GC Technical Training

Module Name: Introduction to GC

Time Allocated: **1.5 - 2 hours**
Intended Audience: **This module assumes no previous gas chromatography knowledge**

Content Covers:

- Basic theory of chromatography and GC
- Manual syringe injection technique, difference between a gas tight and metal plunger syringe
- Basic functions of the injector
- Setting the conditions in the injector (inlet pressure and temp)
- Description and function of a column
- Installing a column: DOs and DON'Ts
- Choosing the right ferrule
- Explanation of the workings of a FID, FPD, PFPD, TCD, ECD and NPD
- Basic data analysis and interpretation

At the completion of this seminar, attendees should be able to:

- Explain the role of the carrier gas and temperature in the separation
- Inject liquid samples and achieve good peak shape
- Demonstrate an understanding of the role of liners, septa and ferrule choice on the overall "system performance"
- Load a GC method and be able to explain each of the parameters
- Install a column and understand the sequence of steps
- Set the right inlet pressure for optimum carrier gas velocity