purity Super Refined™ excipients which optimise delivery and stability of APIs and drug formulations while maintaining API integrity.

Exhibited articles and services

- Excipients manufacturer

Contact

Health Care Marketing
Nicola Daniels

Phone: +44-1405 861 767
Fax: +44-1405 860 551
E-mail: hc-europe@croda.com

Cowick Hall, Snaith
DN14 9AA East Yorkshire
United Kingdom

www.crodahealthcare.com

The logo for Croda, featuring the word "CRODA" in a bold, black, serif font, underlined.

DOW Pharma Solutions – Booth 59

Dow Pharma Solutions is a leader in global research, manufacturing and innovation of functional excipients as well as APIs for laxatives and colonic lavage, for Hyperkalemia and hypercholesterolemia solutions. Our excipients are designed to help address your delivery challenges in a multitude of dosage forms. Whether you are creating modified release medicines, looking for efficient tablet coating or taste masking, seeking to enhance the solubility of Active Pharmaceutical Ingredients for therapeutic effect or simply preventing abuse, we can take you there.

Dow will highlight specific solutions on solubility enhancement and productivity:

- Enhanced Spray Drying Throughput with High Productivity Hypromellose Acetate Succinate
- AFFINISOL™ HPMCAS Designed for Hot Melt Extrusion
- Functional excipients designed to help pharmaceutical companies increase productivity and reduce waste

Exhibited articles and services

- Excipients
- Solubility Enhancement
- Drug Formulation & Delivery

Contact

Bachtobelstr. 3
8810 Horgen
Switzerland

www.dowpharmasolutions.com



DS Technology – Booth 1

DS Technology is a system partner for new innovative oral drug delivery systems.

A Partner of Harro Höfliger

Contact

Dr. Elke Sternberger-Rützel Phone: +49 7191 501 0

Stormstraße 8
71364 Winnenden
Germany

www.d-s.technology



DURECT CORP / Lactel® Absorbable Polymers – Booth 48

Come talk to a polymer expert about our range of stock and custom biodegradable polymers for the drug delivery and medical device industries. As the oldest commercial source of biodegradable polyesters in the U.S., DURECT draws upon decades of experience in polymer chemistry, product development, and GMP manufacturing.

We offer a full range of standard polymers from glycolide, lactide and ϵ -caprolactone monomers, as well as expert developmental input and custom synthesis. Our polymers have been used in numerous marketed pharmaceutical products and medical devices approved by the FDA and other regulatory agencies worldwide. We maintain both Drug and Device Master Files with the FDA and are compliant with the IPEC-PQG Excipient Guidelines. At our new, state-of-the-art facility in Birmingham, Alabama we continue to pioneer commercial-scale production of medical-grade polymers.

Exhibited articles and services

- Excipients
- Biodegradable Polyesters

Contact

10260 Bubb Road
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United States

Phone: +1 408 777 4927
Fax: +1 408 865 1406
E-mail: absorbables@durect.com

www.absorbables.com



Elsevier – Booth 52

Elsevier is a world-leading provider of information solutions that enhance the performance of science, health, and technology professionals, empowering them to make better decisions, deliver better care, and sometimes make groundbreaking discoveries that advance the boundaries of knowledge and human progress. In pharmaceutical sciences, Elsevier publishes leading journals like *Advanced Drug Delivery Reviews*, the *Journal of Controlled Release*, the *European Journal of Pharmaceutical Sciences*, the *European Journal of Pharmaceutics & Biopharmaceutics* (with APV), the *International Journal of Pharmaceutics*, and the *Journal of Drug Delivery Science and Technology* (with APGI, Adritelf and APSTJ).



Contact

Anne Marie Pordon E-mail: a.pordon@elsevier.com

Radarweg 29
1043 NX Amsterdam
The Netherlands www.elsevier.com

EVONIK Industries AG – Booth 8

Evonik, a global leader in specialty chemicals, with its Health Care Business Line provides pharmaceutical excipients, drug delivery technologies, development services, and GMP manufacturing for oral and parenteral formulations as well as active pharmaceutical ingredients.



Exhibited articles and services

- EUDRAGIT®
- Enteric formulations
- Sustained-release formulations
- Formulation development
- GMP services
- Advanced drug delivery
- Depot formulations
- RESOMER®
- Protectice formulations
- Technical support
- Proof of concept
- Medical devices
- Biodegradable polymers

Contact

Pharma
Polymers & Services
Phone: +49-6151 18 4019
Fax: +49-6151 18 3520
E-mail: pharma-polymers@evonik.com

Kirschenallee 45
64293 Darmstadt
Germany www.eudragit.com
www.resomer.com

FETTE Compacting GmbH – Booth 25

Fette Compacting is the world's leading provider of integrated solutions for the transformation of powder into tablets. As a technological and global market leader, the company specialises in high-performance machines for the pharmaceutical industry. The company's head office and global control centre is in Schwarzenbek near Hamburg. Fette Compacting is represented across the globe in more than 40 countries.

Fette Compacting is the only manufacturer of tablet presses, operating a dedicated global competence network with fully-equipped and inter-actively-networked Competence Centres in Germany, USA, Brazil, India and China. In addition, Fette Compacting specialists take care about customer needs at subsidiaries in USA, Brazil, Mexico, Spain, France, India, China and Southeast Asia.

Fette Compacting is part of the LMT Group – a medium-sized, family-owned group of companies. The group also includes LMT Tools, a leading manufacturer of precision tools for industrial processing of construction materials, and the LMT Finance & Shared Services, which is responsible globally for the company's central functions.



Exhibited articles and services

- Process Equipment
- Upgrades

Contact

Jörg Gierds

Phone: +44 1737 857700

E-Mail: jgierds@fette-compacting.com

Grabauer Strasse 24
21493 Schwarzenbek
Germany

www.fette-compacting.com

FORUM Products – Booth 15

The focus of Forum Products is to provide competitive, high quality ingredients and finished preparations from leading worldwide manufacturers. We pride ourselves on our unparalleled customer service and logistics.

Exhibited articles and services

- Excipients
- Flavours
- Bulk drug actives
- Finished product preparations
- Intermediates
- Drug delivery technology
- Amino acids
- Antibiotics

Contact

Mark Rutherford

Phone: +44 1737 857700

mark.rutherford@forumgroup.co.uk

Crown House
2-8 Gloucester Road
RH1 1FH Surrey, Redhill
United Kingdom

www.forum.co.uk



Freund-Vector Corporation – Booth 37

Freund-Vector Corporation, a full service global company, that designs, manufactures and markets automated processing equipment and services for the processing of powders, particles, beads, tablets and other solid dosage forms. Equipment applications includes coating, drying, agglomerating, granulating, layering and densification. Product lines marketed by Freund-Vector includes coating pan systems for applying an aqueous, solvent or sugar film coating; fluid bed systems for granulating, coating and drying; roll compactors for material densification and granulation; high shear granulators for wet granulation and automated process control systems for all of the equipment/systems.



Exhibited articles and services

- Solid dosage processing
- Equipment-Granulation and coating

Contact

Steven Kay

Phone: +1 319 377 8263

Fax: +1 319 377 8263

675 44th Street

E-mail: sales@freund-vector.com

52302 Marion Iowa

United States

www.freund-vector.com

Frewitt Manufacturer of Machines LTD – Booth 30

FREWITT: We care about milling

At your service — through thick and thin, from coarse to fine Frewitt has been developing and manufacturing premium-quality mills in Switzerland since 1946, mills that are critical components in the crushing and grinding processes of our renowned clientele in the pharmaceutical, chemical and food product industries. Thanks to our forward-looking orientation to the requirements of our customers, Frewitt is also an expert partner for high-tech sieving, homogenization, deagglomeration, conveying, dosing and filling solutions for powders and granulates of every type.



