

## Scheduled Training Course Calendar September – December 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, MALDI-TOF), **Spectroscopy** (ICP-OES, FTIR, UV-Vis, AA),  
**Mass Spectrometry Imaging** (DESI, MALDI, SIMS), **Physical & Structural Properties of Molecules** (KF, LDA, PXRD),  
**Thermal Analysis** (DSC, TGA) and all their related techniques.

### Face-to-face Courses

#### GC & GC-MS

Universal GC & GC-MS courses	Days	Price*	Sept	Oct	Nov	Dec
Hands-on Complete GC & GC-MS	5	£2,500	26			
Absolute Basics GC & GC-MS	1	£350		14		
Complete GC & GC-MS	5	£1,575			14	
Practical Essentials of GC & GC-MS	3	£990			14	
The GC & GC-MS Clinic	2	£680			17	
Applied Interpretation of GC-MS Mass Spectra	3	£1,375			30	
<b>Manufacturer-specific GC &amp; GC-MS courses</b>						
Comprehensive GC Training (Agilent GC with OpenLAB CDS)	4	£1590		4		
Comprehensive GC-MS Training (Agilent SQMS with MassHunter)	5	£1,990				5

#### HPLC & LC-MS

Universal HPLC & LC-MS courses	Days	Price*	Sept	Oct	Nov	Dec
Applied Interpretation of LC-MS Mass Spectra	3	£1,375	20			
Hands-on Complete HPLC & LC-MS	5	£2,500			14	

#### Mass Spectrometry

	Days	Price*	Sept	Oct	Nov	Dec
Applied Interpretation of LC-MS Mass Spectra	3	£1,375	20			

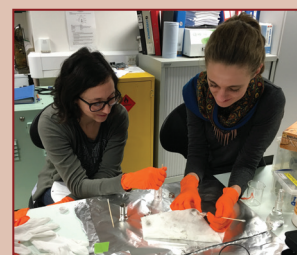
#### Inductively-Coupled Plasma

	Days	Price*	Sept	Oct	Nov	Dec
Hands-on ICP-MS	2	£1,150	5			
Applied Interpretation of GC-MS Mass Spectra	20	£1,375			20	

### Face-to-face training.

Our face-to-face **classroom-based** courses make use of 'props' (instrument parts and consumables) for you to handle. Although there will be no laboratory-based practical exercises within these course, there will be questions, tasks, case studies or demonstrations throughout the course and we endeavour to include a laboratory tour where possible.

Our **"hands-on"** courses have 50% of the time spent in the laboratory using instrumentation. A maximum of 5 delegates ensures the needs of every individual are met through focused support.



# Virtual Courses

## GC & GC-MS

Universal GC & GC-MS courses	Hours	Price*	Sept	Oct	Nov	Dec
Practical Essentials of Advanced Injection for GC & GCMS (Modules 1 - 2)	6.5	£350			10	
Practical Essentials of Multi-Mode Inlets & PTVs	3.25	£225.00			10	
Practical Essentials of Large Volume Injection (LVI)	3.25	£225.00			10	
<b>Manufacturer-specific GC &amp; GC-MS courses</b>						
Comprehensive GC-MS Advanced (Agilent QQQMS with MassHunter)	6.5	£499		11		
Comprehensive GC-MS Software (Agilent MSD ChemStation)	13	£875			24	

