



second announcement

## 12<sup>th</sup> World Meeting on Pharmaceuticals, Biopharmaceutics and Pharmaceutical Technology

# Vienna, Austria

23 - 26 March 2020

**Abstract submission deadline**  
15 November 2019

# PBP

## WORLD MEETING

in combination with

**R**esearch **P**harm<sup>®</sup>  
*International Exhibition for R&D*



[www.worldmeeting.org](http://www.worldmeeting.org)



# 12<sup>th</sup> World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology

## 23 to 26 March 2020, Vienna, Austria

In continuation of the very successful scientific meetings in Budapest, Paris, Berlin, Florence, Geneva, Barcelona, Malta, Istanbul, Lisbon, Glasgow and Granada, the 12<sup>th</sup> World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology will be held in Vienna, Austria in 2020.

This conference has gained an ever increasing impact among the pharmaceutical scientists: With more than 1000 submitted abstracts and more than 1300 participants it has become a well-established major meeting attracting scientists from all over the world. It is organized every two years, in March or April of the even years.

The entire spectrum of topics ranging from engineering aspects during the manufacturing process, the portfolio of commercially available excipients enabling formulation of a large variety of medicinal products, the underlying physico-chemical principles, cutting-edge characterization techniques as well as potential pitfalls and hurdles to be overcome during product development, manufacturing and characterisation will be addressed.

The conference will be held on 3.5 days: from Monday (noon) until Thursday (evening). From Tuesday to Thursday, 4 parallel sessions with oral presentations will be held:

- 2 sessions on industry-related topics, presented by distinguished invited speakers, giving overviews on the current state of the art in the respective fields
- 2 sessions with short talks selected from submitted abstracts, presenting the latest research findings in the broad field of Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology.

During the entire conference, the accompanying exhibition ResearchPharm® provides a cross-disciplinary platform for pharmaceutical scientists working in all fields of drug development in industry, academia and regulatory bodies. This exhibition is steadily growing and offers the possibility to present and learn about the newest trends and products in the area of pharmaceutical ingredients, developing and processing equipment, analytical technologies, medicinal products, medical devices and contract manufacturing.

In addition, young and experienced scientists from academia and industry will present their latest research achievements in form of posters, allowing for successful exchanges with the authors.

The meeting is intended to bring together people working in fundamental and applied academic research, in the chemical and pharmaceutical industry and the regulatory field, offering the opportunity to initiate fruitful discussions and collaborations.

The organizing committee cordially invites you to join the 12<sup>th</sup> World Meeting and would be glad to welcome you in Vienna, Austria!



Andrea Manfredi  
President ADRITELF



Juergen Siepmann  
President APGI



Joerg Breitkreutz  
President APV



# Programme

## Monday, 23 March 2020

13:00 – 13:45	Opening Ceremony	Exhibition
13:45 – 14:45	Key note lecture	
14:45 – 15:30	Coffee break	
15:30 – 17:30	Hot topic lectures	
17:30 – 19:00	Welcome Reception	

### Key note lecture

- 13:45 - Engineering cancer immunotherapy  
 14:45 David J. Mooney, Harvard School of Engineering and Applied Sciences, Cambridge, USA

### 14:45 - 15:30 Coffee break/exhibition

### Hot topic session

- 15:30 - Digitalisation and application of Pharma 4.0 tools to manufacturing  
 16:10 Patrick Hyett, GlaxoSmithKline, United Kingdom
- 16:10 - Advances in PLGA drug delivery system  
 16:50 Steven Schwendeman, College of Pharmacy, University of Michigan Ann Arbor, MI, USA
- 16:50 - Delivery of cannabinoids to and across the skin  
 17:30 Elka Touitou, Hebrew University of Jerusalem, Israel

### 17:30 - 19:00 Welcome reception

- 09:40 - Nanotechnologies for advanced imaging  
 10:20 Nathalie Mignet, Faculty of Pharmacy, University of Paris Descartes, France
- 10:20 - Hyperloaded polymeric micelles for chemo- and immunotherapy  
 11:00 Alexander Kabanov, Eshelman School of Pharmacy at Chapel Hill, University of North Carolina, USA

### Invited talks: Solid dosage forms

- 09:00 - Adoption of the MCS concept in the pharmaceutical industry  
 09:40 Michael Leane, Bristol-Myers Squibb, New York City, USA/Anikó Szepes, F. Hoffmann-La Roche, Basel, Switzerland
- 09:40 - Process design for innovative drug delivery systems  
 10:20 Jukka Rantanen, Department of Pharmacy, University of Copenhagen, Denmark
- 10:20 - The importance of understanding the physical and chemical properties of APIs in the digital design of drug products  
 11:00 Kevin Roberts, Faculty of Engineering, University of Leeds, United Kingdom