Exhibited articles and services

- FreDrive-Lab the World Innovation "Patent Pending"
- 5 different milling heads – one system
- Processing from 50gr batch to 30kg/h
- Milling chambers certified ATEX up to zone 0-20
- Easy to handling and cleaning

Contact

Roy Housh,

Phone: +41 26 460 74 00

Director of Sales

Fax: +41 26 460 74 59

Rte du Coteau 7

E-mail: r.housh@frewitt.com

1763 Granges-Paccot

Switzerland

www.frewitt.com

Gamlen Tableting LTD – Booth 7

Tableting by Design™

We produce the Gamlen Tablet Press range of instruments, the world's first force-controlled computerised benchtop devices for making tablets one at a time, and for material characterisation, preformulation, formulation, process development, QbD for tablets, and QC of APIs and excipients.

We also supply the GTP-SafeTab, a lightweight, portable benchtop enclosure for handling highly-potent APIs, and the GamPette, a powder pipette for reliably and reproducibly delivering small volumes of powder.



Exhibited articles and services

- Gamlen Tablet Press
- Process development
- QbD for tablets
- Material characterisation
- Preformulation, formulation
- QC of APIs and excipients

Contact

Dori A Schmetterling

Yeoman House
63 Croydon Road
London SE20 7TS
United Kingdom

Phone: +44 115 912 4271
Mobile: +44 7860 314 625
Fax: +44 115 912 4278
dori.schmetterling@gamlentableting.com

www.gamlentableting.com

GATTEFOSSÉ – Booth 19

Gattefossé is a privately-owned company based in France and present in 60 countries worldwide. We are the leader in functional lipid excipients for improved drug delivery with formulation expertise in oral solubility and bioavailability enhancement, sustained release, taste-masking. We can help revitalize topical products with skin penetration enhancers and emulsifiers for improved texture and sensoriality. We provides bespoke technical and regulatory support to accelerate our customers drug development programmes.



Exhibited articles and services

- Excipients
- Drug delivery solutions

Contact

Sophie Hughes

36, Chemin de Genas
CS70070
69804 St Priest Cedex
France

Phone: +33-472 22 9800
E-mail: infopharma@gattefosse.com

www.gattefosse.com

Gaylord Chemical Company LLC – Booth 44

Gaylord Chemical produces Procipient® (Dimethyl Sulfoxide USP, PhEur) a highly purified and well characterized pharmaceutical DMSO manufactured according to ICH Q7 guidelines. It is supported by a Health Canada DMF, a Type II Drug Master File and CEP granted by EDQM.

Procipient is effectively utilized worldwide in numerous registered pharmaceutical dosages and medical devices. Procipient is a polar, water-white liquid with versatile solvent properties. It can be an effective tool in drug delivery systems as an excipient for medical polymers and difficult-to-dissolve active ingredients, or as a stabilizing cosolvent.

Exhibited articles and services

- Dimethyl Sulfoxide USP, PhEur
- Excipient
- API

Contact

Bob Strub
106 Galeria Boulevard
70458 Slidell LA
United States

Phone: +1 845 895 8482
Fax: +1 985 649 0068
E-mail: bstrub@gaylordchem.com
www.GaylordChemical.com



GLATT GmbH – Booth 25

Glatt Pharmaceutical Services is the CDMO division of Glatt. We develop and produce solid pharmaceutical dosage forms as a service provider. The core areas are multiparticulates such as pellets and micropellets as well as granulates.

Glatt also offers additional suitable technological solutions, for example, taste masking of human and animal medications, improvement of bio-availability and chemical stabilization of drugs.

Exhibited articles and services

- Formulation and process development
- Pediatric formulation
- Innovative technologies for Micropellets

Contact

Philippe Tschopp
Werner-Glatt-Str. 1
79589 Binzen
Germany

Phone: +49-7621 664 506
E-mail: philippe.tschopp@glatt.com
www.glatt.com



Harro Höflinger – Booth 1

Well-established automation provider specialising in customised solutions for the Inhalation, Oral Dose, Sterile Drug Delivery, Medical Devices & Advanced Wound Care sectors.

Exhibited articles and services

- Customised solutions for inhalation
- Oral dose
- Medical devices
- Sterile drug delivery
- Advanced wound care sectors

Contact

Alan Holmes

131 High Street
GU22 9LD Old Woking
United Kingdom

Phone: +44 1483 736 800

Fax: +44 1483 736 810

E-mail: info@hoefliger.co.uk

www.hoefliger.com



HEATH SCIENTIFIC LTD – Booth 43

Distributors of pION's products and analytical services for physicochemical compound characterisation.

μ DISS - Small volume (2-20mL) dissolution apparatus based on multi-channel UV fiber optic detection. The new μ FLUX option allows for monitoring real time absorption potential across a donor and receiver compartment separated by a filter-supported artificial membrane (GIT, BBB or Skin). Intrinsic dissolution also measured with mini-IDR compression accessory for μ DISS from Heath Scientific.

PULSE - automated instrument for measurement of ionisation constants, pKa, and log P/log D pH-lipophilicity profiles.

PAMPA Explorer/Evolution- for determining permeability by PAMPA (parallel artificial membrane assay) method. Available as manual "Explorer" package or "Evolution" 96-well high-throughput platform using either Tecan/Beckman robotics.

Also distributors of Electrolab's range of pharmaceutical physical testing equipment including disintegration, friability, tablet hardness, tap density, bulk density and powder flow.

Exhibited articles and services

- Dissolution
- Permeability
- Solubility

Contact

Steve Stones

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MK1 1SW Bletchley
United Kingdom

Phone: +44 1908 646 700

Fax: +44 1908 645 209

steve.stones@heathscientific.com

www.heathscientific.com



InProcess-LSP – Booth 44

InProcess-LSP provides Process Analytical Services for Life Science and Pharma industry. We offer full services from consultancy & training up to feasibility studies and full application development, validation and implementation. Whether it is an in/on-line, at-line or lab application, In-Process-LSP can support you finding a well-balanced solution to improve and optimize your process in pharma, food & feed or any related area. In addition, we offer troubleshooting and (non-destructive) analytical services as well. We do this by combining in depth knowledge of spectroscopic and optical technologies, smart chemometric modelling and extensive process - and regulatory knowledge. With our strong background in pharma and life science industry you can rely on a highly skilled and very experienced team of specialists. You will find in us a dedicated, reliable and enthusiastic partner.



Exhibited articles and services

- Process Analytical Technology (PAT)
- In-process method development and validation
- Powder blending monitoring & control

Contact

Ad Gerich
Kloosterstraat 9
5349AB Oss
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Phone: +31 412 211 002
E-mail: info@inprocess-lsp.com
www.inprocess-lsp.com

JB Pharmatron – Booth 35

JB Pharmatron Group is an ISO 9001 accredited company that offers a unique service to the pharmaceutical industry in the UK and Ireland. With over 15 years of global experience gained from assisting Multi-National, Generic and Start-Up companies with the day to day challenges JB Pharmatron has a proven reputation for success. We offer the complete package from initial application consultation, project management, installation, validation and after sales service. JB Pharmatron specialize in offer a complete solution for tablet testing and Topical & Transdermal Testing Systems. We work with world-leading manufacturers as Hanson Research and Charles Ischi and our product line includes Topical & Transdermal Testing Systems (VDC), Complete Dissolution Line (dissolution tester, Autosampler, Filter Changer, Media Preparation System, On-line UV Dissolution and Fibre Optic Dissolution), Hardness, Disintegration, and Friability testers. We also supply a full range of dissolution accessories and consumables for all brands of baths. Our team is totally committed to finding the right solution for your application and challenges!



