

## Training Course Agenda

## PDA EU00161 Single-Use-Systems – A New Age of Drug Making

CEST

Day 1, 09 May 2023	
13:00	Arrival & Lunch
14:00	Campus and Application Center Tour
19:00	Dinner at Restaurant Mazzoni Cucina e Vino Hermann-Rein-Str. 2 37075 Göttingen
Day 2, 3	L0 May 2023
8:30	Introduction of Participants, Safety Briefing
9:00	Introduction to Single-Use Bioprocessing
9:45	GMP Update on SUS (part 1)         • Current GMP Regulation         • FDA Requirements         • Technicalal Guidelines         • Regulatory Expectations
10:30	Coffee Break
10:45	GMP Update on SUS (part 2) <ul> <li>New Annex 1</li> </ul>
11:15	<ul> <li>Hands-on Exercise 1 (Cleanroom) (incl. 5 min lecture)</li> <li>Experiment on Advantages of SUS</li> <li>Gowning</li> </ul>
12:15	Lunch Break
13:15	<ul> <li>Basics in Single-Use Bioprocessing Focus on Bags</li> <li>Manufacturing of Single-use Consumables</li> <li>Different Bag Functionalities</li> </ul>
14:15	Coffee Break
14:30	Hands-on Exercise 2 (Cleanroom)         • Connect Opta/AQ and Welding         • Disconnect Clipster and Sealer         • Connection/Disconnection
16:30	Wrap-up Day 1
17:00	End of Day 1





19:00	Dinner at Restaurant Bullerjahn im Ratskeller Göttingen Markt 9 37073 Göttingen	
Day 3, 11 May 2023		
8:30	Sensors and Automation in Single-Use-Systems: Overview and Demonstration	
9:15	Hands-on Exercise 3 <ul> <li>Overview Bag Types</li> </ul>	
10:15	Coffee Break	
10:30	<ul> <li>Data Integrity, Data Analysis, and Monitoring <ul> <li>Regulatory Requirements and Guidelines</li> <li>ALCOA</li> <li>Data Integrity for Computer, Paper, and Hybrid Systems</li> <li>Control of Meta data</li> <li>Data Integrity Strategies for Compliance</li> <li>Checking for Data Integrity Issues in Practice</li> </ul> </li> </ul>	
11:30	Experimental Approach  Lunch Break	
12:15	<ul> <li>Filtration &amp; CCT</li> <li>Filter Integrity Testing in SUS</li> <li>Bag Assembly Integrity Testing</li> </ul>	
13:15	Hand-on Exercise 4 (Cleanroom) <ul> <li>Filter Integrity Testing</li> </ul>	
14:00	Coffee Break	
14:15	<ul> <li>Filter Integrity Testing fault handling – GMP view</li> <li>GMP requirements</li> <li>Pre- and Post-use integrity testing</li> <li>Impact of new EU GMP Annex 1 requirements</li> </ul>	
14:45	<ul> <li>GMP Practical Session</li> <li>Failed Filter IT – what to do under GMP?</li> <li>What are the Differences between Media Preparation and Final Filtration of a Drug Product prior Filling?</li> <li>'Bioburden Reduction' vs. 'Sterile Filtration'</li> </ul>	
15:30	Data Recording & Evaluation <ul> <li>Data Logging</li> <li>Batch Monitoring</li> </ul>	
16:00	Wrap-up	
16:30	End of Training Course	