### Short talks I: Determined in December 2019

### Short talks II: Determined in December 2019

### 11:00 - 11:30 Coffee break/exhibition/posters

- 11:30 - APGI award session  
 13:00 and plenary lecture

Advances in nanotechnology  
 Patrick Couvreur, Faculty of Pharmaceutical Sciences, Paris Sud University, France

### 13:00 - 15:00 Lunch break/exhibition/posters

### Invited talks: Advanced therapeutic products: an industrial perspective

- 15:00 - Finding answers to antibody bioprocessing challenges in biophysics  
 15:40 Chris Van der Walle, MedImmune, Cambridge, United Kingdom
- 15:40 - Lentiviral vector-based medicines from concept to market  
 16:20 James Miskin, Oxford Biomedica, United Kingdom
- 16:20 - Biodrugs and advanced therapy medicinal products: a revolution in medicine  
 17:00 Maria Luisa Nolli, NCNbio, Milan, Italy

## Tuesday, 24 March 2020

09:00 – 11:00	Invited talks	Short talks	Posters	Exhibition
11:00 – 11:30	Coffee break			
11:30 – 13:00	Award session and Plenary lecture			
13:00 – 15:00	Lunch			
15:00 – 17:00	Invited talks	Short talks		

### Invited talks: What's new in nanotechnology?

- 09:00 - What's needed in nanomedicine?  
 09:40 Twan Lammers, Department Nanomedicines and Theranostics, RWTH, Aachen University, Germany



# Programme

## Invited talks: 3D-printing

- 15:00 - 3D-printing of medicines and implants:  
15:40 making the formulations work  
Clive Roberts, School of Pharmacy, University of Nottingham, United Kingdom
- 15:40 - 3D-printing of medicines at the point of  
16:20 care: fantasy or the future?  
Matthew Peak, Alder Hey Children's Hospital, Liverpool, United Kingdom
- 16:20 - 3D printing in an industrial GMP setting  
17:00 Timothy Tracy, Aprelia Pharmaceuticals, Blue Ash, OH, USA

Short talks III: Determined in December 2019

Short talks IV: Determined in December 2019

## Wednesday, 25 March 2020

09:00 – 11:00	Invited talks	Short talks		
11:00 – 11:30	Coffee break			
11:30 – 12:00	Award session		Posters	Exhibition
12:00 – 13:00	Plenary lecture			
13:00 – 15:00	Lunch			
15:00 – 17:00	Invited talks	Short talks		
20:00 – 02:00	Gala dinner at the Hofburg			

## Invited talks: Formulation issues for biotech drugs

- 09:00 - Pellet freeze-drying of biopharmaceuticals  
09:40 Stefan Schneid, Bayer, Wuppertal, Germany
- 09:40 - L-arginine-based protein formulations in  
10:20 freeze drying: opportunities and challenges  
Henning Gieseler, Department of Chemistry and Pharmacy, University Erlangen-Nürnberg, Germany
- 10:20 - Biologics drug product development:  
11:00 challenges at the interface of formulation, primary packaging and application  
Susanne Jorg, Lonza Pharma & Biotech, Verviers, Belgium

## Invited talks: Oral drug delivery

- 09:00 - Oral drug delivery: how to formulate poorly  
09:40 absorbed drugs  
Andreas Bernkop-Schnürch, Faculty of Chemistry and Pharmacy, University of Innsbruck, Austria

- 09:40 - Biological barriers to oral delivery of  
10:20 macromolecules  
Caitriona O'Driscoll, School of Pharmacy, University of Cork, Ireland
- 10:20 - The virtual patient and the in-silico design of  
11:00 solid dosage forms  
Hans Leuenberger, College of Pharmacy, University of Florida, Lake Nona Medical Campus, Orlando, FL, USA

Short talks V: Determined in December 2019

Short talks VI: Determined in December 2019

11:00 - 11:30 Coffee break/exhibition/posters

11:30 - 12:00 APV award session

## Plenary lecture

- 12:00 - Pharmacomicrobiomics: drugs meet the  
13:00 human microbiome  
Christina Moissl-Eichinger, Medical University of Graz, Austria