Contact

Stone Barn, Blisworth Hill Farm
NN7 3DB Northamptonshire
United Kingdom

Phone (UK): +44 1604 878420
Phone (Ireland) +353 51 307077
E-mail: info@jbpharmatron.com
www.jbpharmatron.com

JETPHARMA SA – Booth 32

JETPHARMA SA, established in Switzerland since 1986, is a worldwide leader in contract micronization services for pharmaceutical industries. JETPHARMA SA is able to micronize from 0.2g to commercial scale of APIs, excipients, steroids, and psychotropics, along with cytotoxics, cytostatics and highly potent compounds in total containment and in extreme short timelines, no matter bulk quantities required. JETPHARMA SA strictly observes cGMPs, is FDA-inspected since 1995, ISO:9001 certified, licensed by Swiss Health Authorities and, since 2007, is accepted as a Foreign Manufacturer by Japanese MHLW. Services.



Exhibited articles and services

- Micronization; Co-micronization Cryogenic Micronization
- Milling, Sieving, Delumping; Blending, PSD Analysis
- Development & Validation of Analytical Methods & Process
- Technical Feasibility Study
- Practice size distribution, practice size reduction

Contact

Via Sotto Bisio 42 A/C
6828 Balerna
Switzerland

Phone: +41 91696 10 10
E-mail: contact@jetpharma.com
www.jetpharma.com
www.micronization.com

Linkam Scientific Instruments LTD – Booth 50

Linkam Scientific Instruments have been supplying heating and cooling stages for over 30 years. These stages are found in thousands of laboratories worldwide with the most successful heating/cooling stage, the THMS600, selling over 4000 units. Linkam develops and manufactures a broad range of heating/cooling stages for both OEM and end users, to visualize and explore materials properties. The instruments can be used in conjunction with light microscopes, Raman, IR, other forms of spectroscopy and X-ray. Linkam Scientific Instrument's product range now includes stages designed specifically for Optical Rheology, Liquid Crystal, Fluid Inclusion, Cryobiology, Tensile, Freeze Drying, Catalysis and High Pressure Research.



Exhibited articles and services

- Thermal analysis & Thermal microscopy
- Sample characterisation

Contact

Duncan Stacey
Unit 8 Epsom
Downs Metro Centre
Waterfield, Tadworth
KT20 5LR Surrey
United Kingdom

Phone: +44 1737 363 476
Fax: +44 1737 363 480
E-mail: info@linkam.co.uk

www.linkam.co.uk

LTS Lohmann Therapie-Systeme AG – Booth 47

LTS is the global leader in the development and manufacture of transdermal systems and oral thin films with additional innovative technologies in development. The products developed by LTS comprise a multitude of innovations, such as first and only patch for treatment of Alzheimer and the only patch against Parkinson's and Restless-Legs-Syndrome, which is the first medication in the world available only as a patch. The innovation capability of LTS led the way for oral thin film products on the market with the introduction of Listerine® Pocket-paks®, which dominate the North American market.

LTS supports its cooperation partners from product inception through commercialisation in our FDA approved facilities in Germany and USA. More than 3,000 patents reinforce the top position of LTS group in development of its technologies



Exhibited articles and services

- Transdermal, Oral thin film
- Transmucosal, Drug delivery

Contact

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E-mail: joerg.mayer@ltslohmann.de
www.ltslohmann.de

Medelpharm – Booth 33

Medelpharm is an international enterprise passionate about designing and manufacturing easy-to-use, fast and reliable equipment for Research and Development Scientists.

You are looking for assistance in powder characterization, solid dosage formulation or production trouble shooting? Our labs are here for you. Medelpharm offer you a comprehensive portfolio of Multi-function R&D Presses and Compaction simulators, Process equipment and extensive Services in tableting, granulation and coating.



R&D Presses Made by people for people

Exhibited articles and services

- STYL'One R&D Compaction Simulator
- Powder Characterization, Analysis, Training
- Advantest High-speed Terahertz Imaging

Contact

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Fax: +33 478 88 18 65
E-mail: icoyle@medelpharm.com
www.medelpharm.com

Medimetrics B.V. – Booth 31

Medimetrics is the pioneer and global leader in electronic oral drug delivery and is committed to innovating healthcare. Medimetrics has created the IntelliCap® system for precise delivery of drugs in the gastro-intestinal tract and the measurement and reporting of conditions in the body. It is the world's first and only smart oral electronic drug delivery system. Medimetrics applies the certified IntelliCap® system to speed up and de-risk the development of modified release formulation dosage forms in pharmaceutical R&D. In addition, the IntelliCap® system is also used to collect gastrointestinal fluid from the small bowel for further analysis in a non-invasive manner. Based on the IntelliCap® system technology, Medimetrics develops smart, pharmaceutical drug device combinations, taking a lead position in integrating modern digital innovations for the future healthcare ("beyond the pill").



Exhibited articles and services

- IntelliCap® system
- Smart drug device combinations
- Modified release development
- Electric oral drug delivery

Contact

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Phone: +31 40 851 64 51

E-mail: yves.decadt@medimetrics.com

High Tech Campus 10
5656 AE Eindhoven
The Netherlands

www.medimetrics.com

Meggle Excipients and Technology – Booth 9

MEGGLE Excipients & Technology is a global leader in manufacturing lactose for the pharmaceutical industry. Supporting supply chain security with manufacturing facilities in Europe and North America, MEGGLE offers a broad product portfolio of lactose excipients, co-processed technologies and excipient contract manufacturing.

Our broad portfolio of products, multiple manufacturing locations, technical centers in major markets, and innovative technologies, make MEGGLE the preferred supplier and valued partner by large and small pharmaceutical product manufacturers.



MEGGLE Excipients & Technologies products:

- Lactose monohydrate
- Co-Processed Excipients
- Lactose for lyophilization and parenteral applications
- Custom lactose products
- Anhydrous Lactose
- Lactose for Inhalation

Contact

Dr. Franz-Karl Penz

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Fax: +49 8071 73 320

E-mail: service.pharma@meggle.de

Megglestr. 6-12
83512 Wasserburg
Germany

www.meggle-pharma.com

MERCK – Booth 55 & 58

Merck a leading science and technology company in life science, offers over 400 pharmaceutical formulation raw materials for solid, liquid and semi-solid dosage forms, a wide range of Active Pharmaceutical ingredients and drug delivery compounds which include activated PEGs, lipids, PEG lipids for bioavailability enhancement. In addition, we provide extensive documentation and support to assure regulatory compliance. Through dedicated collaboration on new scientific and engineering insights, Merck serves as a strategic partner to help advance the promise of life saving therapies. For more information on our portfolio, please visit our website.



Exhibited articles and services

- API
- Fine chemicals
- Excipients
- Biopharmaceuticals

Contact

Frankfurterstr. 250
64293 Darmstadt
Germany

Phone: +49 69 86 79 8021
Nathalie.cousin@merckgroup.com
www.merckgroup.com

Micro-Macinazione SA – Booth 4

With 40 years of experience, swiss-based Micro-Macinazione is the most competent provider of micronization services and equipment for Pharmaceutical Industry.

