PDA Good Digital Manufacturing Conferen Agenda

Tuesday, 20 May

CEST Daylight Time (UTC +2:00)

	Co-Chair: Timothy W Hsu MHSA International Expert on Health Industry Vice President Industry & Emerging Technologies UNIDO AAMI
09:10 - 09:20	Co-Chair: Marilyn Romieux , Strategy Director - Pharma segment, Merck KGaA
	Ballraum 2&3
	Welcome from the Co-Chairs
	Committee Member: Falk Klar PhD, General Manager, Vice President Europe, Parenteral Drug Association
09:00 - 09:10	Ballraum 2&3
	Welcome and Introduction
00.00 - 17.30	Topaz & Topaz Foyer
08:00 – 17:30	Registration Open

Opening Plenary

Ballraum 2&3

This conference will show a larger picture of our industry's raison d'être. Regardless of whether we work for a drug manufacturer, a materials supplier, a software developer, or a consulting firm; whether our roles lie in drug discovery, manufacturing, quality control, or IT; and whether we identify as scientists, engineers, IT specialists, or strategists, we all unite our efforts to enhance human health. At the end of the value chain stand patients in hope for advancements in their treatment. We want to highlight the impact our industry's progress has on healing people. Innovations in digital technology, the implementation of automation and robotics, and the applications of artificial intelligence are making a real difference in people's lives. We will hear insights from organizations dedicated to health, extending beyond the pharmaceutical sector, to understand this impact further.

Moderator: Marilyn Pomioux Strategy Director - Pharma segment March KGaA

	Moderator: Mari	lyn Romieux , Strategy Director - Pharma segment, <i>Merck KGaA</i>
09:20 – 11:15	09:20 – 09:45	Beyond Safety, Efficacy, and Compliance: The Human Impact of Digital Innovation Ballraum 2&3 • Keynote Speaker: Stacey Tinianov MPH, Patient Advocate, Founder, Advocates for Collaborative Education
	09:45 – 10:10	Al in Life Sciences: When Innovation Comes From the Unimaginable Ballraum 2&3 • Academic Presenter: Laura Adams MS, Senior Advisor, National Academy of Medicine
	10:10 – 10:35	How is Al Implemented at Swissmedic Ballraum 2&3 • Regulatory Presenter: Nicolas Löffler-Perez PhD, Data Scientist, Swissmedic

Plenary Discussion

Ballraum 2&3

• Moderator: Marilyn Romieux, Strategy Director - Pharma segment, Merck KGaA

10:35 - 11:15

- Panelist: Laura Adams MS, Senior Advisor, National Academy of Medicine
- Regulatory Panelist: Nicolas Löffler-Perez PhD, Data Scientist, Swissmedic
- Panelist: Stacey Tinianov MPH, Patient Advocate, Founder, Advocates for Collaborative Education

11:15 - 11:45

11:45 - 13:15

Networking Coffee Break, Poster Session & Exhibition

Topaz & Topaz Foyer

Session 1: Understanding Artificial Intelligence

Ballraum 2&3

In this session, we will explore the necessary foundations for successfully adopting artificial intelligence, including management and quality of data, organizational competencies and skillsets, and clear and focused adoption strategies. High-quality data is an essential ingredient for AI to robustly produce unbiased and accurate predictions, reliable insights, and effective decisionmaking. Technology and business domain competencies are both equally essential to understand the strengths, weaknesses, and risks of various technologies and ensure these are well-matched to the business processes and the nuanced meanings of the data. Solid adoption strategies will ensure foundations are in place and investments are focused to match business priorities.

Moderator: James R. Francum MBA, CEO, GxP-CC

	The Connections Between AI, Data Management, Data Integrity, and Knowledge Management
11:45 – 12:05	Ballraum 2&3

• Presenter: James L Vesper PhD, MPH, Director, Learning Solutions, ValSource, Inc.

