
Masterclass 5: Integration & Calibration- 1 day

0900-1100

Principles of Integration

- Quantification
- Units
- Data collection frequency
- Data System Resolution
- Signal range
- Raw data and processed data

Integration algorithm

Handling fused peaks

Peak groups

Elimination of small peaks

1115-1300

Peak width and Peak Threshold

Timed events

Peak Identification

Peak Table parameters

Understanding Noise

Sources of Noise

Reducing Noise

Noise Analysis

Calibration

- Types of calibration
 - External Standard Calibration- single point and multi point
 - Internal Standard calibration
 - Standard Addition
 - Correlation Factor

1400-1700

Calibration range

Should a calibration curve be a straight line Preparation of calibration standards?

Bracketed Calibration

Use of zero in a calibration curve

Factors that threaten the integrity of a calibration

Confidence in results

Errors Analysis

- Random and Systematic Errors
- Accuracy and precision
- Analysis of random errors in HPLC

System Suitability Testing

Discussion and Questions