Two cGMP facilities dedicated to contract micronization are equipped with jet-mills and glove-boxes with a capacity that exceeds 1'000 tons/year.

The synergy between micronization and engineering competencies, together with our R&D enables us to develop process optimization for API/HAPIs and innovative technologies for solubility improvement.



Exhibited articles and services

- Micronization
- Jet milling
- Micronization equipment

Contact

Giovanna Libralon
Via Cantonale 4
6995 Molinazzo di Monteggio
Switzerland

Phone: +41 91 611 3636
Fax: +41 611 3637
E-Mail: libralon@micromacinazione.com
www.micromazinazione.com

Micromeritics – Booth 54

Micromeritics is a globally established, leading provider of technologies for the physical characterisation of porous and particulate materials. We have offered innovative instrument solutions for over fifty years and were the first company to offer a commercial, portable BET surface area analyser. With sales and service staff available in over sixty countries all backed by our extensive in-house design and manufacturing capabilities we offer a wide range of instrumentation for surface area, gas and mercury porosimetry, particle size and shape analysis, density and chemisorption. We can also offer contract analysis in our own FDA registered, DEA licensed and cGMP / GLP compliant laboratory through Micromeritics Pharmaceutical Services (MPS).



Exhibited articles and services

- Contract analysis
- Porosimetry
- Particle size
- Surface area
- Density
- Shape analysis

Contact

Steve Coulson
Suite 2, The Stables
Hexton Manor
Hexton SG5 3JH
United Kingdom

Phone: +44 1582 88 1164
Fax: +44 1582 88 3933
micromeritics.ul@micromeritics.com
www.micromeritics.com

NISSO Chemical Europe GmbH – Booth 13

HPC (Hydroxypropyl Cellulose) is one of the key products for NISSO group. Nisso Chemical Europe distributes NISSO HPC to European, and African market, offering a wide range of viscosities and particle size formats, for wet/dry granulation, direct compression, ODT, modified release and film coating applications.

Latest unique offering is special low viscosity grades of NISSO HPC.

Contact

Berliner Allee 42
40212 Düsseldorf
Germany

Phone: +49 211 130 6686 0
Fax: +49 328 231
E-mail: info@nisso-chem.de
www.nisso-chem.de



Pharmaterials – Booth 51

Pharmaterials Ltd is a pharmaceutical contract service company with comprehensive expertise in salt selection, polymorphism, amorphous materials, pharmaceutical materials science and formulation development for oral, inhaled, topical and parenteral routes of drug delivery, with MHRA approved cGMP manufacture and supporting analytical & stability services.



Our core services:

- Solid state testing of APIs, excipients and final drug products, including Raman mapping
- Salt selection, polymorph screening and co-crystal formation
- Analytical development, validation and stability studies
- Development of preclinical, clinical and generic formulations
- Clinical trial cGMP manufacture of liquids, suspensions, semi-solids, capsules, tablets and inhalation products
- Specials manufacture
- Amorphous quantification

Contact

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5 Boulton Road
RG2 0NH, Reading
United Kingdom

www.pharmaterials.co.uk

PIERRE FABRE MEDICAMENT – Supercritical Fluids CDMO – Booth 10

Pierre Fabre Medicament has developed a division using Supercritical Fluids. This cGMP platform proposes its expertise in supercritical fluids to external pharmaceutical laboratories for:

- pre-formulation of API (Formulcoat : taste-masking , Formulplex and Formuldisp : enhancement of solubility and bioavailability)
- extraction / purification for pharmaceutical applications (the unit is recognized as a pharmaceutical establishment by authorities)
- cleaning of medical device (ISO 7 clean room)

The unit consists of a development workshop and a production workshop permitting to supply development services and commercial manufacturing.



Exhibited articles and services

- Drug Delivery Enhancement: Formulcoat®, Formulplex®, Formuldisp®
- Cleaning of Medical Device

Contact

Hubert Lochard
16 rue Jean Rostand
81600 Gaillac
France

Mobile: +33 633 51 98 77

hubert.lochard@pierre-fabre.com

www.supercritical-solutions.com

Precision Nanosystems Inc. – Booth 5

Precision NanoSystems powers the development of precision medicine.

We provide scientists with an integrated platform of products and support, helping advance innovative nanotechnology solutions for the understanding of the molecular basis of disease.

Exhibited articles and services

- Nanomedicine
- Nanoparticles
- Microfluidics

Contact

6190 Agronomy Road
V6T 1Z3 Vancouver
Canada

Phone: +1 888 618 0031
Fax: +1 604 563 5277
E-mail: info@precision-nano.com

www.precisionnanosystems.com



ProCepT N.V. – Booth 38

With 20 years of experience, ProCepT is the specialist in lab-scale R&D equipment, offering innovative solutions for drying, agglomeration, coating and mixing applications. Focussing on small-scale equipment, ProCepT's mission is to reduce and optimize customers R&D costs in particle processing. Worldwide ProCepT has built up strong references in Pharma, Biotech, Fine Chemicals, Nutraceuticals and Food. Our engineering concept is based on the four pillars of: modularity, visibility, accuracy and customization.

R&D Equipment (from mg to kg) and Contract Services for feasibility and clinical applications:

- Spray Dryer – Congealer – Priller
- Fluid Bed
- Tablet Coater
- High Shear Granulator Vacuum Dryer
- Extruder
- Homogeniser
- Nutsche Filter Dryer

Contact

Filip Van der Gucht

Phone: +32-934 223 23
E-mail: sales@procept.be

Industriepark Roisteyne 4
9060 Zelate
Belgium

www.procept.be



Process System Enterprise – Booth 27

Process Systems Enterprise (PSE) is a developer and provider of mechanistic modelling tools and associated consulting services that help pharmaceutical companies increase R&D efficiency, facilitate tech transfer and quantify as well as manage risk throughout the drug development and commercial manufacturing lifecycle (QbD 2.0).

We are also the technical leaders of the Systems-based Pharmaceutics Alliance and the ADDoPT consortium, developing an end-to-end digital design approach to the integrated development and optimisation of drug formulation and manufacturing processes.



PSE products include:

- gCRYSTAL®
- gCOAS®
- gSOLIDS®

Exhibited articles and services

- Mechanistic modelling
- Model validation
- Risk assessment
- Quality-by-design
- Drug formulation and manufacture

Contact

Sean Bermingham

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26-28 Hammersmith Grove
W6 7HA London
United Kingdom

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www.psenetprise.com

QCL – Booth 53

QCL is the UK distributor for Rudolph Research Analytical Polarimeters, Refractometers and Density Meters. These highly accurate instruments are used in pharmaceutical laboratories around the world. Our research grade Polarimeters feature unmatched accuracy and are 21CFR Part 11 compliant. Pharmaceutical grade Refractometers feature Peltier temperature control and Smart Measure technology to ensure accurate refractive index and BRIX measurements.



Exhibited articles and services

- Polarimeters
- Refractometer

Contact

Ian Allison

Phone: +44 1342 820 820

Fax: +44 1342 820 825

Riverside

E-Mail: sales@qclscientific.com

Forest Row Business Park

RH18 5DW Forest Row

United Kingdom

www.qclscientific.com

QDevelopment LTD – Booth 26

QDevelopment provides innovative solutions in the field of pharmaceutical technology from batch and continuous R&D equipments to formulation process development and scale-up. Together with our manufacturing partner Quick2000 Ltd. with 25 years experience we supply GMP equipments such as roller compactor, twin screw extruder for continuous wet granulation, melt extrusion and continuous homogenization (3in1), batch and continuous dryers, high-shear granulator, spray dryer, mills and tailor made equipments.

