Chrom Africa

Bringing Scientific & Technical Resources to the Africa Continent

# GC GC-MS BEST PRACTICES IN METHOD DEVELOPMENT/OPERATION & MAINTENANCE

**23rd - 27th FEBRUARY 2026**

## What will you learn on this course?

This course provides the theory of gas chromatography (GC) and mass spectrometry (MS) essential to any participant, along with hands-on practical elements in the laboratory to practice and re-enforce the theoretical knowledge. These courses are 20% theory and80% practical in a lab environment.

This course addresses gases and plumbing, sample introduction, analytical columns, GC detectors (FID and ECD), mass-spectrometry and data analysis. The knowledge is then used to create methods, perform injections and change parameters to see the effects. The course discusses the need for maintenance along with practicals to carry out maintenance on both a GC and a GC-MS system such as liquid auto sampler, inlet, columns, FID/ECD and Quadruple MS including tuning and ion source cleaning. A day is spent on troubleshooting a GC or GC-MS instrument and learning what problem can occur, with solving on the instruments and date analysis software.

## Advantages of the Training Program:

GC-MS finds application in fields like Medicine, criminal forensics, environmental monitoring and cleaning, explosives detection, etc. Thus the training is beneficial for the people who are working industries which relates to chemicals, pharmaceuticals, food, oils, agriculture, cosmetics, analytical testing laboratories and many others.

| Day 1 | 23-02-26 | Activity |
|---|---|---|
| 9.00 – 9.30 am | | Registration and Climate Setting |
| 9.30 – 10.30 am | | • Introduction & instrumentation, of, GC, parts, function. and operations of individual components, GC configuration. |
| 10.30 – 11.00 am | | TEA- BREAK |
| 11.00 – 12.30 p.m | | • Cont: Introduction & instrumentation, of, GC, parts, function. and operations of individual components, GC configuration. |
| 12-30 – 14.00 p.m | | LUNCH - BREAK |
| 14.00 – 16.30 p.m | | • Introduction & instrumentation, of GC-MS, parts, functions and operations of individual components. |

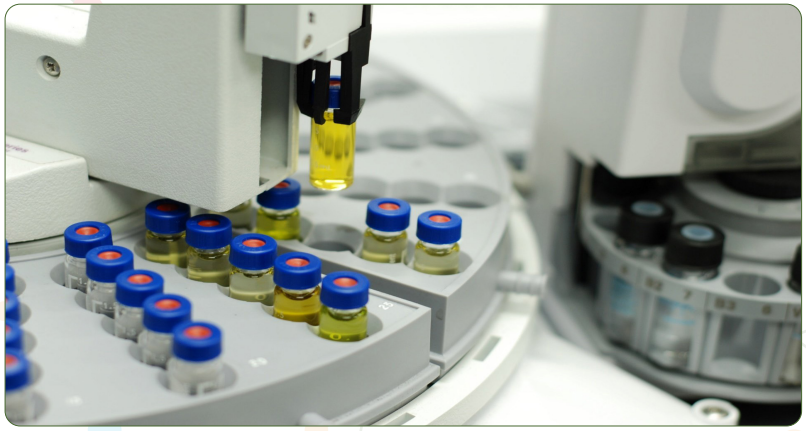
| Day 2 | 24-02-26 | Activity |
|---|---|---|
| 9.00 – 10.30 am | | • GC-MS Configuration, parts and components<br>• Procedure for powering on the GC/GC-MS, pumping down |
| 10.30 – 11.00 am | | TEA- BREAK |
| 11.00 – 12.30 p.m | | • Explaining Pre-Acquisition software: Tuning and Calibration, Calibration report generation, MS Tune File, Explanation of MS Method and GC Method |
| 12.30 – 14.00 p.m | | LUNCH - BREAK |
| 14.00 – 16.30 p.m | | • Introduction to Data acquisition software, System and method Parameter setup.<br>• Set up method for Full Scan and Single Ion Monitoring Operation, On-column injection, Split/Split less injection |

**Chrom Africa Instrumentation Services Limited**
Téléphone: +254 – (20)2594918 | US Operations: St. Paul, Min, USA
Téléphone: +1 651-731-3670 www.chromafrica.com/ www.chromafrica.co.ke
info@chromafrica.co.ke/info@chromafrica.com

AGQ Labs · accta · ainia centro tecnológico · CHROMacademy e-learning for analytical scientist · WKCCRC West Kenya Cancer Care & Research Center WE UNRAVEL

| Day 3 | 25-02-26 | Activity |
|---|---|---|
| 9.30 – 10.30 am | | • GC/GC/MS Sample Preparation |
| 10.30 – 11.00 am | | TEA- BREAK |
| 11.00 – 12.30 p.m | | • GC/GC/MS Sample Preparation |
| 12.30 – 14.00 p.m | | LUNCH - BREAK |
| 14.00 – 15.30 p.m | | • Introduction to Quantitative software, Qualitative software, Library search Concepts, integration, report generation. |

| Day 4 | 26-02-26 | Activity |
|---|---|---|
| 9.00 – 10.30 am | | • Creating sequence for multiple sample analysis.<br>• Creating Calibration, curve and producing report files<br>• Individual sample analysis |
| 10.30 – 11.00 am | | TEA- BREAK |
| 11.00 – 12.30 p.m | | • Qualitative and quantitative data analysis with a set file<br>• Quantitation using single internal standard |
| 12.30 – 14.00 p.m | | LUNCH - BREAK |
| 14.00 – 15.30 p.m | | • Quantitation using external standard |




| Day 5 | 27-02-26 | Activity |
|---|---|---|
| 9.30 – 10.30 am | | • Interpreting MS data, ie positive & negative ion ionization |
| 10.30 – 11.00 am | | TEA- BREAK |
| 11.00 – 12.30 p.m | | • Discussion of results and possible deviations |
| 12.30 – 14.00 p.m | | LUNCH - BREAK |
| 14.00 – 15.00 p.m | | • Directors speech and issue of certificates |

**Deadline: 9th February 2026**

**23rd – 27th FEBRUARY 2026**

**COST ; USD 1,200.00**
**OR KSH 125,000**
**TAX EXCLUSIVE**

**NAIROBI**

Online Training available at: www.chromafrica.com

**Chrom Africa Instrumentation Services Limited**
Téléphone: +254 – (20)2594918 | US Operations: St. Paul, Min, USA
Téléphone: +1 651-731-3670 www.chromafrica.com/ www.chromafrica.co.ke
info@chromafrica.co.ke/info@chromafrica.com

AGQ Labs · accta · ainia centro tecnológico · CHROMacademy e-learning for analytical scientist · WKCCRC West Kenya Cancer Care & Research Center