

Gas & Liquid Chromatography & Troubleshooting





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Course Objective

- ➤ Gain the basic theoretical aspects of Gas Chromatography
- ➤ Communicate practical information, capabilities and limitations of Gas & Liquid Chromatography
- ➤ Gain confidence on the analysis technique, troubleshooting and analytical results evaluation



Target Audience

➤ This seminar is ideal for lab and quality professionals that do not have formal training or experience in gas chromatography or those that want to refresh their current knowledge of gas chromatography. It is also suitable for Environmental Quality Personnel.



Course Outline

- > DAY 1
- ➤ Introduction to Chromatography
- ➤ The History of Chromatography GC & LC
- > Overview of GC & LC Chromatography
- ➤ The Modern Chromatography
- ➤ Liquid Chromatography The Development Process
- ➤ Factors Controlling Retention
- ➤ Molecular Forces and Chromatographic Selectivity
- ➤ Effects of Stationary Phase Loading on the Performance of a Chromatographic System
- ➤ Chromatography Nomenclature
- ➤ DAY 2
- ➤ Chromatography Basics
- Basic Chromatography
- ➤ Sample Introduction
- ➤ The role of sample introduction and injection ports in GC operations
- > Injection ports maintenance and its impact on GC performance
- **≻** Columns
- > The role of columns in GC operations
- > Column selection & maintenance
- ➤ How columns can impact GC performance



- **>** DAY 3
- ➤ GC Operation
- ➤ Peak Dispersion in a Chromatographic Column
- ➤ Detector Selection
- > The role of Detectors in GC operations
- > Detector maintenance
- ➤ How detectors can impact GC performance
- > Setup and GC operation, basic steps
- > Preparation for operation
- ➤ Sampling Techniques
- > DAY 4
- ➤ Data Acquisition and Calibration
- ➤ Calibration
- ➤ Data Acquisition and Processing System
- ➤ Calibration linked to GC performance
- > DAY 5
- ➤ Applications and Troubleshooting
- Chromatography Applications
- ➤ Method Development
- ➤ Gas Chromatography
- ➤ Liquid Chromatography
- ➤ ISO17025 Accreditation Basics
- ➤ Laboratory Management & Troubleshooting



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The Cost Of The Training Program Includes The Following:

- 1) Scientific article on flash memory.
- 2) Training Room.
- 3) Training.
- 4) Coffee break.
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Price (USD)

Communicate with the training department to know the participation fees

> There are offers and discounts for groups

The details of the bank account

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