Customer Classroom Training Program 2020

OneSource
Laboratory Services

EDUCATION SERVICES TO EMPOWER YOUR LAB

PerkinElmer®
For the Better
YOUR BENEFIT FROM TRAINING

Our classroom training offers an ideal setting for learning how to get the best possible performance from your instrument. Free from everyday distractions, you'll receive hands-on experience in a laboratory environment complete with the latest equipment, software and accessories. You'll receive guidance from expert faculty with comprehensive instrument knowledge and experience. You'll also have the opportunity to network with other participants to problem solve.

Training courses are offered at PerkinElmer Centers of Excellence, conveniently located throughout the United States and Canada. We maintain a small class size to ensure you receive individual attention and ample hands-on instrument use – everything you need for focused learning that can lead to increased productivity.

Participants are accepted on a first-come, first-served basis, so reserve your spot soon.

UNABLE TO GET AWAY FROM YOUR LAB?

Contact us to discuss bringing the training directly to you – saving you time and travel expenses. Email OnsiteTraining@perkinelmer.com for more information.
# 2020 Calendar

## Atomic Spectroscopy

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ATOMIC ABSORPTION (AA)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flame Atomic Absorption</td>
<td>N0205001</td>
<td>2</td>
<td>$1,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jan 20-21</td>
</tr>
<tr>
<td>Graphite Furnace Atomic Absorption</td>
<td>N0200017</td>
<td>3</td>
<td>$2,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jan 22-24</td>
</tr>
<tr>
<td>Advanced Furnace AA</td>
<td>N0200024</td>
<td>2</td>
<td>$1,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Call for Availability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDUCTIVELY COUPLED PLASMA (ICP-OES)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inductively Coupled Plasma</td>
<td>N0205010</td>
<td>3</td>
<td>$2,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jan 27-31, Feb 25-27, Mar 16-18, Apr 20-24, Jun 8-12</td>
</tr>
<tr>
<td>Advanced ICP Training</td>
<td>N0200027</td>
<td>2</td>
<td>$1,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar 19-20, May 14-15, Jun 4-5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICP MASS SPECTROMETRY (ICP-MS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NexION® ICP-MS</td>
<td>N0200193</td>
<td>5</td>
<td>$3,310</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jan 13-17, Feb 3-7, Mar 23-27, Jun 8-12</td>
</tr>
</tbody>
</table>

## Chromatography

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GAS CHROMATOGRAPHY (GC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Gas Chromatography</td>
<td>N0200407</td>
<td>3</td>
<td>$2,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Feb 26-28, Jan 22-24, Jun 1-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GC MASS SPECTROMETRY (GC/MS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarus® GC/MS Operator</td>
<td>N0200417</td>
<td>4</td>
<td>$2,840</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar 2-5, Jan 28-31</td>
</tr>
<tr>
<td>Torion® GC/MS Basic Operations</td>
<td>N0239010</td>
<td>3</td>
<td>$2,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Call for Availability</td>
</tr>
<tr>
<td>Torion® GC/MS Advanced Operations</td>
<td>N0239011</td>
<td>5</td>
<td>$3,310</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Call for Availability</td>
</tr>
<tr>
<td>Torion® GC/MS Advanced Operations and Maintenance for Distributors</td>
<td>N0239012</td>
<td>10</td>
<td>$6,600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Call for Availability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIQUID CHROMATOGRAPHY (LC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundamental LC</td>
<td>N0200501</td>
<td>2</td>
<td>$1,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Call for Availability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LC MASS SPECTROMETRY (LC-MS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QSight® Triple Quad LC/MS/MS</td>
<td>N0233042</td>
<td>5</td>
<td>$3,310</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Call for Availability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHROMATOGRAPHY DATA SYSTEMS (CDS)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TotalChrom® Principles</td>
<td>N0201043</td>
<td>3</td>
<td>$2,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mar 17-19</td>
</tr>
</tbody>
</table>

## Molecular Spectroscopy

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INFRARED SPECTROSCOPY (IR)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to FT-IR Spectroscopy</td>
<td>N0200126</td>
<td>2</td>
<td>$1,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Feb 11-12</td>
</tr>
<tr>
<td>Spectral Interpretation</td>
<td>N0200152</td>
<td>2</td>
<td>$1,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Feb 13-14</td>
</tr>
</tbody>
</table>

## Thermal/Elemental Analysis

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course No.</th>
<th>Days</th>
<th>Price</th>
<th>Atlanta, GA</th>
<th>Chicago, IL</th>
<th>Fort Collins, CO</th>
<th>Shelton, CT</th>
<th>Toronto, CAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intro to Differential Scanning Calorimetry</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to Thermogravimetric Analysis</td>
<td>N0200605</td>
<td>2</td>
<td>$1,520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Call for Availability</td>
</tr>
</tbody>
</table>
Atomic Absorption

Flame Atomic Absorption

This two-day course provides the analyst with the knowledge and skills needed for optimizing and troubleshooting basic flame atomic absorption. Laboratory exercises include experiments in controlling interferences as well as procedures for developing methods. WinLab and Syngistix™ software will also be covered.