13:00 - 15:00 Lunch break/exhibition/posters

## Invited talks: Localised drug delivery

- 15:00 - Jumping to the brain: tailored  
15:40 nanomedicines  
Giovanni Tosi, University of Modena and Reggio Emilia, Italy
- 15:40 - Drug delivery to the eye and ear  
16:20 Amélie Bochot, School of Pharmacy, Institut Galien Paris-Sud, University of Paris Sud/Paris-Saclay, Châtenay-Malabry, France
- 16:20 - Inhaled chemotherapy: a new modality for  
17:00 lung cancer treatment?  
Nathalie Wauthoz, Université Libre de Bruxelles, Belgium

## Invited talks: Amorphous drug delivery systems

- 15:00 - The impact of atomization and drying rate  
15:40 on the mechanical properties of spray dried amorphous solid dispersions  
Aaron Goodwin, Pfizer, USA
- 15:40 - Hybrid mixtures: A perspective on  
16:20 amorphous solid dispersions in food applications  
Lennart Fries, Nestlé Research Center, Vevey, Switzerland
- 16:20 - The variability of the amorphous state in  
17:00 relation to processing  
Marc Descamps, University of Lille, France

# Programme

Short talks VII: Determined in December 2019

Short talks VIII: Determined in December 2019

20:00 - 02:00 Gala dinner at the Hofburg

Short talks X: Determined in December 2019

11:00 - 11:30 Coffee break/exhibition/posters

11:30 - 12:00 ADRITELF award session

## Thursday, 26 March 2020

09:00 – 11:00	Invited talks	Short talks		
11:00 – 11:30	Coffee break			
11:30 – 12:00	Award session			
12:00 – 13:00	Plenary lecture			
13:00 – 15:00	Lunch			
15:00 – 17:00	Invited talks	Short talks		

Posters

Exhibition

### Invited talks: In silico simulation for manufacturing processes

- 09:00 - 09:40 Digitalization in pharmaceutical product and process design: from advanced simulations to virtual drug product development  
Johannes Khinast, Graz University of Technology, Austria
- 09:40 - 10:20 Digital Process Design  
Sean Bermingham, Process System Enterprise (PSE), London, United Kingdom
- 10:20 - 11:00 Modelling and simulation of fluid-bed processes  
Stefan Heinrich, Hamburg University of Technology, Germany

### Invited talks: Nanofabrication technologies

- 09:00 - 09:40 Novel manufacturing for healthcare: microbubbles, particles, capsules and fibres  
Mohan Edirisinghe, Biomaterials Processing Laboratory, Department Mechanical Engineering, University College London, United Kingdom
- 09:40 - 10:20 Advances in electrospinning  
Nalin de Silva, Department of Chemistry, University of Colombo, Sri Lanka
- 10:20 - 11:00 Advanced in vitro lung-on-chip platforms for inhalation assays  
Josue Sznitman, Department of Biomedical Engineering, Israel Institute of Technology, Haifa, Israel

Short talks IX: Determined in December 2019

### Plenary lecture

- 12:00 - 13:00 Oral drug delivery systems: from irrelevance to top-selling products and ongoing challenges  
Andrea Gazzaniga, Biopharmaceuticals and Pharmaceutical Technology Laboratory, University of Milan, Italy

13:00 - 15:00 Lunch break/exhibition/posters

### Invited talks: Dermal and transdermal delivery

- 15:00 - 15:40 Pickering emulsions  
Marie-Alexandrine Bolzinger, Claude Bernard University Lyon, France
- 15:40 - 16:20 Microarray patches for high-dose drug delivery: targeting global healthcare challenges  
Ryan F. Donnelly, School of Pharmacy, Queen's University Belfast, United Kingdom
- 16:20 - 17:00 Improved vaccine immunogenicity through microneedle delivery  
Michael Schrader, Vaxess, Boston, MA, USA

### Invited talks: Continuous manufacturing

- 15:00 - 15:40 Process development of the future: fully automated DoE process analysis in an integrated continuous manufacturing plant for solid oral dosage forms  
Victoria Pauli, Novartis, Basel, Switzerland
- 15:40 - 16:20 Implementing continuous manufacturing into a factory for solid dosage forms  
Clemens Stief, Pfizer, Freiburg, Germany
- 16:20 - 17:00 Continuous manufacturing of solid dosage forms; opportunities and controversies  
Kendal Pitt, GlaxoSmithKline, Ware, United Kingdom

Short talks XI: Determined in December 2019

Short talks XII: Determined in December 2019

17:00 End of conference

Programme subjected to be changed!



