

EuPAT 13

Pan-European Science Conference on QbD & PAT

Intelligent, Integrated and Autonomous Pharmaceutical Manufacturing:
From Molecule to Medicine through Connected Platforms, AI and Self-Driving Technologies

In combination with



CESPE

Implementation-focused
industry-led session

September 28 – 30 • 2026 • Ghent • Belgium

**Registration Deadline
EXTENDED!**



CESPE

CENTRE OF EXCELLENCE IN SUSTAINABLE
PHARMACEUTICAL ENGINEERING & MANUFACTURING



EuPAT 13

28 – 30 September 2026 • Ghent , Belgium

The 13th pan-European Science Conference on QbD & PAT, in a joint effort with the annual CESPE Conference, will bring together researchers and professionals from across academia, industry, and regulatory bodies to explore the next generation of intelligent, integrated and autonomous pharmaceutical development and manufacturing.

The conference will focus on how batch, mini-batch and continuous manufacturing platforms, combined with end-to-end integration, automation and digitalization, are transforming the way drug substances and drug products are developed and produced. Particular emphasis will be placed on integrated development–manufacturing platforms, self-driving laboratories, and disruptive manufacturing concepts, including point-of-care and decentralized production technologies.

Across three scientific sessions and a hands-on workshop, EuPAT 13 will showcase cutting-edge academic research and industrial development and case studies covering:

- Next-generation sensors, advanced PAT tools and innovative QbD strategies, supporting real-time monitoring, intelligent control and robust, flexible manufacturing across batch, mini-batch and continuous processes
- Integrated and autonomous pharmaceutical platforms, connecting drug substance and drug product development through end-to-end manufacturing
- Artificial intelligence across the pharmaceutical lifecycle, enabling predictive modeling, data-driven decision making and autonomous operation

The program will highlight real-world implementation, data-driven and automated control strategies, and the role of advanced sensing, data integration and digital platforms in enabling intelligent and autonomous manufacturing. Regulatory perspectives on the adoption of AI, PAT, QbD and autonomous systems will be addressed, with a focus on ensuring product quality, robustness and patient safety in future-proof manufacturing environments.

In addition to invited lectures and contributed oral presentations, poster sessions will provide extensive opportunities for scientific exchange, networking, and discussion of emerging technologies shaping the future of pharmaceutical manufacturing.

ORGANIZED BY



CESPE
CENTRE OF EXCELLENCE IN SUSTAINABLE
PHARMACEUTICAL ENGINEERING & MANUFACTURING

IN COLLABORATION WITH



Scientific Programme

MONDAY, 28 SEPTEMBER 2026

09.00–09.10 **Opening speech**
Dr. William Dhooge – CESPE Platform Manager

IMPLEMENTATION-FOCUSED INDUSTRY-LED SESSION

PAT in Practice: Implementation Challenges, Measurable Impact and Real Outcomes

09.10–09.35 **PAT in Full Scale Biomanufacturing – Implementation Experience and Challenges**
Dr. Jakob Christensen – Novo Nordisk Engineering

09.35–10.00 **PAT Is a Tool, Not a Goal: Lessons from Translating Raman Spectroscopy into Manufacturing**
Dr. Yannick Borguet – Takeda

10.00–10.25 **A Leading Role for PAT in Continuous Manufacturing**
Dr. Melanie Dumarey – AstraZeneca

10.25–10.50 **PAT Strategy to Master Continuous Process – Example for On-Line Vaccine Formulation**
Laurent Strodiot – GSK

10.50–11.20 **COFFEE BREAK**

11.20–11.45 **Turning Data into Decisions: The Road to an Integrated Control Strategy in Continuous Direct Compression**
Dr. Shana Van de Steene – Fette Compacting

11.45–12.10 **Beyond Method Replacement: Using PAT to Understand, Support and Improve Pharmaceutical Processes**
Olivier Van Der Ha – Ajinomoto Omnicem

12.10–12.35 **From Leaf to Product: Implementing PAT for Robust Downstream Processing in Plant-Based Biomanufacturing**
Dr. Jeroen Hofenk – SwiftPharma

12.35–13.30 **LUNCH BREAK**

organized by



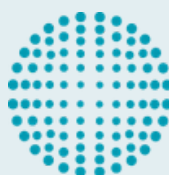
CESPE

EUPAT-CESPE HANDS-ON WORKSHOP

13.30 –16.30 Interact directly with technology providers through hands-on demonstrations, live equipment showcases and real-world case studies.

