



## GC Technical Training

**Module Name:** GC Sample Introduction - Intermediate

**Time Allocated:** 1.5 - 2 hours

**Intended Audience:** This talk assumes the attendee has at least the knowledge obtained from attending the GC Beginner Course

### Content Covers:

- Optimization of split injection
- Optimization of splitless injection
- Peak focusing techniques – solvent effect and thermal focusing
- How to minimize mass discrimination
- Liner choice relevant for volatiles and semi volatiles
- Inlet liner deactivation and conditions when this becomes important

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

- Set appropriate GC conditions for split and splitless injection for the best peak shape and sensitivity
- Make a choice regarding most appropriate liner selection for split, splitless and large volume injection
- Calculate split ratio and understand effect of oven temperature on the split ratio
- Determine the relationship between solvent choice and initial oven temperature in splitless injection
- Understand the effect of low inlet liner flow on peak shape
- Be able to diagnose a chromatogram from an analysis of symptoms
- Understand the process of inlet liner deactivation