

## **IONSCAN<sup>®</sup>-LS Training Course Agenda**

**Class times: 9:00am-5:00pm**

- **Module 1: Introduction, General Operation of IONSCAN<sup>®</sup>-LS**
  - Theory of ion mobility spectrometry (IMS)
  - How the IONSCAN Works
  - Plasmagram interpretation
  - Daily start-up and shut-down
  
- **Module 2: IM-Station Software**
  - 21 CFR Part 11 compliance
  - User accounts and access levels
  - Electronic signatures
  - Audit Trail
  - Logging In
  - Selecting, viewing and editing methods
  - Collecting data
  - Data Reduction
  
- **Lab Exercise 1**
  - Logging in
  - Manual Sample Analyses
  - Programming Peaks
  
- **Module 3: Autosampler Operation**
  - Autosampler Set Up
  - Programming the Autosampler
  - Autosampler System Parameters
  - Autosampler Method Parameters
  - Operating the Autosampler
  - Appendix: Syringe Volume Calibration
  
- **Lab Exercise 2**
  - Autosampler Operations
  - Data Reduction

- **Module 4: HPI Operation**
  - HPI Operation
  - HPI System Parameters
  - HPI Method Parameters
  - Running an HPI Method
  - Appendix: Creating an HPI Bakeout Method
  
- **Lab Exercise 3**
  - HPI Operation
  
- **Module 5: Analysis Optimization with Teflon<sup>®</sup> Substrate**
  - Basic method development steps
  - How to Improve Precision
  - Limit Test
  - How to Handle Interferences
  - Method Transfer Considerations
  
- **Module 6: Analysis Optimization with HPI**
  - HPI Method Parameter Toolbox
  - Organic solvents
  - Aqueous samples
  - Separating interferents
  - Split injections
  - HPI Method Optimization
  
- **Lab Exercise 4**
  - Negative ion mode, programming a peak
  
- **Module 7: Safety, Maintenance and Troubleshooting**
  - Safety
  - Maintenance of IONSCAN<sup>®</sup>-LS
  - Maintenance of Autosampler
  - Maintenance of HPI
  - Troubleshooting Guide
  
- **Lab Exercise 5**
  - Maintenance
  - Radiation Leak Testing
  - Method Development
  - Q&A