**Prerequisite**
The analyst should have spent at least one month becoming familiar with the instrument and should have a working knowledge of Microsoft® Windows and AA WinLab software before attending this course.

Graphite Furnace Atomic Absorption

This three-day course will provide the analyst with the knowledge necessary to set up, run, troubleshoot, and operate the graphite furnace. A considerable portion of this course is devoted to understanding the capabilities of the WinLab and Syngistix™ software used to operate the system. The course begins with the basics of graphite furnace atomic absorption (GFAA) and concludes with the most recent developments in the technique including simultaneous graphite furnace analysis.

**Prerequisite**
The student should have spent at least one month becoming familiar with the instrument and should have a working knowledge of Microsoft® Windows and AA WinLab software before attending this course.

Advanced Furnace AA

This two-day laboratory intensive course, which will focus on how to handle difficult samples. The modifier and its role in solving analytical problems will be discussed in detail. The class will examine complex matrices, focusing on peak plot interpretation as a means to method development. Techniques such as QA/QC as a means of verifying the accuracy of data will be discussed. Class participants will be expected to have a good working knowledge of the software as this will not be addressed in the course. This course is not for the novice. The basic techniques of graphite furnace and an extensive knowledge of the Microsoft® Windows-based software will be expected.

**Prerequisite**
The student should have completed course N020-0017 (basic Graphite Furnace) or have a minimum of six months experience with graphite furnace analysis and the WinLab software before attending this course.
ATOMIC SPECTROSCOPY

Inductively Coupled Plasma

N020-5010 | 3 Days | Tuition $2,150 (if not included w/instrument purchase)

This three-day comprehensive course comprises a study of basic emission theory, radial versus axial viewing, ICP hardware, and WinLab 32 and Syngistix software. All lab experiments will be conducted on current models of the PerkinElmer ICP series.

**Prerequisite**
Analysts should have spent at least one month becoming familiar with the instrument and should have a working knowledge of WinLab 32 and/or Syngistix software before attending this course.

**Lectures and Labs**
- Theory of atomic emission
- Plasma performance
- Identifying and overcoming interferences
- ICP component
- Data reprocessing
- Radial vs. axial viewing
- Method development
- Background correction
- Multicomponent Spectral Fitting (MSF)
- Interfering Element Correction (IEC)
- Echelle optical system maintenance
- Parameter optimization

Inductively Coupled Plasma Series

N020-0027 | 2 Days | Tuition $1,520

Advanced Optima ICP

This two-day course provides analysts with the knowledge needed to develop a method for ICP-OES analysis of complex samples. This lab intensive course covers when and how to use internal standards, validation requirements, inter-element correction factors (IECs) and multi-component spectral fitting (MSF) effectively to obtain accurate results. This course is not recommended for beginners.

**Prerequisite**
The student should have either completed course N020-5010 (ICP with ICP WinLab/ Syngistix software) or be familiar with the following topics:

a) ICP OES emission and hardware fundamentals.
b) General instrument operation (igniting and extinguishing the plasma, controlling the instrument hardware, performing torch alignment)
c) Method editor, conducting analysis, and reprocessing data.
d) Fundamentals of interferences and background correction.

**Lectures and Labs**
- Identifying interferences
- Inter-element correction factors
- Using internal standards
- Multicomponent spectral fitting
**Inductively Coupled Mass Spectrometry**

N020-0193  |  5 Days  |  Tuition $3,310 (if not included w/instrument purchase)

<table>
<thead>
<tr>
<th>NexION ICP-MS Instrumentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>This five-day course will cover the NexION® series of ICP-MS. This course will be a combination of classroom lectures and hands on laboratory experiments and exercises. The items covered will consist of the following:</td>
</tr>
<tr>
<td>• ICP-MS theory and method development</td>
</tr>
<tr>
<td>• Overview and discussion of the hardware of the</td>
</tr>
<tr>
<td>• NexION/Syngistix software training</td>
</tr>
<tr>
<td>• Discussion on optimization and setup of the instrument</td>
</tr>
<tr>
<td>• Introduction into the optimization and the use of</td>
</tr>
<tr>
<td>• Universal Cell Technology (UCT)</td>
</tr>
<tr>
<td>• Troubleshooting, and maintenance</td>
</tr>
<tr>
<td>• Reporting and data exporting</td>
</tr>
</tbody>
</table>

**Prerequisite**

Students should have spent at least one month becoming familiar with the instrument, and should have a working knowledge of the software before attending this course.