Exhibited pharmaceutical equipments from lab scale

- Roller compactor
- High shear granulaor
- Spray dryer
- Continuous wet granulator
- Twin screw extruder
- Homogenizers & Mills

Services:

- Formulation process development from the API to the coated tablet
- Development of continuous formulation processes
- Development of amorphous solid dispersions (ASDs)
- Technology scale-up
- Wide-range characterisation and process analytical technology support

Contact

Bence Szabó
Hársfa 15
8600 Siófok
Hungary

Phone: +36 30 523 0399
E-Mail: info@qdevelopment.hu
www.qdevelopment.hu
www.quick2000.hu



ROQUETTE – Booth 14

ROQUETTE is a long-established supplier of plant-based pharmaceutical excipients and active ingredients, a worldwide solution provider for the pharmaceutical and biopharmaceutical industries. By understanding the formulation challenges of its customers, ROQUETTE has developed an extended range of starches and derivatives, sugars & polyols, with an exceptional potential, for any dosage forms and applications:

- Direct compression or wet granulation for any type of tablets
- Fibers, minerals and proteins for clinical nutrition and nutraceuticals
- Liquid formulation for syrups and suspensions
- Molecular encapsulation for a better solubility, stability or taste-masking
- Polymers for tablet film coating and orally dispersible films
- Pyrogen-free raw materials for injectables and dialysis solutions
- Solutions for hard capsules filling and sachets
- Toothpastes and mouthwashes for oral care

Moreover, the ROQUETTE PHARMA offer includes a worldwide network assisting customers with high quality services (formulation development and optimization, compression simulation service, on-site assistance for coating), and supports (Application Development Center, Quality, Regulatory and Intellectual Property, Analytical, Supply chain, Engineering).

Contact

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France

Phone: +33 321 63 36 00
Fax: +33 321 63 38 50
pharma.business.unit@roquette.com
www.roquette-pharma.com



Shin-Etsu SE-PFMD GmbH – Booth 34

Shin-Etsu began producing pharmaceutical excipients in 1962. Since then, thanks to feedback from our customers and inspection by the FDA, we have further developed and improved our quality and control systems to high standards. Shin-Etsu's cellulose excipients can make a valuable contribution in various areas of pharmaceutical technology, for example as film coatings (Pharmacoat), solid dispersion (Shin-Etsu AGOAT® HPMCAS), matrix tablets (Metolose SR), enteric coating (HPMCP and AGOAT® HPMCAS) and ODT (L-HPC & SmartEx). Our technical services we have now opened a new application laboratory for customer trials, and are now offering QbD samples kits for your development.



Exhibited articles and services

- Funcional Excipients
- Cellulose derivatives
- Hypromellose

Contact

Rheingaustraße 190-196
Building H346
65203 Wiesbaden
Germany

Phone: +49 611 962 6199
Fax: +49 611 962 9999
E-Mail: contact@se-pfmd.com
www.se-pfmd.com

Simulations Plus Inc. – Booth 29

Simulations Plus provides modeling & simulation software and consulting services from discovery through clinical development. GastroPlus™ is the leading PBPK modeling platform for prediction of absorption/DDIs/IVIVCs/population outcomes in humans and animals. DDDPlus™ and MembranePlus™ offer the mechanistic simulations of in vitro dissolution and permeability experiments. The ADMET Design Suite™ - consisting of ADMET Predictor™, MedChem Studio™, and MedChem Designer™ - provides chemists with an unprecedented capability to data mine compound libraries, quickly design new molecules, and virtually screen structures for over 150 ADME-Tox properties. And our newest application, PKPlus™, rapidly generates NCA/compartamental PK modeling reports. These programs are complemented by our PBPK and pharmacometric modeling and simulation services and clinical pharmacology support.



Exhibited articles and services

- GastroPlus™, AdmetPredictor™, DDDPlus™, PKPlus™
- MembranePlus™, MedchemStudio™, KIWI™
- PBPK Modeling & Simulation, PK/PD Modeling & Simulation
- Clinical Trial Data Analysis

Contact

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93534 Lancaster, CA
United States

Phone: +1 661 723 7723
Fax: +1 661 723 5524
E-Mail: info@simulations-plus.com
www.simulations-plus.com

Sirius Analytical – Booth 18

Sirius Analytical is a market leader in the fields of measurement of physicochemical properties, biorelevant solubility and dissolution and in vitro modelling of in vivo behaviour of formulated biological drugs. Our expertise areas include the delivery of oral, inhaled, injected and transdermal drugs.

In addition to our 'standard' products and services, Sirius has highly experienced consultants in the UK and US who are ready and willing to work with you to solve your small or large molecule formulation challenges.

Contact

Paul Whittles

Phone: +44 1342 820 720

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Forest Row Business Park
Station Road, Forest Row
RH18 5DW East Sussex
United Kingdom

E-Mail: sales@sirius-analytical.com

www.sirius-analytical.com



Solid Form Solutions – Booth 6

Solid Form Solutions Ltd is a world leading contract research organization (CRO) providing the pharmaceutical industry with chemical development services. Our work programs include:

- Salt Screening.
- Co-crystal Screening.
- Crystallisation Screening.
- Polymorph Screening.
- Scale-up Crystallisation.
- Physical Properties and Developability Testing.
- Particle Engineering.
- GMP Analytical Release Testing.

Our services can either be used separately to solve specific problems, or in parallel to deliver a larger drug development program that will seamlessly bring the most developable solid form of a drug molecule, to most efficient scale-up process.

Contact

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1 The Fleming Building
Edinburgh Technopole
EH26 0BE Edinburgh
Scotland

www.solidformsolutions.co.uk



SOTAX LTD – Booth 17

SOTAX is a global leader in providing innovative solutions for pharmaceutical testing. The company offers high-quality dissolution testing systems, physical tablet testing instruments, automated sample preparation workstations for composite assay and content uniformity testing, as well as associated technical and application services. Since 2013, the Dr. Schleuniger® Pharmatron brand completes the SOTAX product portfolio and expertise in the physical testing segment.



sotax
Solutions for Pharmaceutical Testing

Exhibited articles and services

- Dissolution Testers
- Analytical Services
- Tablet Hardness Testers

Contact

2nd Floor, Gadd House
Arcadia Avenue
N3 2JU London, Finchley
United Kingdom

Phone: +44 2083 4969 47
Fax: +44 2083 4969 48
E-Mail: info@sotax.com
www.sotax.com

SPI Pharma – Booth 15

SPI Pharma is a leading supplier of solutions to pharmaceutical formulation marketers worldwide. Our primary objective is to engineer functional materials that enable our customers to solve formulation problems, achieve differentiation and gain speed to market. Through collaboration with our customers, we use proven processing skills and formulation expertise to deliver value-added and cost-effective solutions to their problems.

As a global leader, we serve over 55 countries with formulation innovation, technical assistance, and troubleshooting support. Our products include antacid actives, excipients, taste-masking technology, drug delivery systems for tablets, fast-dissolve technologies, and a variety of other creative offers for patient-friendly dosage formats. As your partner, we also offer a comprehensive drug development and testing service. Our Pharmasolutions program can provide unique options to energize your drug portfolio.