## Chairs and committees

### Chair of the conference

Eva Roblegg, University of Vienna/University of Graz, Austria

### Co-chairs of the conference

Jörg Breitzkreutz, University of Düsseldorf, Germany  
Anna Maria Fadda, University of Cagliari, Italy  
Jürgen Siepmann, University of Lille, France

### Chair of the programme committee

Duncan Craig, University College London, UK

### Programme committee members

Dorothee Ambrosius, Boehringer Ingelheim, Germany  
Maria Carafa, Sapienza University Rome, Italy  
Simon Geissler, Merck, Darmstadt, Germany  
Catherine Herry, Ethypharm, Le Grand-Quevilly, France  
Alessandro Regola, Italy

### International Advisory Board

Lilian M. Azzopardi, Malta Pharmaceutical Association, Malta  
Rok Dreu, SFD, Slovenia  
Anna-Maria Fadda, SCI, Italy  
Linda Hakes, APS, United Kingdom  
Christoph Herwig, Arbeitskreis Prozessanalytik der GDCh und DECHEMA, Austria  
Renata Jachowicz, PTF, Poland  
Maja Jakševac Mikša, HFD, Croatia  
Karin Kogermann, EASP, Estonia  
Francisco J. Otero-Espinar, SEFIG, Spain  
Leena Peltonen, Finnish Pharmaceutical Society, Finland  
Sven Stegemann, Geriatric Medicine Society e.V., Germany  
Piroska Szabó-Révész, HSPS, Hungary  
Frédéric Zwahlen, GSIA, Switzerland

## Abstract submission

### Online submission

Short papers can only be submitted online. Please use the following URL:

[worldmeeting.org/short-paper-submission/](http://worldmeeting.org/short-paper-submission/)

Deadline for short paper submission:  
15 November 2019

### Short papers

Submitted short papers will be presented from 24 to 26 March 2020, either orally or in poster form.

### Acceptance of short-papers

Authors will be notified of acceptance of their short paper and the type of presentation (oral or poster) by end of December 2019.

## Social programme

### Welcome reception

The welcome reception will be held on

**Monday, 23 March 2020 from 18:00 - 19:30 h.**

Enjoy a glass of wine while networking with old and new friends or strolling around the industrial exhibition ResearchPharm® at the congress centre.

### Gala dinner

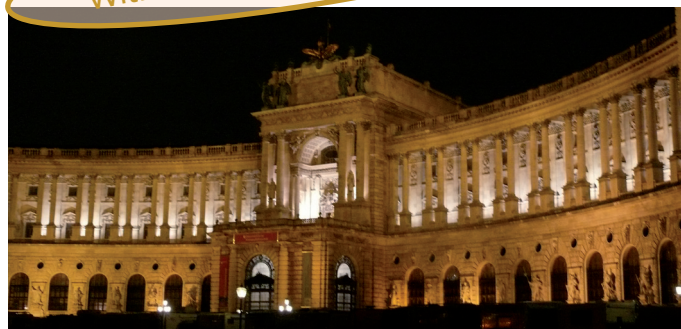
Join us for our unmissable social networking gala dinner at the charming event location „Hofburg“.  
The doors will be open for you

**from 19:45 h on Wednesday, 25 March 2020!**

The Hofburg is reachable within walking distance in the city centre of Vienna.

Experience Vienna on a traditional exclusive level and establish contacts in a relaxed atmosphere. Taste the variety of traditional Austrian food with a seated three-course dinner menu.

With after show party until 02:00 h!



Authors also have the possibility to view the status of their abstract by using the function "status of your abstract".

There they can view the status as well as they can edit their data and upload the latest version of their abstract. For log in use your registration ticket and your e-mail address.

#### Fill in the header for your short-paper here

1<sup>st</sup> Author Name<sup>1,2</sup>, 2<sup>nd</sup> Author Name<sup>1,3</sup>, 3<sup>rd</sup> Author Name<sup>1</sup>  
<sup>1</sup> Affiliation, Address e-mail address, Optional phone number  
<sup>2</sup> Affiliation, Address e-mail address, Optional phone number  
<sup>3</sup> Affiliation, Address e-mail address, Optional phone number

#### INTRODUCTION

The following text should only help you to understand what to do and how to use the template. **After you read the text, please delete it and start filling in the columns with your own text.** This text is to be used for submission of your abstracts. As your abstract will be distributed to all delegates of the PPS World Meeting, we want to make sure that all papers look the same, are consistent and have a high-quality appearance. We therefore ask you to follow these simple guidelines. In general, you should format your paper exactly like this document. The content may be different, but the format should be the same. Please replace the content with your own material. For more information, please go to [www.worldmeeting.org/abstract](http://www.worldmeeting.org/abstract).

