



Bringing Scientific & Technical  
Resources to the African Continent

**Chrom Africa Instrumentation Services Limited**  
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## LC-LCMS BEST PRACTICES IN METHOD DEVELOPMENT/OPERATION AND TROUBLESHOOTING 29<sup>th</sup> JULY – 2<sup>ND</sup> AUGUST 2024.

### Who Should Attend

LC MS-MS is an instrument which has a wide scope in industries which manufactures or deals with drugs, dyes, food and dairy products, etc. The training is profitable for those individuals who are working to enter these industries.

### What You Will Learn

- An overview of LC –MS applications, including food, environmental, industrial, GPC, and biopharmaceutical analysis
- Concepts, perspectives, best practices, and potential issues surrounding UHPLC
- Fundamentals of LC-MS method development and easier approaches
- Overview of method validation and transfer  
Standard operating procedures for LC-MS modules, and troubleshooting strategies

DAY 1	EVENTS
09.00-09.30	Registration and climate setting
09.30-10.00	Introduction to LC-MS
10.00-10.30	<i>Tea Break</i>
11.00-12.30	Theory of Single Quadrupole, Triple Quadrupole, System overview & Ionization sources, detectors, Collision induced Dissociation, Solvents, buffers & additives used in LC-MS
12.30-14.00	<i>Lunch Break</i>
14.00-16.30	MS operation, including the operation of the most popular LC-MS interfaces Operation in MS, MS/MS, and MS/MS/MS modes
DAY 2	
9.00-10.30	Tuning and Calibration, Product Ion Scan, MRM Method and HPLC Method
10.30-11.00	<i>Tea Break</i>
11.00-12.30	Ion production, fragmentation, and detection MS calibration and optimization.
12.30-14.00	<i>Lunch Break</i>
14.00-16.30	Creating method on Software and validating the method
DAY 3	
9.00-10.30	LC-MS Sample Preparation for Pesticide Analysis
10.30-11.00	<i>Tea Break</i>
11.00-12.30	LC –MS Sample Preparation for analysis of Organic pollutants
12.30-14.00	<i>Lunch Break</i>

<b>14.00-15.30</b>	Creating sequence for multiple sample analysis of pesticide residue	
<b>DAY 4</b>		
<b>9.00-10.30</b>	Developing calibration curve. Method optimizations and the validations of parameters such as LOD, LOQ, accuracy, precision, linearity and robustness in LC-MS-MS	
<b>10.30-11.00</b>	<i>Tea Break</i>	
<b>11.00-12.30</b>	Sample analysis of Pesticide residue in Water samples, Quantitative analysis of Organic pollutants	
<b>12.30-14.00</b>	<i>Lunch Break</i>	
<b>14.00-15.30</b>	Quantitative data analysis with set files Quantitation using internal standards	
<b>DAY 5</b>		
<b>9.00-10.30</b>	Discussion of the results	
<b>10.30-11.00</b>	<i>Tea Break</i>	
<b>11.00-12.30</b>	Maintenance and Troubleshooting – Effectively detecting, troubleshooting and rectifying common issues – Performing instrument maintenance Carrying out relevant diagnostic tests – Experience from hands-on laboratory exercises.	
<b>12.30-14.00</b>	<i>Lunch Break</i>	
<b>14.00-15.00</b>	Directors speech and issue of certificates	
<b>DATES</b>		
<b>COST</b>		
<b>VENUE</b>		
<b>29<sup>th</sup> July – 2<sup>nd</sup> August. 2024</b>	<b>Kes. 92,800.00 or USD 928.00</b>	
<b>Deadline 16<sup>th</sup> July 2024</b>	<b>NAIROBI</b>	