Al-Powered Data: Revolutionizing Real-Time Release and Quality by Design

12:05 - 12:25

Ballraum 2&3

• Presenter: Fabrizio Maniglio , Industry and Business Development Director, Honeywell

On Our Journey From MANUfacturing to SMARTfacturing | Miss the Shift - Miss the Future

Ballraum 2&3 12:25 - 12:45

> Presenter: Michelangelo Canzoneri PhD, Global Head of Group Smart Manufacturing, Merck KGaA Darmstadt, Germany

Q&A, Discussion

Ballraum 2&3

- Moderator: James R. Francum MBA, CEO, GxP-CC
- 12:45 13:15
- Panelist: Michelangelo Canzoneri PhD, Global Head of Group Smart Manufacturing, Merck KGaA Darmstadt, Germany
- Panelist: Fabrizio Maniglio , Industry and Business Development Director, Honeywell
- Panelist: James L Vesper PhD, MPH, Director, Learning Solutions, ValSource, Inc.

LIVE Guided Poster Walk Engage with our Poster Presenters in our Exhibition Hall

Topaz & Topaz Foyer

Moderator: Tom J.B de Man MSc, Head of Omics and Machine Learning R&D, Merck **Transform Your Inspection from Excellent to Genius** Topaz & Topaz Foyer 13:15 - 13:30• Poster Presenter: Christian Haenlein M.Sc., Senior Product Owner, Körber Pharma Inspection RAGulating Compliance: A Multi-Agent Knowledge Graph Approach for Regulatory QA Topaz & Topaz Foyer 13:15 - 13:30 Poster Presenter: Alex Kaplunov , , **DIGITAL CPV - An Implementation Case Study** Topaz & Topaz Foyer 13:15 - 13:30 • Poster Presenter: Maria Batalha MSc, Senior Consultant, ValGenesis 13:15 - 13:30In-Silico Process Development and Scale-Up Simulations for the Manufacturing of a Late-Phase **Vaccine Product** Topaz & Topaz Foyer 13:15 - 13:30• Poster Presenter: Antonio Castro PhD, Senior Scientist, Johnson & Johnson - Innovative Medicine **Traceability Solutions for Smart Manufacturing** Topaz & Topaz Foyer 13:15 - 13:30 • Poster Presenter: Ali Badiei MSc, Head of Digital Supply Chain Solutions, Gerresheimer Al and Automation in Microbiological Environmental Monitoring: Standardization, Savings and **Other Benefits** 13:15 - 13:30 Topaz & Topaz Foyer Poster Presenter: Nicole Schepis . . Networking Lunch Break, Poster Session & Exhibition 13:30 - 14:30 Topaz & Topaz Foyer Session 2: Speed Talks - Enabler for Manufacturing Ballraum 2&3 This dynamic session features concise and impactful "Speed Talks." providing attendees with rapid exposure to essential

Inis dynamic session features concise and impactful "Speed Talks," providing attendees with rapid exposure to essential innovations and best practices shaping the future of pharmaceutical manufacturing. Expert speakers will present focused insights into advanced technologies and methods, including artificial intelligence for trend detection in quality processes, big data and IoT for predictive maintenance, comprehensive digitalization for environmental monitoring, and an overview of PDA Technical Report 22, which covers the latest guidance on equipment qualification and validation. Designed to facilitate quick learning and encourage active participation, this session delivers actionable knowledge and practical strategies that enhance operational efficiency, ensure compliance, and drive continuous improvement in manufacturing processes.

