



## Virtual Classroom Training: Scheduled Course Calendar May – August 2022

Independent experts providing training and consultancy in the analytical science fields of  
**Gas Chromatography** (GC, GCxGC), **Liquid Chromatography** (HPLC, UHPLC, LCxLC),  
**Mass Spectrometry** (GC-MS, LC-MS, ICP-MS), **Spectroscopy** (ICP-OES, FTIR, UV-Vis, AA),  
**Mass Spectrometry Imaging** (DESI, MALDI, SIMS), **Physical & Structural Properties of Molecules** (KF, LDA, XRD),  
**Thermal Analysis** (DSC, TGA) and all their related techniques.

<b>GC &amp; GC-MS</b>						
<b>Universal GC &amp; GC-MS courses</b>	<b>Hours</b>	<b>Price*</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>
<b>Complete GC &amp; GC-MS (Modules 1 - 12)</b>	32.5	£1,575	28 Apr			
<b>Practical Essentials of GC &amp; GC-MS (Modules 1 - 8)</b>	19.5	£990	28 Apr			
Module 1: GC & GC-MS Introduction	1	£55	28 Apr			
Module 2: Gases & Plumbing in GC & GC-MS	1.5	£82.50	28 Apr			
Module 3: Sample Introduction in GC & GC-MS	4	£220	28 Apr			
Module 4: GC Columns	2.5	£137.50	29 Apr			
Module 5: GC Detectors	1.5	£82.50	29 Apr			
Module 6: Mass Spectrometers in GC-MS	3	£165	29 Apr			
Module 7: Data Analysis for GC & GC-MS	2	£110	3			
Module 8: Sampling Techniques for GC & GC-MS	4	£220	3			
<b>The GC &amp; GC-MS Clinic (Modules 9 - 12)</b>	13	£680	4			
Module 9: Applied Method Development for GC & GC-MS	4.5	£247.50	4			
Module 10: Introduction to Advanced Techniques in GC & GC-MS	2	£110	4			
Module 11: Applied GC & GC-MS Maintenance	3	£165	5			
Module 12: Applied Troubleshooting for GC & GC-MS	3.5	£192.50	5			
<b>Absolute Basics GC &amp; GC-MS</b>	6.5	£350	25			
<b>Practical Essentials of Advanced Injection for GC &amp; GCMS (Modules 1 - 2)</b>	6.5	£350		13		
<b>Practical Essentials of Multi-Mode Inlets &amp; PTVs</b>	6.5	£225.00		13		
<b>Practical Essentials of Large Volume Injection (LVI)</b>	3.25	£225.00		13		
<b>Absolute Basics of Deconvolution</b>	3.25	£350		17		
<b>Applied Interpretation of GC-MS Mass Spectra</b>	20	£1,375			20	
<b>Manufacturer-specific GC &amp; GC-MS courses</b>						
<b>Comprehensive GC Software (Agilent OpenLAB CDS)</b>	13	£875	26			
<b>Comprehensive GC-MS Software (Agilent MassHunter for SQMS)</b>	19.5	£1,300		8		
<b>Comprehensive GC-MS Advanced (Agilent QQQMS with MassHunter)</b>	6.5	£499		30		
<b>Comprehensive GC-MS Software (Agilent MSD ChemStation)</b>	13	£875			14	
<b>Comprehensive Deconvolution (NIST AMDIS)</b>	13	£875			6	
<b>Statistical Analysis</b>						
<b>Absolute Basics of Metabolomics</b>	6.5	£350				15
<b>Absolute Basics of Proteomics</b>	6.5	£350		15		

