

# Phenomenex Method optimization and HPLC troubleshooting Seminar

## Agenda 13.10.2023

09:30 – 10:00 Registration

10:00 – 11:30 **Part 1: Optimizing validated methods to enhance lab productivity, improve method stability, and reduce costs**

- Drivers and Considerations for Optimizing Validated Methods
- Ph. Eur and USP – General Information
- Choose of Suitable Columns for Monograph Methods
- Harmonisation Ph. Eur. Chapter 2.2.46 and USP 621
- Adjustment of Chromatographic Conditions
- Regulations of Isocratic and Gradient Elution in HPLC
- Criteria for System Suitability

11:30 – 11:45 Coffee break

11:45 – 13:15 **Part 2: Optimizing validated methods to enhance lab productivity, improve method stability, and reduce costs**

- Method Optimization via Variation of Particle Size, Particle Morphology, Column length and Flow Rate
- From HPLC to UHPLC
- Several Case Studies Detailing the Optimization of Pharmacopoeia Methods

13:15 – 14:15 Lunch break

14:15 – 15:45 **Part 1: HPLC Troubleshooting**

1. General Approach
  - General Troubleshooting Approach
  - System Problems & Preventive Maintenance
  - General Chromatographic Problems
  - Peak Shape Issues
2. System Problems and Preventive Maintenance - All parts of the HPLC System
3. General Chromatographic Problems
  - Pressure
  - Leaks
  - Variable Retention Times
  - Quantitation and Data Quality
  - Baseline

15:45 – 16:00 Coffee break

16:00 – 17:00 **Part 2: HPLC Troubleshooting**

4. Peak Problems
5. Questions



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