



Virtual Classroom Training: Scheduled Course Calendar January – April 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.

GC & GC-MS						
Universal GC & GC-MS courses	Hours	Price*	Jan	Feb	Mar	Apr
Complete GC & GC-MS (Modules 1 - 12)	32.5	£1,575	12			
Practical Essentials of GC & GC-MS (Modules 1 - 8)	19.5	£990	12			
Module 1: Practical Essentials of Gas Chromatography and GC-MS Introduction	1	£55	12			
Module 2: Practical Essentials of Gases & Plumbing in GC & GC-MS	1.5	£82.50	12			
Module 3: Practical Essentials of Sample Introduction in GC & GC-MS	4	£220	12			
Module 4: Practical Essentials of GC Columns	2.5	£137.50	13			
Module 5: Practical Essentials of GC Detectors	1.5	£82.50	13			
Module 6: Practical Essentials of Mass Spectrometers in GC-MS	3	£165	13			
Module 7: Practical Essentials of Data Analysis for GC & GC-MS	2	£110	14			
Module 8: Practical Essentials of Sampling Techniques for GC & GC-MS	4	£220	14			
GC & GC-MS Clinic (Modules 9 - 12)	13	£680	19			
Module 9: Applied Method Development for GC & GC-MS	4.5	£247.50	19			
Module 10: An Introduction to Advanced Techniques in GC & GC-MS	2	£110	19			
Module 11: Applied GC & GC-MS Maintenance	3	£165	20			
Module 12: Applied Troubleshooting for GC & GC-MS	3.5	£192.50	20			
Absolute Basics GC & GC-MS	6.5	£350	21			
Absolute Basics of Deconvolution	6.5	£350		4		
Practical Essentials of Advanced Injection for GC & GC-MS (Modules 1 - 2)	6.5	£350		25		
Module 1: Practical Essentials of Multi-Mode Inlets & PTVs	3.25	£225.00		25		
Module 2: Practical Essentials of Large Volume Injection (LVI)	3.25	£225.00		25		
Applied Interpretation of GC-MS Mass Spectra	20	£1,375			30	
Manufacturer-specific GC & GC-MS courses						
Comprehensive GC Software (Agilent OpenLAB CDS)	13	£875	6			
Comprehensive GC-MS Software (Agilent MassHunter for SQMS)	19.5	£1,300		9		
Comprehensive GC-MS Advanced (Agilent QQQMS with MassHunter)	6.5	£499			3	
Comprehensive GC-MS Software (Agilent MSD ChemStation)	13	£875			17	
Comprehensive Deconvolution (NIST AMDIS)	13	£875			24	

HPLC & LC-MS

Universal HPLC & LC-MS courses	Hours	Price*	Jan	Feb	Mar	Apr
Applied Interpretation of LC-MS Mass Spectra	20	£1,375	17			
Absolute Basics of HPLC & LC-MS	6.5	£350	24			
Absolute Basics of Ion Chromatography (IC)	6.5	£350	31			
Absolute Basics of Anion Exchange Chromatography (AEC)	6.5	£350		1		
Absolute Basics of Size Exclusion Chromatography (SEC)	6.5	£350		2		
Complete HPLC & LC-MS (Modules 1 - 12)	32.5	£1,575		14		
Practical Essentials of HPLC & LC-MS (Modules 1 - 8)	18	£990		14		
Module 1: Practical Essentials of Liquid Chromatography and LC-MS Introduction	1	£55		14		
Module 2: Practical Essentials of Mobile Phases & Pumps in HPLC & LC-MS	2.5	£137.50		14		
Module 3: Practical Essentials of Sample Introduction in HPLC & LC-MS	1	£55		14		
Module 4: Practical Essentials of LC Classification, Columns & Theory	3.5	£192.50		15		
Module 5: Practical Essentials of LC Detectors	1	£55		15		
Module 6: Practical Essentials of Data Analysis for HPLC & LC-MS	2	£110		15		
Module 7: Practical Essentials of Mass Spectrometers in LC-MS	3.5	£192.50		16		
Module 8: Practical Essentials of Sample Preparation, Calibration Standards and Sample Properties for HPLC & LC-MS	3.5	£192.50		16		
The HPLC & LC-MS Clinic (Modules 9 - 12)	14.5	£680			14	
Module 9: Applied Method Development & Optimisation for HPLC & LC-MS	5.5	£302.50			14	
Module 10: An Introduction to Advanced Techniques in HPLC & LC-MS	3	£165			15	
Module 11: Applied HPLC & LC-MS Maintenance	2.5	£137.50			16	
Module 12: Applied Troubleshooting for HPLC & LC-MS	3.5	£192.50			16	
Applied Method Migration from HPLC to UHPLC (UPLC)	6.5	£510			29	
Manufacturer-specific HPLC & LC-MS courses						
Comprehensive LC-MS Software (Agilent MassHunter)	19.5	£1,300				25