<b>HPLC &amp; LC-MS</b>						
<b>Universal HPLC &amp; LC-MS courses</b>	<b>Hours</b>	<b>Price*</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>
Applied Interpretation of LC-MS Mass Spectra	20	£1,375	16			
Absolute Basics of HPLC & LC-MS	6.5	£350	23			
Absolute Basics of Ion Chromatography (IC)	6.5	£350		6		
Absolute Basics of Anion Exchange Chromatography (AEC)	6.5	£350		7		
Absolute Basics of Size Exclusion Chromatography (SEC)	6.5	£350		8		
Complete HPLC & LC-MS (Modules 1 - 12)	32.5	£1,575		27		
Practical Essentials of HPLC & LC-MS (Modules 1 - 8)	18	£990		27		
Module 1: LC & LC-MS Introduction	1	£55		27		
Module 2: Mobile Phases & Pumps in HPLC & LC-MS	2.5	£137.50		27		
Module 3: Sample Introduction in HPLC & LC-MS	1	£55		27		
Module 4: LC Classification, Columns & Theory	3.5	£192.50		28		
Module 5: Practical Essentials of LC Detectors	1	£55		28		
Module 6: Data Analysis for HPLC & LC-MS	2	£110		28		
Module 7: Mass Spectrometers in LC-MS	3.5	£192.50		29		
Module 8: Sample Preparation, Calibration Standards and Sample Properties for HPLC & LC-MS	3.5	£192.50		29		
The HPLC & LC-MS Clinic (Modules 9 -12)	14.5	£680			4	
Module 9: Applied Method Development & Optimisation for HPLC & LC-MS	5.5	£302.50			4	
Module 10: Introduction to Advanced Techniques in LC & LC-MS	3	£165			5	
Module 11: Applied HPLC & LC-MS Maintenance	2.5	£137.50			6	
Module 12: Applied Troubleshooting for HPLC & LC-MS	3.5	£192.50			6	
Applied UHPLC	6.5	£510			26	
<b>Manufacturer-specific HPLC &amp; LC-MS courses</b>						
Comprehensive LC-MS Software (Agilent MassHunter)	19.5	£1,300				22
<b>Mass Spectroscopy</b>						
Absolute Basics of MALDI-TOF	6.5	£350	4			
Absolute Basics of Mass Spectrometry Imaging (MSI)	6.5	£350		22		
Applied Interpretation of GC-MS Mass Spectra	20	£1,375			20	
Applied Interpretation of LC-MS Mass Spectra	20	£1,375	16			
<b>Spectrometry</b>						
Absolute Basics of Atomic Absorption Spectroscopy (AAS)	6.5	£350	25			
Applied FTIR	6.5	£350			25	
<b>Inductively-Coupled Plasma</b>						
Applied ICP-OES	6.5	£350	3			
Applied ICP-MS	6.5	£350	4			
Absolute Basics of ICP-OES & ICP-MS	6.5	£350	24			
<b>Manufacturer-specific ICP courses</b>						
Comprehensive ICP-MS Software (Agilent MassHunter)	13	£875			11	
<b>Physical &amp; Structural Properties of Molecules</b>						
Absolute Basics of Physical & Structural Properties of Molecules (Modules 1 - 6)	20	£990		20		
Module 1: Absolute Basics of Karl Fischer (KF)	2	£110		20		
Module 2: Absolute Basics of Thermal Gravimetric Analysis (TGA)	1.5	£82.50		20		
Module 3: Absolute Basics of Differential Scanning Calorimetry (DSC)	3.5	£192.50		20		
Module 4: Absolute Basics of Laser Diffraction Analysis (LDA)	2	£110		21		
Module 5: Absolute Basics of Powder X-ray Diffraction (PXRD)	4.5	£247.50		21		
Module 6: Absolute Basics of Mass Spectrometry Imaging (MSI)	6.5	£350		22		

<b>Sample Preparation</b>						
	Hours	Price*	May	Jun	Jul	Aug
<b>Practical Essentials of Sample Preparation (Modules 1 - 8)</b>	26	£1,295			8	
Module 1: Practical Essentials of Liquid-Liquid Extraction (LLE)	3.25	£225.00			8	
Module 2: Practical Essentials of Derivatisation	3.25	£225.00			8	
Module 3: Practical Essentials of Solid-Phase Extraction (SPE)	3.25	£225.00			25	
Module 4: Practical Essentials of Solid-Phase Micro-Extraction (SPME)	3.25	£225.00				10
Module 5: Practical Essentials of Headspace (HS)	3.25	£225.00				11
Module 6: Practical Essentials of Purge-and-Trap (P&T)	3.25	£225.00				11
Module 7: Practical Essentials of Thermal Desorption (TD)	3.25	£225.00				12
Module 8: Practical Essentials of Pyrolysis (Py)	3.25	£225.00				12

<b>Methods</b>						
	Hours	Price*	May	Jun	Jul	Aug
<b>Applied Out of Specification (OOS) Results Investigation</b>	6.5	£510	16			
<b>Applied Stability Indicating Methods (SIM)</b>	6.5	£510		13		
<b>Applied Extractables &amp; Leachables (E&amp;L) Methods</b>	6.5	£510		14		
<b>Applied Method Validation</b>	6.5	£510			1	
<b>Applied UHPLC</b>	6.5	£510			26	

Our live Virtual Classroom courses offer a fully interactive experience. Our Virtual Classroom has a clear layout in one view featuring an HD video feed of the trainer and interactive tools. There is an interactions area including virtual whiteboard for drawings and explanations.

Participants can ask live questions; either by using their microphone or by typing into the Q&A or chat boxes. Many of our courses feature instrument parts and consumables to see, or case studies to work on to apply the topics learned.



The instructor uses screenshare for software demonstrations and exercises and where applicable, delegates can also perform software exercises on their own PCs if they have the software available to them.

Our Virtual Classroom training courses are also available to access On-demand.

**Attend On-Demand Training**

