



## Virtual Classroom Training: Scheduled Course Calendar January – April 2021

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>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>
<b>Absolute Basics of Deconvolution</b>	6.5	£250	8			
<b>Absolute Basics GC &amp; GC-MS</b>	6.5	£250	15			
<b>Complete GC &amp; GC-MS</b> (Modules 1 - 12)	32	£1,120	22			
<b>Practical Essentials of GC &amp; GC-MS</b> (Modules 1 - 8)	19.25	£760	22			
Module 1: Practical Essentials of Gas Chromatography and GC-MS Introduction	1	£50	22			
Module 2: Practical Essentials of Gases & Plumbing in GC & GC-MS	1.5	£75	22			
Module 3: Practical Essentials of Sample Introduction in GC & GC-MS	4	£200	22			
Module 4: Practical Essentials of GC Columns	2.5	£125	28			
Module 5: Practical Essentials of GC Detectors	1.5	£75	28			
Module 6: Practical Essentials of Mass Spectrometers in GC-MS	2.5	£125	28			
Module 7: Practical Essentials of Data Analysis for GC & GC-MS	2	£100	29			
Module 8: Practical Essentials of Sampling Techniques for GC & GC-MS	4.25	£212.50	29			
<b>GC &amp; GC-MS Clinic</b> (Modules 9 - 12)	12.75	£530		3		
Module 9: Applied Method Development for GC & GC-MS	4.25	£212.50		3		
Module 10: An Introduction to Advanced Techniques in GC & GC-MS	2	£100		3		
Module 11: Applied GC & GC-MS Maintenance	3	£150		4		
Module 12: Applied Troubleshooting for GC & GC-MS	3.5	£150		4		
<b>Practical Essentials of Advanced Injection for GC &amp; GC-MS</b> (Modules 1 - 2)	6.5	£300		12		
Module 1: Practical Essentials of Multi-Mode Inlets & PTVs	3.25	£162.50		12		
Module 2: Practical Essentials of Large Volume Injection (LVI)	3.25	£162.50		12		
<b>Applied Interpretation of GC-MS Mass Spectra</b>	20	£1,060			24	
<b>Manufacturer-specific GC &amp; GC-MS courses</b>						
<b>Comprehensive GC Software</b> (Agilent OpenLAB CDS)	13	£750	18			
<b>Comprehensive GC-MS Software</b> (Agilent MassHunter for SQMS)	19.5	£1,060		8		
<b>Comprehensive GC-MS Software</b> (Agilent MSD ChemStation)	13	£750			15	
<b>Applied Deconvolution</b> (NIST AMDIS)	13	£750			10	

## HPLC & LC-MS

Universal HPLC & LC-MS courses	Hours	Price*	Jan	Feb	Mar	Apr
Applied Interpretation of LC-MS Mass Spectra	20	£1,060	11			
Applied Ion Chromatography (IC)	6.5	£405	25			
Absolute Basics of HPLC & LC-MS	6.5	£250	26			
Applied Anion Exchange Chromatography (AEC)	6.5	£405		1		
Applied Size Exclusion Chromatography (SEC)	6.5	£405		2		
Complete HPLC & LC-MS (Modules 1 - 12)	34	£1,120		22		
Practical Essentials of HPLC & LC-MS (Modules 1 - 8)	18	£760		22		
Module 1: Practical Essentials of Liquid Chromatography and LC-MS Introduction	1	£50		22		
Module 2: Practical Essentials of Mobile Phases & Pumps in HPLC & LC-MS	2.5	£125		22		
Module 3: Practical Essentials of Sample Introduction in HPLC & LC-MS	1	£50		22		
Module 4: Practical Essentials of LC Classification, Columns & Theory	3.5	£175		23		
Module 5: Practical Essentials of LC Detectors	1	£50		24		
Module 6: Practical Essentials of Data Analysis for HPLC & LC-MS	2	£100		24		
Module 7: Practical Essentials of Mass Spectrometers in LC-MS	4	£200		25		
Module 8: Practical Essentials of Sample Preparation, Calibration Standards and Sample Properties for HPLC & LC-MS	3	£150		26		
The HPLC & LC-MS Clinic (Modules 9 - 12)	16	£530			15	
Module 9: Applied Method Development & Optimisation for HPLC & LC-MS	6	£300			15	
Module 10: An Introduction to Advanced Techniques in HPLC & LC-MS	3	£150			16	
Module 11: Applied HPLC & LC-MS Maintenance	3	£150			22	
Module 12: Applied Troubleshooting for HPLC & LC-MS	3	£200			23	
Applied Method Migration from HPLC to UHPLC (UPLC)	6.5	£405			24	
<b>Manufacturer-specific HPLC &amp; LC-MS courses</b>						
Comprehensive LC-MS Software (Agilent MassHunter)	19.5	£1,060				19