#### PAGES AND COLUMNS

You need to have two (2) pages filled. If your short-paper is only one page, we cannot accept it and we will ask you to edit it, but we also have to ask you to shorten your short-paper if it is longer than two pages. Please make sure you fill both columns, on the left and on the right, starting with the left column on the first page, then going to the right column on the first page, before typing your text on the second page (fill first, then right column).

#### SUBMISSION FORMAT

Please submit your short-paper in a PDF format.

#### Second Page

On the second page, start at the top of the page and continue in double-column format. The two columns on the left page should be approximately of equal length.

#### References and Citations

Use a numbered list of references at the end of the article, ordered as they appear in the text or ordered alphabetically by first author. See the examples of citations at the end of this document. Your references should be published materials accessible to the public. Preprint information may not be cited. Please communicate should be

acknowledged in the main text, not referenced (e.g., [Robertson, personal communication]).



Figure 1. For images, be sure to have a good resolution image.

#### SECTIONS

The heading of a section should be in Times New Roman (10-point or Arial 9-point bold, all in capital (abbreviating 1) only in this template. (2) Section should not be numbered.

#### Subsections

Headings of subsections should be in Times New Roman (10-point or Arial 9-point bold with only the initial letters capitalized (abbreviating 1) (2) (Note: For sub-sections and sub-subsections, a word like do or do not is capitalized unless it is the first word of the heading.)

#### Table captions

Headings for sub-subsections should be in Times New Roman (10-point or Arial 9-point bold with initial letters capitalized (abbreviating 1) (2).

Text	Text
Figure 1	2
Figure 1	2

Table 1. Table captions should be placed below the table.



## ResearchPharm®

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

Coffee breaks, welcome reception as well as the event dinner are included in the registration fee. Coffee breaks and welcome reception will be integrated in the exhibition/poster area to create as much traffic around your booth as possible.

It's easy to book a stand at the ResearchPharm®. Just fill in the booking form, which you find on our homepage [www.researchpharm.org](http://www.researchpharm.org) and send it to us.

Your contact for further information is:

Heide Zweyer

+ 49 6131 97 69 90

hz@apv-mainz.de

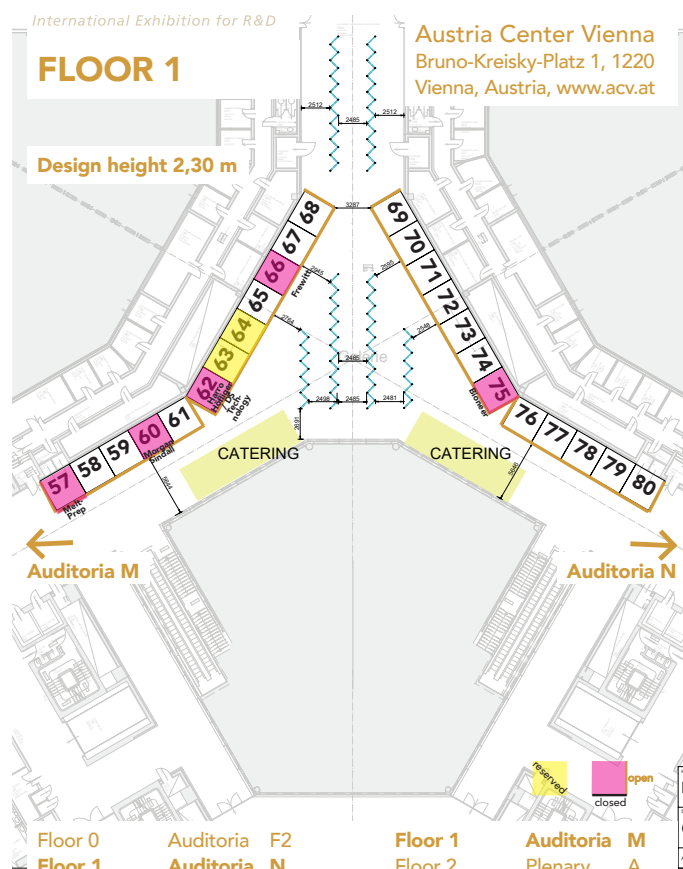
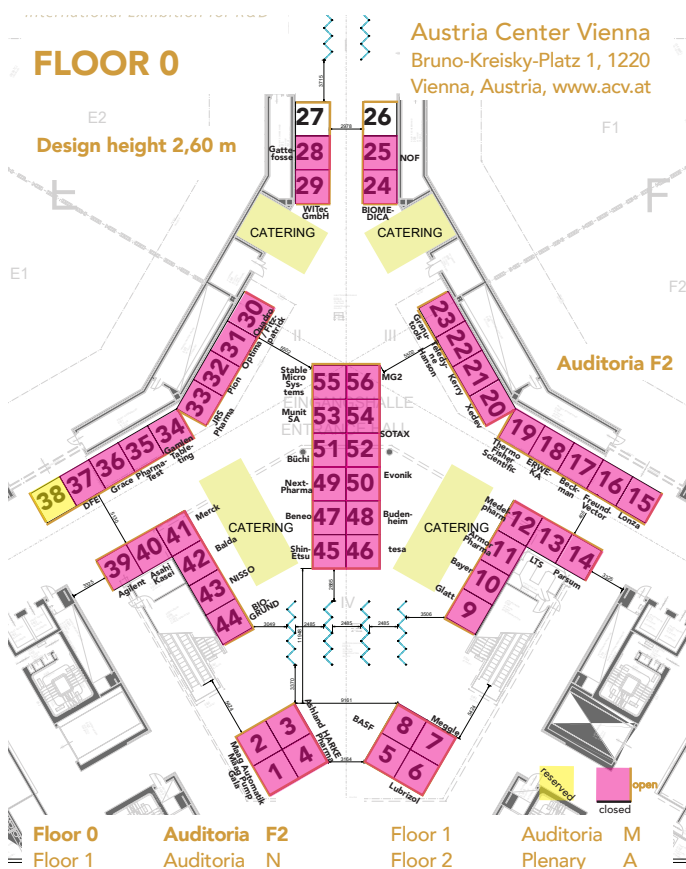
## Sponsoring