SPI Pharma™

Exhibited articles and services

- Antacid actives, Excipients
- Tastemasking technology
- Drug delivery systems

Contact

503 Carr Rouad, Suite 210
19809 Wilmington DE
United States

Phone: +1 302 576 86 00
E-Mail: cdurand@spipharma.com
www.spipharma.com

Stable Micro Systems LTD – Booth 24

Stable Micro Systems, a leading designer and manufacturer of materials testing instrumentation for over 20 years, will be displaying its revolutionary Powder Flow Analyser and Texture Analyser for controlled release applications. The instrument will provide an accurate and reliable method of measuring the flow characteristics of dry and wet powders. The TA.XTPlus Texture Analyser can also measure the hardness of granules, tablets or micro spheres, tablet disintegration and swelling and will perform mucoadhesion tests. Visit our stand for a revealing demonstration of these two products and discuss your testing requirements with our product specialists.



Stable Micro Systems
Innovation • education • application

Exhibited articles and services

- TA.XTplus Texture Analyser
- Powderflow Analyser
- Volscan Profiler

Contact

Phone: +44 1483 427345
Vienna Court; Lammas Road Fax: +44 1483 427600
Godalming E-Mail: sales@stablemicrosystems.com
Surrey GU7 1 YL
United Kingdom www.stablemicrosystems.com

Surface Measurement Systems LTD – Booth 63

Surface Measurement Systems Ltd is world leaders in sorption science and inventors of Dynamic Vapour Sorption (DVS) technology and Inverse Gas Chromatography Instrumentation and solutions, providing professional world-class scientific and technical support for all our customers. We are headquartered in the UK, have office in the USA and supply our solutions throughout the world. Our products are used by hundreds of leading laboratories and universities globally in a wide range of vertical markets including: pharmaceuticals, building materials, biomaterials, cosmetics, and the food industry. Our goal is to expand the frontiers of particle, materials and surface science by developing unique characterization solutions.



Surface Measurement Systems
World Leader in Sorption Science

Exhibited articles and services

- Drying and dehydration
- Hydrates and morphology
- Water sorption isotherms
- Vapour pressure and Polymorphism
- Formulation performance
- Diffusion and permeability
- Amorphous content; Stability testing

Contact

Nektaria Servi nservi@surfacemeasurementsystems.com
Unit 5 Wharfside
Rosemont Road
London, HA0 4PE
United Kingdom www.surfacemeasurementsystems.com

Sympatec LTD – Booth 56

Sympatec develops, manufactures, sells, services and supports an innovative range of best instruments for particle size and shape analysis in laboratory and process for customers worldwide. With continuous innovations in the technological fields of laser diffraction, dynamic image analysis, ultrasonic extinction and photon cross-correlation spectroscopy (PCCS) Sympatec makes a prominent contribution to the development, production and quality control of most challenging particulate systems. Typical applications cover dry powders and granules, fibres, suspensions, emulsions, gels, sprays and inhalants within a size range from 0.5 nm to 34,000 µm. Modular instruments show great versatility and can be adapted to the specific task within your laboratory. The proven measurement technologies are also available for integration into your process. Moreover, the instruments reliably deliver most accurate, reproducible and comparable results at shortest measuring times. Sympatec – The Particle People



Exhibited articles and services

- HELOS – Laser Diffraction Particle Size Analysis
- QICPIC – Dynamic image analysis

Contact

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 Fax: +44 161 763 1887
Unit B2 Waterfold House E-Mail: afrance@sympatec.com
BL9 7BR, Bury
United Kingdom www.sympatec.com

Tesa Labtec GmbH – Booth 57

tesa Labtec offers the development and manufacture of transdermal & topical patches as well as oral, sublingual and buccal films. Our proprietary technologies (Mucofilm®/ Transfilm®/ Rapidfim®) provide a platform to formulate customized, innovative products which differentiate your company from competitors. Our cGMP production plant in Hamburg, Germany offers the latest state of mixing, coating, converting and packaging equipment. Since May 2014 we have enlarged our range of production by a pilot-scale equipment at our R&D site. This enables us to support your clinical trials as well as full-scale production needs. End to end service refers to a broad range of indications and molecules for innovative OTC and Rx products.



Exhibited articles and services

- Transdermal & topical patches
- Oral, sublingual and buccal films
- Assessment of oral transmucosal and transdermal drug delivery

Contact

Raiffeisenstr. 4 Phone: +49 2173 9735 0
40764 Langenfeld E-Mail: bd.tesa-labtec@tesa.com
Germany www.tesa-labtec.com

Thermo Fisher Scientific – Booth 39

Thermo Fisher Scientific supplies innovative solutions for the world's pharmaceutical and biopharmaceutical industries. With applications that span the drug development process – from discovery through to large-scale commercial production – we provide a broad range of products and services including twin screw extrusion, rheology and spectroscopy. Visit us on Stand 39 in Hall 5 to learn how our products can help drive your innovation and productivity:

Thermo Scientific™ Pharma 11 Twin-screw Extruder: Perform material- and labor-effective Hot Melt Extrusion and Wet Granulation using only a small amount of active pharmaceutical ingredient, operating at throughput levels as low as 20g/h.

Thermo Scientific™ DXR™xi Raman Imaging Microscope: Identify and verify drug components in tablets and other formulations using Raman Spectroscopy.

Thermo Scientific™ Nicolet™ iS™50 FT-IR Spectrometer: Ideal for analytical laboratories performing basic drug research and structural elucidation, formulation development and validation, quality control processes for incoming and outgoing materials, and in-packaging testing.

Contact

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Phone: +44 1442 233 455
William.wilson2@thermofisher.com

www.thermoscientific.com



ThermoFisher
SCIENTIFIC

Ubichem – Booth 2

Ubichem is chemistry for life. Customers of the pharmaceutical, agrochemical and veterinary industries have chosen Ubichem since 1978. Ubichem delivers complex supply chain solutions. Starting with a deep technical understanding of the chemistry and biology of Life Science Markets, Ubichem follows regulatory compliance pathways to identify API, excipient, advanced intermediate, biochemical or fine chemical. Ubichem Manufacturing enables customer specific solutions for chemical formulation, bespoke pack size and labelling for single or multi-component liquids, solutions or powders. This processing capability finds particular application for Complex Formulation Manufacturing. Ubichem's speciality manufacturing capabilities add tangible value to customer operations.

Exhibited articles and services

- Excipients, APIs and Intermediates
- CRAMS
- Laboratory Chemicals
- Chemical repacking Services
- GMP Audit Services
- Fine Chemicals
- University Research Supplies
- Analytical Services

Contact

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Fax: +44 3330 110 383
E-Mail: sales@ubichem.com
www.ubichem.com



ubichem
CHEMISTRY FOR LIFE

WITec GmbH – Booth 21

WITec is the leading German manufacturer of confocal and scanning-probe microscopes for Raman, Atomic Force (AFM), and Scanning Near-Field Optical Microscopy (SNOM). From the company's founding in 1997, WITec has been distinguished by its innovative product portfolio and a microscope design that enables combinations of the various imaging techniques within one system. To this day, WITec's confocal microscopes are unrivaled in sensitivity, resolution and imaging capabilities.