*An experiment on how to use the autosampler will be covered in class however ESI Autosampler material will NOT be covered.*

Also as part of this course material, appropriate lab exercises will be conducted that are related to the discussions held. Laboratory experiments will be conducted to show how to set up, optimize and maintain the ICP-MS instrument. In addition, data will be collected by means of various analytical methods available with this technique. All lab experiments will be conducted on the NexION models of ICP-MS instruments.
Liquid Chromatography

N020-0501  |  2 Days  |  Tuition $1,520

**Fundamental Liquid Chromatography**

For the beginner, this two-day introduction to liquid chromatography provides an overview of the principles and practice of high-performance liquid chromatography (HPLC). The topics covered are basic chromatographic terminology, modes of HPLC (normal and reversed-phase, size exclusion, and ion exchange chromatography), instrumentation, peak identification and method development, a brief applications review, and routine maintenance and troubleshooting.

**Prerequisite**
The student should have spent at least one month becoming familiar with the instrument.

N020-1043  |  3 Days  |  Tuition $2,150

**TotalChrom Principles of Operation**

This three-day lecture and lab course presents users of TotalChrom™ Workstation and Client/Server with a fundamental knowledge of the theory and operation of the software, basic maintenance, and troubleshooting. Discussion and hands-on exercises emphasize acquiring data, developing quantitative methods, and reprocessing data. This course is for key operators of laboratories who need formal product training or operators who need more comprehensive training than that supplied by on-site familiarization courses.

**Prerequisite**
A fundamental understanding and/or experience using the Microsoft® Windows® 95, 98 or 2000 operating systems are strongly recommended for this course. Thirty to sixty days of product usage before the class is recommended.

**Lectures and Labs**

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

N020-0407  |  3 Days  |  Tuition $2,150

**Fundamental Gas Chromatography**

This three-day course provides an overview of the basic principles, hardware, and operational techniques used in gas chromatography, along with column overview.

**Prerequisite**
The student should have spent at least one month becoming familiar with the Clarus instrument.

*Note: Students in need of detailed instruction using TotalChrom software should attend the appropriate Chromatography Data Systems course.*

TotalChrom Principles will not be included in this course.

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

GC Mass Spectrometry

N020-0417  |  4 Days  |  Tuition $2,840 (if not included w/instrument purchase)

**GC-MS Operator**

This four-day course introduces new Clarus® GC/MS and users to gas chromatography/mass spectroscopy (GC/MS) and gives them an orientation to the hardware, software, and experimental requirements to accomplish successful system operation. Laboratory exercises provide an opportunity to carry out the main operations described in the lecture material.

**Prerequisite**
Students are required to have completed one of the PerkinElmer gas chromatography training courses, or to certify a history of extensive GC experience. The student will also be required to have at least one month of experience with an installed and operating Clarus MS system.

**Lectures and Labs**
- System maintenance and software troubleshooting procedures
- Connecting the GC and MS
- Spectral data processing and cold starting the instrument
- Library searching
- Tuning the instrument
- Developing a method for construction and data analysis
- Instrument control and data acquisition
- Developing a Clarus MS method for quantization and a GC control method
- General maintenance
GC Mass Spectrometry

N020-9010  |  3 Days  |  Tuition fee $2,150

Torion GC/MS Basic Operations

This three-day class will cover basic operations of the Torion T-9 Portable GC/MS system. Topics will include:
- Setting up the instrument for laboratory or field use
- Basic SPME sampling techniques for Gas and liquid samples
- Start up and preparation
- Conducting Performance Validation runs to ensure correct operation of the system
- Basic data viewing and analysis using Chromion Software
- Very basic maintenance for the T-9 GC/MS and SPME Custodion

N023-9011  |  5 Days  |  Tuition $3,310

Torion GC/MS Advanced Operations

This five-day class will cover advanced operations of the Torion T-9 Portable GC/MS system. Topics will include:
- Advanced data analysis using Chromion software
- Building custom target lists and unknown libraries in Chromion
- Air Sampling using the Custodion Needle Trap and Clarion air pump
LC Mass Spectrometry

Prerequisite
Students are required to have basic knowledge on mass spectrometry and chromatogram. It would be ideal to have LC-MS working experiences including LC and MS method development. The students are also required to have at least one month of experience on the installed and operating Qsight LC-MS system.