EQUIPMENT DEMOS

PAT IN PRACTICE



FETTE
COMPACTING

Additional technology providers to be announced

+ EXCLUSIVE SITE VISITS

RheaVita

SITE VISIT

Continuous Freeze-Drying Technologies for Biopharmaceutical Manufacturing



Legend Biotech

VISIT TO TRAINING LAB

Scale-Up of CAR-T Manufacturing: Milestones & Challenges



LIMITED CAPACITY – REGISTRATION REQUIRED

First come, first served! Booking system will be available once registration closes.

Due to time constraints, the possible packages are

- 1 site visit + 2 workshop stations
- All workshop stations

AFTERNOON RECEPTION

The after-workshop reception will be held on Monday, 28 March 2026 from 16.30 – 18.30 h.

Enjoy a drink at The Nucleus, offering the perfect opportunity to network with fellow participants and explore the technology exhibition.

**programme subject to change*



TUESDAY, 29 SEPTEMBER 2026

09.00–09.10 **Welcome & Introductions**
Programme Committee

NEXT-GENERATION SENSORS, ADVANCED PAT TOOLS AND INNOVATIVE QBD STRATEGIES

09.15–09.55 **Terahertz Porosity Sensing for Disintegration Prediction**
Prof. Dr. Axel Zeitler – University of Cambridge, United Kingdom

09.55–10.35 **Control Strategies and Real-Time Release for Continuous Manufacturing: Case Studies**
Dr. Tom Van den Kerkhof – Johnson & Johnson Innovative Medicine, Belgium

10.35–10.50 **COFFEE BREAK**

10.50–10.30 **From PAT Signals to Process Decisions: Designing Closed-Loop Controls for Drug Substance Biopharma Manufacturing**
Jan-Sebastiaan Uyttersprot & Dr. Tuur Vandeputte – UCB, Belgium

11.30–11.45 **Robust API Quantification by Terahertz Frequency-Domain Spectroscopy Against Tablet Design Variation**
Dr. Kei Shimura – Hitachi High-Tech Corporation, Japan

11.45–12.00 **Performances of API fraction predictions with NIR-SRS and with Transmission FT-NIR: A Comparative Case Study**
Freddy Vandenbroucke – Pharma Technology SA, Belgium

12.00–12.15 **Blend monitoring of a Low-Dose Formulation in a Tablet Press Feed Frame Using Spatially Resolved Near-Infrared Spectroscopy**
Dr. Fabien Chauchard – Indatech Chauvin-Arnoux, France

12.15–12.30 **From Compression to Coating: FEM and DEM Simulations Supporting Process Understanding in Continuous Tablet Manufacturing**
Domenica Braile – Johnson & Johnson Innovative Medicine, Belgium