Gain direct access to the delegates of the PBP World Meeting through enhanced visibility and exposure to attract new business. Are you interested in knowing more about our sponsoring opportunities for the PBP World Meeting?

Let's get in touch and find out what might be most suitable for your business development goals.

For more information on sponsoring options visit our homepage [www.worldmeeting.org](http://www.worldmeeting.org) or contact Heide to learn more about our sponsoring and tailor-made packages.

Take advantage of this great event to showcase  
your company and your products  
to an international and very versatile audience!  
Many thanks to our sponsors:



as of Oktober 2019

Current floor plan with available booths can be downloaded from our homepage:

[www.researchpharm.org](http://www.researchpharm.org)



## Venue

**ACV**  
Austria Center Vienna

Bruno-Kreisky-Platz 1  
1220 Vienna  
Austria


[www.acv.at](http://www.acv.at)

## Headquarter Hotel

**Lindner Hotel am Belvedere \*\*\*\***

Rennweg 12  
1030 Vienna

 [www.lindner.de/en/vienna-hotel-am-belvedere](http://www.lindner.de/en/vienna-hotel-am-belvedere)

 +43 1 794 77 932

 [info.wien@lindnerhotels.at](mailto:info.wien@lindnerhotels.at)

## Registration Fees

Full participation includes admission to scientific congress/exhibition, dinner event, welcome reception, coffee breaks and congress documentation consisting of a detailed printed programme and a menu-guided USB-Stick containing all abstracts.

Full participation		until 15 January 2020	from 16 January 2020
Student <sup>1</sup>	member <sup>2</sup>	240.00 € *	360.00 € *
	non-member	400.00 € *	520.00 € *
Academia	member <sup>2</sup>	520.00 € *	640.00 € *
	non-member	720.00 € *	840.00 € *
Industry	member <sup>2</sup>	1540.00 € *	1690.00 € *
	non-member	1940.00 € *	2090.00 € *

\* price excl. Austrian VAT

### Day ticket (not available for student registration):

Day ticket: 50 % of the corresponding full-participation fee. Day tickets include admission to the scientific congress/exhibition for the corresponding day. It does not include admission to social events.

### Accompanying persons

Tickets for the welcome reception and the dinner event for accompanying persons are available for 96.00 € excl. Austrian VAT for both events and can be ordered online.

<sup>1</sup> Students are requested to send a copy of their valid student card/pass or a written confirmation of their supervisor. Student rate is only available for full time students.

<sup>2</sup> Members of all participating societies are requested to upload a membership proof (copy of membership card or membership invoice) to qualify for membership fee.