Exhibited articles and services

- Confocal Raman Microscope
- Atomic Force Microscope
- Scanning Near-field optical Microscope
- Automated confocal Raman / AFM Systems

Contact

Phone: +49 731 14070 0
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www.witec.de

Lise-Meitner-Str. 6
89081 Ulm
Germany



ResearchPharm Floorplan

ResearchPharm®
International Exhibition for R&D

Floorplan

4-7 April 2016
SECC -
Scottish Exhibition and
Conference Centre, Glasgow, UK
Hall 5

Emergency
Exit
Vehicle Access
Door 5.3



	Hall 5	Clyde	Lomond	Alsh	Forth
	Poster Sessions and ResearchPharm	Symposium: Poorly soluble drugs	Short lectures: Oral formulations/Oral Contr. DD	Symposium: Adv. formulations for dermal/transdermal delivery	Short lectures: Nanoparticles & Vesicles
09:00	Nanoparticles & Vesicles I Pharmaceutical Manufacturing & Engineering I Protein formulation & Aggregation	How to formulate poorly soluble drugs - an industrial perspective R. Holm	Prolonged release properties for orodispersible films combining solvent casting and melt extrusion I. Speer	Innovative nanocarrier for dermal and transdermal administration of drugs D. Paolino	Nanotheranostic approach based on mesoporous silicon nanocarrier V.-P. Lehto
09:20	Gene delivery Cellular drug transport Pulmonary delivery		Development of micromolded capsular devices for colonic delivery based on a combined time/microbiological approach F. Casati		Novel isoprenoyl nanoassembled prodrug for paclitaxel delivery S. Mura
09:40	Ocular drug delivery Parenteral delivery Buccal and nasal delivery Controlled drug delivery I	Role of excipients in solubility enhancement of poorly soluble drugs A. Rajabi-Siahboomi	Melt-extruded Solid Lipid Matrices and the Role of Filler Excipients concentrated protein formulations S. Li	Transdermal administration: efficient and effective drug delivery H. Franke	Development of a novel nanotherapeutic approach to potentiate cancer immunotherapy G. Lollo
10:00	09:00 – 17:00; all day		Hydrophilic thermoplastic polyurethanes for the manufacturing of highly dosed oral sustained release matrices via HME G. Verstraete		Lipid Bilayer Coated Mesoporous Silica Nanoparticles for Targeted Delivery of Zoledronic Acid J. Rosenholm
10:20		Cyclodextrins as pharmaceutical solubilizers T. Loftsson	The assessment of water migration in the sodium alginate matrix tablets containing model active ... E. Juszczak	Drug delivery improvements for topic formulation obtained by double layered hydroxides technology M. Bastianini	Nanoliposomes as Multidrug Therapy for Anticancer Treatment C. Celia
10:40			Experimental and modeling description of hydrogel-based controlled release systems D. Caccavo		Liposomal encapsulation of 6BrCaQ, an hsp90 inhibitor reveals promising anti-cancer effects and a better understanding of its mechanism of action F. Sauvage
11:30	Clyde APV Awards				
11:45	Clyde Plenary lecture: Gastro-intestinal behavior of low solubility compounds, Patrick Augustjns				
	Poster Sessions and ResearchPharm	Symposium: Oral controlled delivery	Short lectures: Pediatric formulations/pulm. DD	Short lectures: QbD & PAT	Symposium: Intraocular drug delivery/ophthal. formulations
15:00	Nanoparticles & Vesicles I Pharmaceutical Manufacturing & Engineering I Protein formulation & Aggregation	Oral administration of polymeric micelles for locoregional and systemic treatments C. Alvarez Lorenzo	Flexible Dosing of Enalapril by Orodispersible Minitablets: Paediatric Concept, Drug Development and PIP Approval Y. Thabet	Comparison of science-based calibration and PLS for coating thickness determination using Raman spectroscopy S. Barimani	Cationic nanoemulsions: a versatile platform for topical ocular delivery F. Lallemand
15:20	Gene delivery Cellular drug transport Pulmonary delivery		Formulation of orodispersible film with API for pediatric therapy-Investigation of feasibility and stability Z. Senta-Loys	UV imaging versus terahertz pulsed imaging for analysis of tablet coating A. Novikova	
15:40	Ocular drug delivery Parenteral delivery Buccal and nasal delivery Controlled drug delivery I	Oral controlled drug delivery in the pharmaceutical industry - New insights into existing technologies and future perspectives G. Byrne	Development of an in vitro gastro-intestinal digestion model simulating the young infant pediatric population R. Berthelsen	Fast in-line NIR and imaging in continuous processing for improved understanding of powder mixing and sampling R. Besseling	Intravitreal drug delivery: Pharmacokinetics and delivery strategies A. Urtti
16:00	09:00 – 17:00; all day		Preliminary Biopharmaceutical Classification of Antibiotics for Pulmonary Deliv. S. Marchand	In-line solutions for real-time NIR monitoring in a continuous from-powder-to-tablet line F. De Leersnyder	
16:20		Oral drug delivery systems: controlled drug absorption and impact of GI physiology H. Blume	Comparative study on the aerosolisation performance of engineered theophylline microcomposite particles and adhesive mixtures with lactose carrier M. Malamatar	Post Process Controlling of Printed ODF with Nondestructive Methods M. Wimmer-Teubenbacher	How to deliver a drug into the eye - an industrial perspective H. Kranz
16:40			Investigation of most common errors in using dry powder inhalers A. M. Juppo	A Novel Tool for Online Monitoring of Tg' in Freeze-Drying J. Horn	