12.30–13.35 **LUNCH BREAK**



DAY 2: EUPAT 13

29 SEPTEMBER 2026

INTEGRATED AND AUTONOMOUS PHARMACEUTICAL PLATFORMS

- 13.35–14.15 **Continuous Direct Compression in Development of Dispersible Combination Tablet for HIV-positive Pediatric Patients**
Prof. Dr. Ossi Korhonen – School of Pharmacy, University of Eastern Finland
- 14.15–14.55 **Enabling Continuous Direct Compression of High Drug Loading Tablets Through an Integrated Particle Engineering Framework**
Dr. Jérôme Mantanus – UCB, Belgium
- 14.55–15.10 **Beyond the Surface: In-line NIR-HSI PAT for Monitoring of 3D-Printed Pharmaceutical Formulations**
Ivan Raguz – Research Center Pharmaceutical Engineering GmbH, Austria
- 15.10–15.25 **Automated screening of self-emulsifying drug delivery systems**
Martin Krov – University of Chemistry and Technology Prague, Czech Republic
- 15.25–15.40 **COFFEE BREAK**
- 15.40–16.20 **Accelerating Process Intensification: Advanced Control Strategies Powered by Real Time Bioreactor Analytics**
Amit Chandrakar – Cultzyme, Spain
- 16.20–16.35 **Milligram-Scale Adaptive Robotic Micro-Dosing System for Pharmaceutical Powders**
Muhammad Murtaza – CMAC, University of Strathclyde, UK
- 16.35–16.50 **Automated Spray Drying for Data-Rich Screening of Amorphous Solid Dispersion Design Spaces**
Vojtěch Klimša, University of Chemistry and Technology Prague, Czech Republic
- 16.50–17.05 **Control Strategy Considerations for the Continuous Manufacturing of Low-dose Oral Solid Dosage Formulations**
Dr. Cristina Ruiz Samblás – AstraZeneca, Sweden

18.00–21.30 NETWORKING DINNER

Enjoy a reception and three-course dinner in the historic Saint Peter's Abbey while networking with fellow conference attendees.

Doors open on Tuesday, 29 September 2026 from 18.00 h.



DAY 3: EUPAT 13

30 SEPTEMBER 2026

ARTIFICIAL INTELLIGENCE ACROSS THE PHARMACEUTICAL LIFECYCLE

- 9.05–9.45 **From Material, Process, and Product Knowledge to the AI Formulator**
Prof. Dr. Daniel Markl – CMAC, University of Strathclyde, Scotland
- 9.45–10.25 **Predictive Pharmaceutical Development and Process Intelligence through Low-Frequency Vibrational Spectroscopy**
Dr. Kārlis Bērziņš – University of Copenhagen, Denmark
- 10.25–10.40 **From Mechanistic Models to Explainable Multimodal AI for Real-Time Dissolution Profile Prediction**
Dr. Brigitta Nagy – Budapest University of Technology and Economics, Hungary
- 10.40–10.55 **COFFEE BREAK**
- 10.55–11.35 **The EU Quality Innovation Group Perspective on Modelling and AI in Pharmaceutical Process Development and Manufacturing**
Dr. Silvia Vogl – Quality Innovation Group, European Medicines Agency
- 11.35–11.50 **Navigate the Formulation Space: In-silico Formulation Screening for Digital QbD in Direct Compression**
Dr. Michael Ghijs – Elegent, Belgium
- 11.50–12.05 **Leveraging Bayesian Optimization Infused with Human Knowledge for Automatic Pharmaceutical Loss-in-Weight Feeder Tuning**
Dr. Ruben Waeytens – Fette Compacting, Belgium
- 12.05–12.20 **A Generative AI Approach to Inverse Design for Continuous Pharmaceutical Manufacturing**
Consuelo Del Pilar Vega Zambrano – University College London, UK
- 12.20–12.35 **Implementing Artificial Intelligence to Accelerate Process Development**
Dr. Charlotte Geleyn – Ghent University, Belgium

LUNCH BREAK – END OF CONFERENCE

General Information

Important dates

30 June	Early bird registration closes
28 August	Extended abstract submission closes
14 September	Extended registration closes
28 September	Workshop and CESPE session
28 - 30 September	EuPAT13 Conference

Registration

Participants can register for the EuPAT13 conference with the option to include the CESPE add-on on 28 September which provides access to an additional industry-focused morning session and networking lunch. It also creates additional networking opportunities between CESPE and EuPAT participants, including a dedicated social event after the workshop.

Registration is open – Click [here](#) to register for the event. Early bird rates apply until June 30th. Registration fees are non-refundable after August 1, 2026; however, transfer of your registration to another person is permitted.