Spectroscopy

Applied ICP-OES	6.5	£350	10			
Absolute Basics of ICP-OES & ICP-MS	6.5	£350	25			
Absolute Basics of Atomic Absorption Spectroscopy (AAS)	6.5	£350		7		
Applied FTIR	6.5	£350			28	

Mass Spectrometry

Applied ICP-MS	6.5	£350	11			
Applied Interpretation of LC-MS Mass Spectra	20	£1,375	17			
Module 6: Absolute Basics of Mass Spectrometry Imaging (MSI)	6.5	£350		28		
Applied Interpretation of GC-MS Mass Spectra	20	£1,375			30	
Manufacturer-specific Mass Spectrometry courses						
Comprehensive GC-MS Software (Agilent MassHunter for SQMS)	19.5	£1,300		9		
Comprehensive GC-MS Advanced (Agilent QQQMS with MassHunter)	6.5	£499			3	
Comprehensive GC-MS Software (Agilent MSD ChemStation)	13	£875			17	
Comprehensive ICP-MS Software (Agilent MassHunter)	13	£875			21	
Comprehensive LC-MS Software (Agilent MassHunter)	19.5	£1,300				25

Sample Preparation						
	Hours	Price*	Jan	Feb	Mar	Apr
Practical Essentials of Sample Preparation (Modules 1 - 8)	26	£1,295			23	
Module 1: Practical Essentials of Liquid-Liquid Extraction (LLE)	3.25	£225.00			23	
Module 2: Practical Essentials of Derivatisation	3.25	£225.00			23	
Module 3: Practical Essentials of Solid-Phase Extraction (SPE)	3.25	£225.00			28	
Module 4: Practical Essentials of Solid-Phase Micro-Extraction (SPME)	3.25	£225.00			28	
Module 5: Practical Essentials of Headspace (HS)	3.25	£225.00				21
Module 6: Practical Essentials of Purge-and-Trap (P&T)	3.25	£225.00				21
Module 7: Practical Essentials of Thermal Desorption (TD)	3.25	£225.00				22
Module 8: Practical Essentials of Pyrolysis (Py)	3.25	£225.00				22
Physical & Structural Properties of Molecules						
Absolute Basics of Physical & Structural Properties of Molecules (Modules 1 - 6)	20	£990		21		
Module 1: Absolute Basics of Karl Fischer (KF)	2	£110		21		
Module 2: Absolute Basics of Thermal Gravimetric Analysis (TGA)	1.5	£82.50		21		
Module 3: Absolute Basics of Differential Scanning Calorimetry (DSC)	3.5	£192.50		21		
Module 4: Absolute Basics of Laser Diffraction Analysis (LDA)	2	£110		22		
Module 5: Absolute Basics of Powder X-ray Diffraction (PXRD)	4.5	£247.50		22		
Module 6: Absolute Basics of Mass Spectrometry Imaging (MSI)	6.5	£350		28		
Methods						
Applied Out of Specification (OOS) Results Investigation	6.5	£510	17			
Applied Stability Indicating Methods (SIM)	6.5	£510		8		
Applied Extractables & Leachables (E&L) Methods	6.5	£510		9		
Applied Method Validation	6.5	£510			16	
Applied Method Migration from HPLC to UHPLC (UPLC)	6.5	£510			29	
Statistical Analysis						
Absolute Basics of Metabolomics	6.5	£350				18

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

