



# 2024 North America CUSTOMER TRAINING

January - June



PerkinElmer brings you the best laboratory and applications service in the industry, the quality consumables you need to optimize performance, and **stellar customer training** – when and where you need it.



			CENTERS OF EXCELLENCE		
Course	Course #	Virtual Training	Shelton	Downers Grove, IL	Fort Collins, CO
AA Flame Operator Training	N0205001		Feb 26-27		
AA Graphite Furnace Operator Training	N0200017		Feb 28-Mar 1		
AA Advanced Furnace Operator Training	N0200024		<a href="#">email for availability</a>		
ICP-OES Avio/Optima Operator Training	N0236068	Feb 12-13 March 20-21 April 18-19 June 6-7			
ICP-OES Avio/Optima Operator Training	N0205010		March 11-13 May 6-8	April 22-24 June 4-6	April 1-3
ICP-OES Avio/Optima Advanced Operator Training	N0200027		March 14-15 May 9-10	April 25-26	April 4-5
ICP-MS NexION 300/350/1000/1100/2000 Operator	N0236069	Jan 16-18 Feb 21-23 March 13-15 May 29-31 June 18-20			
ICP-MS NexION 300/350/1000/1100/2000 Operator Training	N0200193		March 18-22	Jan 29-Feb 2 March 4-8	Feb 12-16
ICP-MS NexION 2200 Operator Training	N0239888		May 13-17		
ICP-MS NexION 5000 Operator Training	N0236085		April 1-5	June 24-28	
GC Fundamentals Operator Training	N0200407		<a href="#">email for availability</a>		
GC-MS Clarus Operator Training	N0200417		April 16-19	Feb 27-Mar 1	
GC-MS 2400 Operator Training	N0239857		May 14 – 17		
LC Fundamentals Operator Training	N0200501		<a href="#">email for availability</a>		
LC-MS/MS QSight 3Q Operator Training	N0233071		<a href="#">email for availability</a>		
LC-MS/MS QSight 3Q Operator Training	N0233042		<a href="#">email for availability</a>		
CDS TotalChrom Principles	N0201043		<a href="#">email for availability</a>		
FT-IR Intro to Spectroscopy	N0200126		<a href="#">email for availability</a>		
FT-IR Spectral Interpretation	N0200152		<a href="#">email for availability</a>		
TEA Intro to Differential Scanning Calorimetry (DSC)	N0200607		<a href="#">email for availability</a>		

**REGISTER FOR TRAINING  
IN 3 EASY STEPS AND  
SECURE YOUR SPOT!**

- 1 [Click to create a user profile >](#)
- 2 [Click to email copy of Sales Order Confirmation \(SOC\) with first and last name, email, class name, date, and desired location.](#)
- 3 Happy training



# 2024

## CUSTOMER TRAINING

### Course Descriptions and Objectives



PerkinElmer brings you the best laboratory and applications service in the industry, the quality consumables you need to optimize performance, and **stellar customer training** – when and where you need it.



#### Atomic Spectroscopy

Atomic Spectroscopy courses provide the analyst with the knowledge and skills needed for operating, optimizing and troubleshooting including:

- Technical introduction/features
- Setting up element parameter file
- Background correction
- Optimization and calibration
- Flame emissions analysis
- Interferences and Matrix Modifiers
- Maintenance and Quality Control

#### Inductively Coupled Plasma Optical Emission Spectrometry

ICP-OES courses provide analysts with emission theory and the knowledge to develop a method for analysis of complex samples. Courses include the following topics:

- Identifying interferences
- Inter-element correction factors
- Using internal standards
- Multicomponent spectral fitting

#### ICP-MS Inductively Coupled Plasma Mass Spectrometry

Courses will cover the NexION series of ICP-MS along with the following topics:

- Theory and method development
- Hardware overview
- NexION software training
- Optimization and instrument setup
- Universal Cell Technology (UCT)
- Data acquisition, visualization, reporting
- Troubleshooting and maintenance
- Reporting and data exporting
- Interference and correction tools

#### Gas Chromatography

GC courses provide an overview of the basic principles, hardware, and operational techniques including:

- Basic principles of GC
- Starting a chromatograph
- Hardware, gases, injectors, column installation, flow measurements detectors
- Setup of GC and data handling
- Qualitative and quantitative analysis
- Principles and optimization of data-handling parameters

#### GC/MS

GC/MS courses provide users with orientation to the hardware, software, and experimental requirements including:

- System maintenance and software troubleshooting procedures
- Connecting the GC and MS
- Spectral data processing and cold starting the instrument
- Library searching, Instrument Tuning
- Method for construction and data analysis
- Instrument control, data acquisition
- MS method for quantization and GC control method

#### Liquid Chromatography

LC courses provide an overview of the principles and practice of high-performance liquid chromatography including:

- History and theory of LC
- Modes of HPLC
- Hardware components
- Peak identification and method development
- Application overview
- Troubleshooting and maintenance
- Basic chromatographic parameters
- Hardware familiarization

#### LC/MS

LC/MS courses cover an overview of the fundamentals of mass spectrometry along with the following:

- QSight technology
- SimplicityChrom™ software
- Basic applications, maintenance, technology
- Creating LC/MS/MS methods
- Mass calibration
- Setting up batches
- Acquiring data, data analysis
- Demonstration data using SimplicityChrom™ software

#### CDS Chromatography Data Systems

CDS courses provide users with a fundamental knowledge of the theory and operation including:

- System overview
- PerkinElmer Intelligent Interface
- Software configuration
- Peak detection and identification
- Generation and calibration of method files
- Data acquisition
- Graphic reprocessing
- Comparing chromatographs
- Generation of sequences

#### Molecular Spectroscopy

Molecular Spectroscopy courses provide instruction in theory, instrumentation, and maintenance for both reflectance and transmission studies along with the following:

- IR theory and advantages
- Instrument parts, maintenance, validation, troubleshooting
- Software operation
- Sample preparation using the UATR
- Casting films on IR transparent windows
- KBr pellet making, Gas cell preparation