Lectures and Labs
Overviews including the fundamentals of mass spectrometry, Qsight technology, Simplicity software, basic applications, and basic maintenance and troubleshooting. Hands-on practices including instrument tuning and calibration, Qsight Acquisition and Simplicity software familiarization, method development, sample preparation and data analysis, and basic maintenance and troubleshooting.
## Infrared Spectroscopy

### Introduction to FT-IR and Spectrum Software

This two-day fundamental course provides instruction in theory, instrumentation, maintenance, data acquisition software, sample preparation and the use of various accessories, enabling students to acquire good quality spectra by either reflectance or transmission. The course will cover instrument maintenance, calibration, and the preparation of solids, liquids, and pastes for both reflectance (Universal Attenuated Total Reflectance UATR), and transmission studies. The use of the UATR accessory will be the main focus on day two along with additional techniques for sample preparation.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Duration</th>
<th>Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>N020-0126</td>
<td>2 Days</td>
<td>$1,520</td>
</tr>
</tbody>
</table>

### Lectures and Labs

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

### IR Spectral Interpretation for Beginners

This two-day infrared interpretation course provides students with basic knowledge of the location of absorption bands and the chemical bonds present that are the cause of these absorptions. Various examples of infrared (IR) spectra representing a wide variety of chemical classifications both aliphatic and aromatic will be shown. Each sample spectra discussed will focus on the chemical bonds present and the corresponding infrared absorption. The student will learn the most direct way to interpret an IR spectrum and how to compare an unknown spectrum with known reference spectra. Exercises will focus on a displayed spectrum and the chemical bonds present that cause an infrared absorption in a particular region of the spectrum.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Duration</th>
<th>Tuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>N020-0152</td>
<td>2 Days</td>
<td>$1,520</td>
</tr>
</tbody>
</table>
Thermal Analysis

N020-0607  |  2 Days  |  Tuition $1,520

Introduction to Differential Scanning Calorimetry (DSC 4000, 6000 or 8000, Diamond DSC and Jade)

This course is for students who have recently started using the DSC 4000, 6000 or 8000, Diamond™ DSC or Jade instruments. The practical aspects of operation and maintenance as well as introductory theory are covered in the course. In addition, the common functions of the Pyris™ software and their application to the use of the various power compensated DSC instruments will be demonstrated.

Prerequisite
The student should have spent at least one month becoming familiar with the instrument.

Lectures and Labs
System configuration/overview
Setup
Baseline optimization
Calibration
Maintenance and troubleshooting
Practical laboratory experiments
Generic applications
Data handling
Operating variables
Safety

*The Pyris Player and the TGA Autosampler will not be covered in this course.

N020-0605  |  2 Days  |  Tuition $1,520

Introduction to Thermogravimetric Analysis (TGA 4000, TGA7 and Pyris 1 TGA)

This course is designed for people who have recently started using TGA 4000, TGA7 and Pyris™ 1 TGA. The practical aspects of operation and maintenance as well as introductory theory are covered.

In addition, the course covers the common functions of the standard Pyris software and applications of the TGA7 and Pyris 1 TGA.

Prerequisite
The student should have spent at least one month becoming familiar with the instrument.

Lectures and Labs
System configuration/overview
Setup
Calibration
Sample handling
Maintenance and troubleshooting
Practical laboratory experiments
Generic applications
Data handling
Operating variables
Safety

*The Pyris Player and the TGA Autosampler will not be covered in this course.
Customer Classroom Training Program - 2020

Training Locations - Life and Analytical Sciences

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta, Georgia</td>
<td>PerkinElmer, Inc. 11695 Johns Creek Parkway</td>
<td>Tel: (800) 762-4000 option 3, then option 4</td>
</tr>
<tr>
<td></td>
<td>Johns Creek, GA 30097</td>
<td>Fax: (203) 944-4902</td>
</tr>
<tr>
<td>Chicago, Illinois</td>
<td>PerkinElmer, Inc. 2651 Warrenville Road</td>
<td>Tel: (800) 762-4000 x3</td>
</tr>
<tr>
<td></td>
<td>Downers Grove, IL 60515</td>
<td>Fax: (203) 944-4902</td>
</tr>
<tr>
<td>Fort Collins, Colorado</td>
<td>PerkinElmer, Inc. 1350 Center Ave</td>
<td>Tel: 970-491-0424 ext 9 (voicemail)</td>
</tr>
<tr>
<td></td>
<td>Fort Collins, CO 80521</td>
<td>Tel: 718-813-2354</td>
</tr>
<tr>
<td>Shelton, Connecticut</td>
<td>PerkinElmer, Inc. 710 Bridgeport Avenue</td>
<td>Tel: 800-762-4000 x3</td>
</tr>
<tr>
<td></td>
<td>Shelton, CT 06484-4794</td>
<td>Fax: 203-944-4902</td>
</tr>
<tr>
<td>Toronto, Canada</td>
<td>PerkinElmer, Inc. 151 Charles St W</td>
<td>Tel: 519-804-2240</td>
</tr>
<tr>
<td></td>
<td>Kitchener, ON N2G 1H6</td>
<td></td>
</tr>
</tbody>
</table>