Moderator: Maria Batalha MSc, Senior Consultant, ValGenesis

	Interactive Questionnaire Session
14:30 – 14:45	Ballraum 2&3
	Moderator: Maria Batalha MSc, Senior Consultant, ValGenesis
	Al in Action: NLP & GenAl for Pharma Manufacturing

	14:45 – 14:55	Presenter: Mehran Kamkarhaghighi PhD, Senior Data Scientist, F. Hoffmann-La Roche Ltd From Dougstime to Untime: Bradietive Maintenance for Operational Efficiency.
14:30 – 15:55	14:55 – 15:05	From Downtime to Uptime: Predictive Maintenance for Operational Efficiency Ballraum 2&3 • Presenter: Joel Nuñez , Product Manager / Marketing Manager, Syntegon Telstar
	15:05 – 15:15	Leverage your QC Operational Efficiency Thanks to a Comprehensive Digitalization of your Environmental Monitoring Process to meet the High Standard of Compliance and Optimize Resource Allocation Ballraum 2&3 • Presenter: Florian Morillon, Global solution manager, 3PEnterprise, bioMérieux
	15:15 – 15:25	 Updates on PDA Technical Report 22: Most Relevant Changes of the New Approved Version Ballraum 2&3 Presenter: Patrizia Muscas PhD, Director Sterility Assurance, Global TS/MS (SAT), Eli Lilly and Company
	15:25 – 15:55	 Q&A, Discussion Ballraum 2&3 Moderator: Maria Batalha MSc, Senior Consultant, ValGenesis Panelist: Mehran Kamkarhaghighi PhD, Senior Data Scientist, F. Hoffmann-La Roche Ltd Panelist: Florian Morillon, Global solution manager, 3PEnterprise, bioMérieux Panelist: Patrizia Muscas PhD, Director Sterility Assurance, Global TS/MS (SAT), Eli Lilly and Company Panelist: Joel Nuñez, Product Manager / Marketing Manager, Syntegon Telstar

15:55 - 16:25

Networking Coffee Break, Poster Session & Exhibition

Topaz & Topaz Foyer

Session 3: Artificial Intelligence: From Validation to Compliance

Ballraum 2&3

This session explores the integration of AI and digital solutions in the pharmaceutical industry, focusing on validation and compliance strategies. Presentations will cover practical approaches to managing AI and automation within a cGMP framework, leveraging validation model tools. A case study from a pharmaceutical company will demonstrate how AI and digital technologies enhance process optimization and quality assurance, improving compliance and productivity. Attendees will gain insights into innovative validation strategies, regulatory compliance, and the transformative power of digital technologies in pharmaceutical manufacturing.

Moderator: Sesethu Dowiasch MBA, Life Science Industry Account Manager, Rockwell Automation

Embracing the Digital Revolution: A Strategic Framework for Transforming Pharmaceutical Manufacturing

16:25 - 16:40

Ballraum 2&3

• Presenter: Scott Deckebach MBA, Senior Director, Data Integrity, Governance and Advanced Digital Compliance, Lachman Consultant Services, Inc.

The Integration of AI and GMP in the Pharmaceutical Industry: Advancements, Challenges, and **Regulatory Perspectives**

16:25 – 17:40	16:40 – 16:55	 Presenter: Stefan Marc Pauli PhD, SME Data Science, VTU Engineering
		Enhancing Pharmaceutical Manufacturing with AI - From Process Intelligence to Compliance
		Ballraum 2&3
	16:55 – 17:10	• Co-Presenter: Davide Botta BS Environmental Engineering, Director, Site Lead, Recordati Ireland Ltd
		• Co-Presenter: Maria Zunica , Head of Quality and Regulatory Affairs, Recordati Industria Chimica e Farmaceutica SpA
		Q&A, Discussion
		Ballraum 2&3
		 Moderator: Sesethu Dowiasch MBA, Life Science Industry Account Manager, Rockwell Automation
	17:10 – 17:40	 Panelist: Davide Botta BS Environmental Engineering, Director, Site Lead, Recordati Irelan Ltd
		 Panelist: Scott Deckebach MBA, Senior Director, Data Integrity, Governance and Advanced Digital Compliance, Lachman Consultant Services, Inc.
		Panelist: Stefan Marc Pauli PhD, SME Data Science, VTU Engineering
		• Panelist: Maria Zunica , Head of Quality and Regulatory Affairs, Recordati Industria Chimica e Farmaceutica SpA
	End of Confere	nce Day 1 & Networking Event
7:40 – 21:30	Ballraum 2&3	

wednesday, zi way

CEST Daylight Time (UTC +2:00)