	Hall 5	Clyde	Lomond	Alsh	Forth
	Poster Sessions and ResearchPharm	Short lectures: Nanoparticles & Vesicles II	Symposium: 2D/3D printing in DD	Symposium: Bioanalytics, advanced analytics	Short lectures: Oral formulations
09:00	Controlled drug delivery II Nanoparticles & Vesicles II Oral delivery I Poorly soluble drugs	Impact of soft core versus hard core micelles on cellular uptake M. Möller	Fabrication of 3D tissue J. Miller	New analytical/biophysical methods to characterize aggregation of large molecules - Focus on the effects of interactions with plasma T. Arvinte	Highly Resistant Capsules With Genipin-Cross-Linked Double Poly-L-Lysine Membranes For In Vivo Imaging In The Far-Red Fluorescence Range E. Santos
09:20	Preformulation & physical pharmacy QbD & analytics Quality assurance	Apo E-modification of PLGA-nanoparticles enhances cellular uptake into brain endothelium B. Raudszus			Equivalent glucose-lowering effects of orally and endoscopically delivered insulin in fasting dogs M. Kidron
09:40	Stability testing Technical innovations 09:00 – 17:00; all day	Fucoidan-coated liposomes: a promising approach to intracellular targeting of macrophages V. Passos Gibson	Engineering inkjet technologies for different purposes W. Brok	Emerging methods for the characterization of aggregates and subvisible particles for biopharmaceutical products T. Menzen	Hot Melt Extrusion as a new Method to Form Inclusion Complexes with Cyclodextrins J. Thiry
10:00		Is the unintended ovarian and adrenal accumulation of polymeric and lipid Nano-DDS a common phenomenon? K. Mäder			Posaconazole behavior in the human intestine: suspension versus solution versus solid dispersion B. Hens
10:20		Encapsulation of dexamethasone palmitate into polymeric nanoparticles for a targeted delivery in rheumatoid arthritis R. Simón-Vázquez	Printing APIs C. Planchette	Use of bioanalytical methods in the development of engineered albumins for optimized serum half-life P. Morton	Amorphous and Recrystallized Itraconazole-Loaded Sucrose Microfibers with Enhanced Dissolution Performance S. Marano
10:40		In vivo study of the mucus-permeating properties of PEG-coated nanoparticles L. Inchaurreaga			Invest. of downstream processing of itraconazole solid dispersion prepared by high ... B. Démuth
11:30	Clyde	JDDST awards / APGI student thesis award			
11:45	Clyde	Plenary lecture: Nanomedicine: Translation of nanotechnologies from concept to clinical trials, Justin Hanes			
	Poster Sessions and ResearchPharm	Symposium: Pediatric formulations	Short lectures: Pharmaceutical Manufacturing & Engineering	Symposium: Inhalation	Short lectures: In-vitro/In-vivo correlations & Bioavailability
15:00	Controlled drug delivery II Nanoparticles & Vesicles II Oral delivery I Poorly soluble drugs	Recent achievements in formulating better medicines for children J. Bretkreutz J. Walsh	Pharma 4.0 - Manufacturing and Quality in the Digital Age R. Gaertner	Spray-drying pharmaceuticals for optimal delivery to the lungs: From drying droplets to in vivo evaluation N. Tsapis	IVIVC development in the pharmaceutical industry - Results of a survey among EFPIA companies M. A. Nguyen
15:20	Preformulation & physical pharmacy QbD & analytics Quality assurance		QbD Case Study: Identification of Critical Process Parameters (CPPs) for the Commercial Drug Product Manufacturing Process M. Wunderlich		In vitro and in silico simulation of human GI behavior in pharmacokinetic studies S. Cascone
15:40	Stability testing Technical innovations 09:00 – 17:00; all day	Industry strategies for developing medicines for children T. Ernest	Portable, Continuous, Miniature and Modular (PCMM) why this will be the pharmaceutical factory of the future K. Schoeters	Dissolution testing for inhaled pharmaceuticals: Mibbes aye, mibbes naw B. Forbes	An Integrated Approach to Mechanistically Model In-Vitro Experiments and Incorporate Drug-specific Parameter Estimates within a PBPK Framework to Simulate In-Vivo Drug Diss. S. Pathak
16:00			Gluing Pills: An Innovation in Multilayer Tableting S. Salar-Behzadi		Nifedipine Solid Dispersion using HPMCAS: Preparation by HME and Downstream Processing A. Sauer
16:20		PIPs after the new guideline on pharmaceutical development of paediatric medicines S. Chiappini	Raman mapping for detection of low-dose API in drug products prepared using inkjet printing ... M. Edinger	The development of a novel inhaled bifunctional drug for the treatment of asthma and COPD C. Page	Long-Chain Triglyceride Formulation Enhances Oral Bioavailability of Cannabidiol by Facilitating Intest. Lymph. Trans. A. Zgair
16:40			Hot-melt extruded filaments based on pharmaceutical grade polymers for 3D printing by Fused Deposition Modeling A. Melocchi		Evaluation of the supersaturated state and precipitation kinetics of two poorly soluble weak bases using colloids Á. López Mármol

	Hall 5	Clyde	Lomond	Alsh	Forth
	Poster Sessions and ResearchPharm	Short lectures: Peptide and protein formulation & Nucleic acid delivery	Short lectures: Controlled drug delivery	Symposium: Oral and mucosal dosage forms	Symposium: Continuous manufacturing
09:00	Oral delivery II Pediatric drug delivery Pharmaceutical Manufacturing & Engineering II Transdermal delivery	Impact of Polysorbat 80 on Liquid-Air Interfacial Behavior of Human IgG E. Koepf	Hyaluronic acid liposomal gel, a promising approach to sustain the delivery of a corticoid to the inner ear A. Bochot	Drug permeation through oral mucosa E. Roblegg	Continuous manufacturing - Critical steps and possible solutions J. Khinast
09:20	Dermal delivery Functional materials & Excipients	Protein aggregates and their association with immunogenicity - could bedside filtration reduce the risk? B. Werner	Examination of the influence of the test design on the in vitro release behavior of drug-eluting stents A. Seidlitz		
09:40	In-vitro/In-vivo correlations & Bioavailability Phytopharmaceuticals Regulatory affairs Green & Sustainable pharma	Improving Release Completeness of Ovalbumin from PLGA-based Implants L. Duque	Release and long-term-stability of Gonadorelin-[6-D-Phe]- loaded lipid microparticles produced by spray-congealing K. Hoffmann	Formulation development and manufacturing of orodispersible tablets P. Hebestreit	Control strategies for continuous processes M. Krumme
10:00		Biodegradable nanocarriers for nucleic acid delivery B. Loretz	Fundamental understanding of drug absorption from a parenteral oil depot R. Kalicharan		
10:20	09:00 – 17:00; all day	In vitro and in vivo targeted gene silencing in cancer cells using anti-CD44 aptamer-functionalized liposomes H. Hillaireau	Poly(ethylene glycol) degradable microspheres as anti-angiogenic carriers for chemoembolization L. Moine	Formulation development and manufacturing of oral film preparations A. Krekeler	Continuous secondary manufacture: Practical implementation I. Yadav
10:40		A novel tyrosine-modified LMW polyethylenimine (P10Y) for efficient siRNA delivery in vitro & in vivo A. Aigner	Microcontainers as an oral drug delivery system L. Hagner Nielsen		
11:45 Clyde Plenary lecture: Gene therapy for cystic fibrosis: moving towards the clinic, Uta Griesenbach					
	Poster Sessions and ResearchPharm	Short lectures: Preformulation & physical pharmacy	Short lectures: Topical and mucosal delivery	Symposium: Polymer and other macromolecule conjugate	Symposium: Particle engineering (nanomilling, micronisation)
15:00	Oral delivery II Pediatric drug delivery Pharmaceutical Manufacturing & Engineering II Transdermal delivery	Stability Prediction of Amorphous Drug Molecules M. Ruggiero	Biorelevant characterisation of mucoadhesive oromucosal films containing desmopressin acetate S. Lindert	Polymer conjugates as nano-sized medicines: from single agents to combination therapies M. J. Vicent Docon	Enhancing dissolution of poorly soluble drugs through jet-milling S. Mercuri
15:20	Dermal delivery Functional materials & Excipients	Mechanochemical Synthesis of Pharmaceutical Crystal Suspensions via Hot Melt Extrusion: Feasibility Studies and Physicochemical Characterisation N. Heron	Inkjet Printing of Biologics Inks and Biologics-Loaded Nanodispersions on Polymeric Films as Potential Buccal Drug Delivery Systems J. Morales		
15:40	In-vitro/In-vivo correlations & Bioavailability Phytopharmaceuticals Regulatory affairs Green & Sustainable pharma	Emerging ways in suppression of re-crystallization of amorphous anti-cholesterol agents M. Paluch	Hybrid fibers with bio-adaptive mechanics - advances and perspectives for the application as wound dressing V. Planz	Tailored engineering of pharmaceutical peptides J. Lau	Role of particle engineering in state-of-the-art drug delivery - Most promising technologies and platforms F. Gaspar
16:00	09:00 – 17:00; all day	Investigating the physical stability of the amorphous paracetamol printed as microarray using ink-jet printing M. Algahtani	Comparing the intradermal micro- and nanoparticle delivery depth after different microneedle treatments L. Engelke	Drug-initiated synthesis of polymer prodrug nanoparticles J. Nicolas	PRINT Particle engineering technology for drug delivery systems B. Maynor
16:20		Effect of biorelevant albumin concentration in simulated plasma on the solub. & stab. of Amphotericin B R. Diaz de León-Ortega	Microneedle Arrays for Nanoparticle Vaccination R. Donnelly		
16:40		Production and stabilization of olanzapine nanosuspensions by RESSAS M. Paisana	Novel nanocarrier systems for the transport of dexamethasone into the skin analyzed by EPR spectr. S. Lohan		



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