## Spectroscopy

Applied Inductively-Coupled Plasma Optical Emission Spectroscopy (ICP-OES)	6.5	£405	11			
Applied Atomic Absorption Spectroscopy (AAS)	6.5	£405		1		
Absolute Basics of ICP-OES & ICP-MS	6.5	£250		2		
Applied UV-Vis	6.5	£405			1	
Applied FTIR	6.5	£405				12

## Mass Spectrometry

Applied Interpretation of LC-MS Mass Spectra	20	£1,060	11			
Applied Interpretation of GC-MS Mass Spectra	20	£1,060			24	
Applied Inductively-Coupled Plasma Mass Spectrometry (ICP-MS)	6.5	£405	12			
Module 6: Absolute Basics of Mass Spectrometry Imaging (MSI)	6.5	£250			8	
<b>Manufacturer-specific Mass Spectrometry courses</b>						
Comprehensive GC-MS Software (Agilent MassHunter for SQMS)	19.5	£1,060		8		
Comprehensive GC-MS Software (Agilent MSD ChemStation)	13	£750			15	
Comprehensive ICP-MS Software (Agilent MassHunter)	13	£750			1	
Comprehensive LC-MS Software (Agilent MassHunter)	19.5	£1,060				19

<b>Sample Preparation</b>						
	Hours	Price*	Jan	Feb	Mar	Apr
<b>Practical Essentials of Sample Preparation</b> (Modules 1 - 8)	26	£975			29	
<b>Module 1: Practical Essentials of Liquid-Liquid Extraction (LLE)</b>	3.25	£162.50			29	
<b>Module 2: Practical Essentials of Derivatisation</b>	3.25	£162.50			29	
<b>Module 3: Practical Essentials of Solid-Phase Extraction (SPE)</b>	3.25	£162.50			30	
<b>Module 4: Practical Essentials of Solid-Phase Micro-Extraction (SPME)</b>	3.25	£162.50				16
<b>Module 5: Practical Essentials of Headspace (HS)</b>	3.25	£162.50				16
<b>Module 6: Practical Essentials of Purge-and-Trap (P&amp;T)</b>	3.25	£162.50			30	
<b>Module 7: Practical Essentials of Thermal Desorption (TD)</b>	3.25	£162.50				23
<b>Module 8: Practical Essentials of Pyrolysis (Py)</b>	3.25	£162.50				23
<b>Physical &amp; Structural Properties of Molecules</b>						
<b>Absolute Basics of Physical &amp; Structural Properties of Molecules</b> (Modules 1 - 6)	19.5	£675		22		
<b>Module 1: Absolute Basics of Karl Fischer (KF)</b>	1.5	£75		22		
<b>Module 2: Absolute Basics of Thermal Gravimetric Analysis (TGA)</b>	1.5	£75		22		
<b>Module 3: Absolute Basics of Differential Scanning Calorimetry (DSC)</b>	3.5	£175		22		
<b>Module 4: Absolute Basics of Laser Diffraction Analysis (LDA)</b>	2	£100		23		
<b>Module 5: Absolute Basics of Powder X-ray Diffraction (PXRD)</b>	4.5	£225		23		
<b>Module 6: Absolute Basics of Mass Spectrometry Imaging (MSI)</b>	6.5	£250			8	
<b>Methods</b>						
<b>Applied OOS Results Investigation</b>	6.5	£405	21			
<b>Applied Stability Indicating Methods (SIM)</b>	6.5	£405		8		
<b>Applied Extractables &amp; Leachables (E&amp;L) Methods</b>	6.5	£405		9		
<b>Applied Method Validation</b>	6.5	£405			8	
<b>Statistical Analysis</b>						
<b>Absolute Basics of Metabolomics</b>	6.5	£250	25			
<b>Absolute Basics of Chemometrics</b>	6.5	£250			22	

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.

**Purchase On-demand Training**