## HPLC & LC-MS

Universal HPLC & LC-MS courses	Hours	Price*	Sept	Oct	Nov	Dec
Absolute Basics of Anion Exchange Chromatography (AEC)	6.5	£350		3		
Absolute Basics of Size Exclusion Chromatography (SEC)	6.5	£350		4		
Complete HPLC & LC-MS (Modules 1 - 12)	32.5	£1,575		24		
Practical Essentials of HPLC & LC-MS (Modules 1 - 8)	18	£990		24		
Module 1: LC & LC-MS Introduction	1	£55		24		
Module 2: Mobile Phases & Pumps in HPLC & LC-MS	2.5	£137.50		24		
Module 3: Sample Introduction in HPLC & LC-MS	1	£55		24		
Module 4: LC Classification, Columns & Theory	3.5	£192.50		25		
Module 5: Practical Essentials of LC Detectors	1	£55		25		
Module 6: Data Analysis for HPLC & LC-MS	2	£110		25		
Module 7: Mass Spectrometers in LC-MS	3.5	£192.50		26		
Module 8: Sample Preparation, Calibration Standards and Sample Properties for HPLC & LC-MS	3.5	£192.50		26		
The HPLC & LC-MS Clinic (Modules 9 -12)	14.5	£680		27		
Module 9: Applied Method Development & Optimisation for HPLC & LC-MS	5.5	£302.50		27		
Module 10: Introduction to Advanced Techniques in LC & LC-MS	3	£165		27		
Module 11: Applied HPLC & LC-MS Maintenance	2.5	£137.50		28		
Module 12: Applied Troubleshooting for HPLC & LC-MS	3.5	£192.50		28		
Absolute Basics of Ion Chromatography (IC)	6.5	£350			7	
Absolute Basics of HPLC & LC-MS	6.5	£350			11	
Applied UHPLC	6.5	£510				9
<b>Manufacturer-specific GC &amp; GC-MS courses</b>						
Comprehensive LC-MS Software (Agilent MassHunter)	19.5	£1,300				14

## Mass Spectrometry

	Hours	Price*	Sept	Oct	Nov	Dec
Absolute Basics of MALDI-TOF	6.5	£350			21	
Absolute Basics of Mass Spectrometry Imaging (MSI)	6.5	£350			26	

## Spectroscopy

	Hours	Price*	Sept	Oct	Nov	Dec
Absolute Basics of Atomic Absorption Spectroscopy (AAS)	6.5	£350	19			

## Inductively-Coupled Plasma

	Hours	Price*	Sept	Oct	Nov	Dec
Applied ICP-OES	6.5	£350	7			
Applied ICP-MS	6.5	£350	8			

## Manufacturer-specific ICP courses

Comprehensive ICP-MS Software (Agilent MassHunter)	13	£875				1
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## Sample Preparation

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

## Physical & Structural Properties of Molecules

	Hours	Price*	Sept	Oct	Nov	Dec
<b>Module 1: Absolute Basics of Karl Fischer (KF)</b>	2	£110			24	
<b>Module 2: Absolute Basics of Thermal Gravimetric Analysis (TGA)</b>	1.5	£82.50			24	
<b>Module 3: Absolute Basics of Differential Scanning Calorimetry</b>	3.5	£192.50			24	
<b>Module 4: Absolute Basics of Laser Diffraction Analysis (LDA)</b>	2	£110			25	
<b>Module 5: Absolute Basics of Powder X-ray Diffraction (PXRD)</b>	4.5	£247.50			25	
<b>Module 6: Absolute Basics of Mass Spectrometry Imaging (MSI)</b>	6.5	£350			26	

## Methods

	Hours	Price*	Sept	Oct	Nov	Dec
<b>Applied Stability Indicating Methods (SIM)</b>	6.5	£510		5		
<b>Applied Extractables &amp; Leachables (E&amp;L) Methods</b>	6.5	£510		6		
<b>Applied Method Validation</b>	6.5	£510			4	
<b>Applied Out of Specification (OOS) Results Investigation</b>	6.5	£510			24	
<b>Applied UHPLC</b>	6.5	£510				9

## Statistical Analysis

	Hours	Price*	Sept	Oct	Nov	Dec
<b>Absolute Basics of Chemometrics</b>	6.5	£350				1

## Live online virtual Classroom training.

Our live Virtual Classroom courses offer a fully interactive experience, with the presentation and an HD video feed of the trainer. Participants can ask live questions at any time, 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**