DEOT Daylight II	line (010 12.00)
08:00 – 16:00	Registration Open
	Topaz & Topaz Foyer
	Update of the Interest Group Advanced Manufacturing and Applied Process Digitalization
08:00 - 08:45	Ballraum 2&3
	Moderator: Peter J Makowenskyj MEng, Senior Director of Design Consulting, G-CON
	Welcome Back by the Co-Chairs
09:00 – 09:05	Ballraum 2&3
	Co-Chair: Marilyn Romieux , Strategy Director - Pharma segment, Merck KGaA
	Co-Chair: Timothy W Hsu MHSA International Expert on Health Industry Vice President Industry & Emerging Technologies UNIDO AAMI
	Session 4: With an Eye Towards Digital Operations
	Ballraum 2&3

The pharmaceutical industry is undergoing a digital transformation, leveraging AI, machine learning, and automation to enhance manufacturing efficiency, quality, and compliance. This track explores cutting-edge advancements driving this shift, providing insights into Al and machine learning applications in pharmaceutical manufacturing, the role of operational data in accelerating in-silico process optimization across the product lifecycle, and the latest innovations in sterility testing automation with traceable robotics. These talks offer a forward-looking perspective on digital operations, equipping industry professionals with the knowledge to optimize processes and ensure regulatory alignment.

Moderator: Stephanie Knüppel PhD, Head Sterile Manufacturing & Packaging - E2E Value Stream Lead,

Al and Machine Learning in Pharmaceutical Manufacturing 09:05 – 09:25 Ballraum 2&3 • Presenter: Mónica Perea-Vélez MSc, PhD, CMC Advocacy and Policy Director, GSK

Accelerating In-Silico Process Optimization Across the Product Lifecycle Fuelled by Operational Data

Ballraum 2&3

09:25 - 09:45

- Co-Presenter: Fabian Feidl PhD, CTO and co-founder, DataHow AG
- Co-Presenter: Sesethu Dowiasch MBA, Life Science Industry Account Manager, Rockwell Automation

TraceBot: Sterility Testing Automation With Traceable Robotics

09:45 - 10:05

Ballraum 2&3

• Presenter: Patrick Courtney MBA PhD, Lecturer, King's College London

Q&A, Discussion

Ballraum 2&3

 Moderator: Stephanie Knüppel PhD, Head Sterile Manufacturing & Packaging - E2E Value Stream Lead,

10:05 - 10:35

- Panelist: Patrick Courtney MBA PhD, Lecturer, King's College London
- Panelist: Sesethu Dowiasch MBA, Life Science Industry Account Manager, Rockwell Automation
- Panelist: Fabian Feidl PhD, CTO and co-founder, DataHow AG
- Panelist: Mónica Perea-Vélez MSc, PhD, CMC Advocacy and Policy Director, GSK

10:35 - 11:05

09:05 - 10:35

Networking Coffee Break, Poster Session & Exhibition

Topaz & Topaz Foyer

Session 5: Sustainability

Ballraum 2&3

Join us for an insightful session on sustainability as we explore how AI can drive sustainable operations, while also learning from healthcare and how sustainable digitization is impacting it. Our speakers will share insights on balancing process improvement, both for regulatory compliance and cost savings in manufacturing, with sustainability practices and long-term benefits. This session is perfect for anyone passionate about leveraging technology for a greener, more efficient future.