	Early Bird	Regular (from 30 June)	CESPE add-on*
Students	250 EUR	350 EUR	50 EUR
Academia (EUFEPS members)	450 EUR	550 EUR	100 EUR
Industry (EUFEPS members)	650 EUR	750 EUR	150 EUR
Academia (non-members)	500 EUR	600 EUR	150 EUR
Industry (non-members)	780 EUR	880 EUR	220 EUR

All prices include VAT.

*Registration for only the 1st day (CESPE session, workshop, and reception) is possible

General Information

Location

MEETING VENUE & AFTER-WORKSHOP RECEPTION

The Nucleus, Tech Lane Science Park Ghent
Suzanne Tassierstraat 11
9052 Ghent, Belgium

NETWORKING DINNER

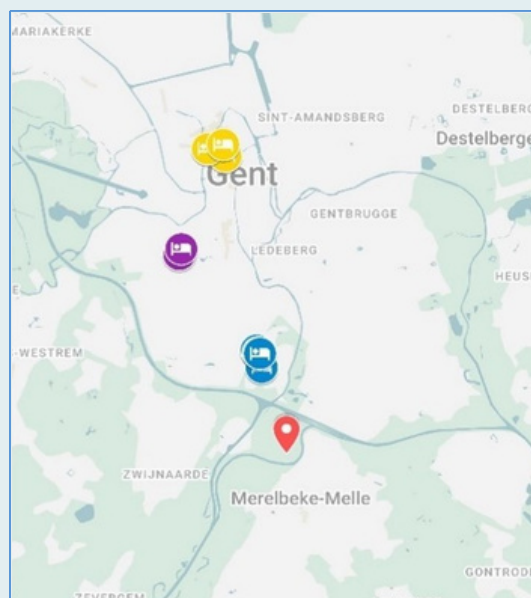
St. Peter's Abbey
Sint-Pietersplein 9
9000 Ghent, Belgium

Hotel Information

Special conference rates have been arranged at selected hotels in Ghent. Hotels are grouped by proximity to the city centre, Ghent-Sint-Pieters station and The Nucleus.

Reservations should be made using the provided booking link or by emailing the hotel directly and mentioning the conference discount code. Rates are subject to availability.

Hotel	Area	Reservation
Ibis Gent Centrum		Sveinhildur.torfadottir@ibis-gent.com using code "EUPAT13MTS"
1898 The Post		reservations@1898thepost.com _using code "EUPAT2026"
Hotel NH collection		Hotel NH collection booking link
Hotel Carlton		info@carltongent.be using code "EUPAT13MTS"
Hotel Chamade		info@chamade.be using code "EUPAT13"
Van der Valk Hotel Gent		Van der Valk booking link using code "GET-EUPAT2026"
Holiday Inn Express & Suites		Holiday Inn booking link
Courtyard By Marriott		Courtyard By Marriott booking link
Residence Inn by Marriott		Residence Inn by Marriott booking link



Hotels near The Nucleus



Hotels near Train Station



Hotels near City Center



The Nucleus

Sponsoring & Exhibition

Increase your reach and visibility during the EuPAT 13 & CESPE Conferences on 28–30th September 2026. As a sponsor of our event you will have the chance to:

- Create visibility for your company through on-site advertisement as well as pre- and post- event promotions
- Network and discuss with some of the leading experts in the field
- Showcase your products
- Get introduced to the scientific community of Ghent, active within the field of sustainable pharmaceutical manufacturing.
- Interact with ±100 participants with equal representation from industry and academia

Are you interested in knowing more about our sponsoring opportunities for the EuPAT13 & CESPE Conferences? Let's get in touch and find out what might be most suitable for your needs. Please reach out to eupat@eufeps.org for further information.

Many thanks to our sponsors

Diamond Sponsor



FETTE
COMPACTING

Gold Sponsors



Silver Sponsor



Bronze Sponsor