Customer Training/How to Enroll

Please mail or fax the completed enrollment form to:

For Canada/US Enrollment
PerkinElmer, Inc.
710 Bridgeport Avenue
Shelton, CT 06484
Tel: (800) 762-4000 option 3, then option 4
Fax: (203) 944-4902
For more information please call (800) 762-4000 x3
(outside US) or fax (203) 944-4902.

Registration
Purchase order or credit card payments must accompany the registration. A confirmation email will be sent within 48 hours of receipt of enrollment. If the class you have requested has been filled, a training representative will contact you to advise you of alternate class availability and place you on a waiting list to fill any late cancellations.

To register by phone:
Contact the Training Center (800) 762-4000, option 3, then option 4 with course request and payment information.

Please carefully review all payment terms and conditions listed below.

Course Agreement/Refund Policy

Cancellation
PerkinElmer may cancel or reschedule courses up to 14 days prior to the start date if the minimum enrollment is not met. A full refund of the tuition fee will be provided if this happens. If air travel is required, we discourage the purchase of non-refundable tickets.

PerkinElmer is not responsible for any travel expenses incurred due to a class cancellation.

Our refund policy regarding a student’s cancellation from a class is as follows:

- Up to 14 days prior to the course: Full Refund
- Less than 14 days: No Refund (customer may schedule alternate date)

All cancellations must be made with the training administration office directly. For all training inquiries or cancellation, please contact us at (800) 762-4000, option 3, then option 4.

Payment
Pricing is quoted in US Dollars. Payment is required upon enrollment. Purchase order and credit cards accepted. If paying by purchase order, a faxed copy of the purchase order must be provided during course enrollment.

PerkinElmer’s OneSource® laboratory services leverage deep scientific knowledge and expertise in the development of the most comprehensive suite of scientific laboratory services, from instrument maintenance and enterprise solutions to scientific consulting services to optimize laboratory efficiency. Discover our integrated approach and take advantage of an ideal set of tools to help empower your science and drive your business.

For more information, please visit www.PerkinElmer.com/OneSourceTraining

For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

Copyright ©2019, PerkinElmer, Inc. All rights reserved. PerkinElmer® is a registered trademark of PerkinElmer, Inc. All other trademarks are the property of their respective owners.
CLASSROOM TRAINING COURSE ENROLLMENT FORM

Email application to: ustraining@perkinelmer.com
PerkinElmer will not guarantee seating without purchase order or credit card for payment. PH: (800) 762-4000, option 3, then option 4. (US/Canada only) / FAX: (203) 944-4902

NAME ________________________________

PHONE ___________________________ FAX ___________________________ EMAIL ___________________________

COMPANY ______________________________

ADDRESS ______________________________

CITY/TOWN ___________________________ STATE/COUNTY ___________________________ ZIP/POSTAL CODE ___________________________

EXPERIENCE WITH PERKINELMER PRODUCTS ___________________________ # OF YEARS ___________________________

DIETARY REQUIREMENTS ______________________________

*PerkinElmer reserves the right to cancel a course if the minimum requirement is not met. Two (2) weeks minimum notice will be given.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Course Date</th>
<th>Course Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

METHOD OF PAYMENT: **Payment must be submitted UPON registration.
Hard copy purchase orders must be submitted to 203-944-4902 (001 203-944-4902 Europe). PerkinElmer cannot guarantee seating without payment.

__________________________ BILL MY COMPANY USING PURCHASE ORDER NUMBER ___________________________
(Copy of purchase order MUST be included with registration in order to guarantee a seat in the class)

__________________________ CREDIT CARD (circle one) MC VISA AMEX ___________________________
Exp.Date: _____________ Number: ___________________________

(Credit card information MUST be supplied upon registration).
Name as it appears on card: ____________________________________________________________________

__________________________ TRAINING WAS INCLUDED WITH SALE OF INSTRUMENT ___________________________
(Please provide PerkinElmer sales order number) ____________________________________________________________________