Moderator: Christian Haenlein M.Sc., Senior Product Owner, Körber Pharma Inspection

Al: The Perfect Tool to Supervise 24x7 Sustainability Aspects in the Site	
- · · · · · · · · · · · · · · · · · · ·	

11:05 – 11:25

Ballraum 2&3

• Presenter: Toni Manzano PhD, CSO and Compliance Officer, Aizon

11:05 - 12:15

The Next Generation of Healthcare: Expanding Access for All

11:25 - 11:45

Ballraum 2&3

• Presenter: Daniel Guedelha, Founder & CEO, Generation Health - GenH

Q&A, Discussion

Ballraum 2&3

11:45 - 12:15

- Moderator: Christian Haenlein M.Sc., Senior Product Owner, Körber Pharma Inspection
- Panelist: Daniel Guedelha, Founder & CEO, Generation Health GenH
- Panelist: Toni Manzano PhD, CSO and Compliance Officer, Aizon

12:15 - 13:15

Networking Lunch Break, Poster Session & Exhibition

Topaz & Topaz Foyer

Closing Plenary Session Part I

Ballraum 2&3

In an era where global health security relies on resilient and agile health product production, the UNIDO International Centre for Health Industry Readiness in Abu Dhabi is poised to become a key driver of regional and global preparedness for future pandemics and emergencies. This session will explore UNIDO's strategic approach to digital transformation in health, emphasizing the Centre's role in enhancing industrial readiness across the MENA region and beyond. Discussions will focus on how advanced manufacturing, digitalization, Fourth Industrial Revolution (4IR) technologies, regulatory harmonization, and technology transfer are shaping the future of regional health industry development. The Centre will serve as a collaborative platform for health regulators, pharmaceutical manufacturers, and global industry leaders, working to strengthen local and regional production capacities while ensuring sustainable, efficient, and high-quality healthcare solutions.

Regulatory Moderator: Timothy W Hsu MHSA, International Expert on Health Industry | Vice President Industry & Emerging Technologies, UNIDO|AAMI

Regional Approach to Digital Transformation in Health

13:15 - 13:35

13:15 - 14:15

• Regulatory Presenter: Nora Markova DPhil, MBA, International Expert on Health Industry, UNIDO

Plenary Discussion

Ballraum 2&3

Ballraum 2&3

- Regulatory Moderator: Timothy W Hsu MHSA, International Expert on Health Industry | Vice President Industry & Emerging Technologies, UNIDO|AAMI
- 13:35 14:15
- Panelist: Daniel Guedelha, Founder & CEO, Generation Health GenH
- Regulatory Panelist: Nora Markova DPhil, MBA, International Expert on Health Industry, UNIDO
- Panelist: Stacey Tinianov MPH, Patient Advocate, Founder, Advocates for Collaborative Education
- Panelist: James L Vesper PhD, MPH, Director, Learning Solutions, ValSource, Inc.

14:15 - 14:45

Networking Coffee Break, Poster Session & Exhibition

Topaz & Topaz Foyer

Passport Raffle Announcement

14:45 - 14:50

Ballraum 2&3

Moderator: Melanie Decker , , Parenteral Drug Association

Closing Plenary Session Part II

Ballraum 2&3

Regulatory Moderator: Timothy W Hsu MHSA, International Expert on Health Industry | Vice President Industry & Emerging Technologies, *UNIDO*|*AAMI*

		Interactive Round Table Session
		Ballraum 2&3
14:50 – 16:25	14:50 – 16:25	 Moderator: Timothy W Hsu MHSA, International Expert on Health Industry Vice President Industry & Emerging Technologies, UNIDO AAMI
		Moderator: Marilyn Romieux , Strategy Director - Pharma segment, Merck KGaA
		Conference Summary from the Co-Chairs
		Ballraum 2&3
	16:25 – 16:35	Co-Chair: Marilyn Romieux , Strategy Director - Pharma segment, Merck KGaA
		 Co-Chair: Timothy W Hsu MHSA, International Expert on Health Industry Vice President Industry & Emerging Technologies, UNIDO AAMI

16:35 - 16:40

Ballraum 2&3

Committee Member: Falk Klar PhD, General Manager, Vice President Europe, Parenteral Drug Association

16:40 - 16:40 **End of Conference**