



Gas Chromatography Techniques Training

This five day hands-on workshop will introduce the students to both basic and advanced techniques in gas chromatography. Discussion will include chromatography theory, but the emphasis will be on understanding how the instruments operate and how to produce accurate chromatographic data. Hands-on experiments will allow the students to practice the techniques that are discussed during the lectures.

Who Should Attend?

Anyone who is actively using gas chromatography, and wants to learn more about the technique and instrumentation. Some experience with chromatography will be helpful, but extensive experience is not required.

Outline

- Day 1 Morning
 - Introductions
 - A Brief History of Chromatography
 - Chromatography Theory
 - Discussion
- Day 1 Afternoon
 - *Theoretical considerations*
 - *Design of instruments*
 - *Inlets, detectors, columns*
 - Discussion
- Day 2
 - Introduction to ChemStation software
 - Laboratory Demonstrations and Experiments
 - GC configurations and connections
 - Installing GC columns
 - Exploring inlet/injection options
 - Split injections
 - Splitless injections
 - Temperature effects
 - Column selectivity
- Day 3 Morning
 - *Operating Parameters and Applications*
 - *Troubleshooting GC systems*
 - Discussion

- Day 3 Afternoon
 - Advanced GC operating considerations
 - Sample introduction options (headspace, purge-trap, etc.)
 - Introduction to mass spectrometry
 - Discussion
- Day 4
 - Integrating and Calibrating Using ChemStation software
 - Laboratory Demonstrations and Experiments
 - Temperature programming
 - Method development for complex samples
- Day 5 Morning
 - Quantitative Techniques in Chromatography
 - Integrating Chromatographic Peaks
 - *Calibration concepts in analytical chemistry*
 - Discussion
- Day 5 Afternoon
 - Sample Preparation for Chromatography
 - *Principles of sample preparation*
 - *Classical/Solution techniques*
 - *Recent advances/instrumental techniques*
 - Discussion

Instructor

Dr. Merlin K. L. Bicking has more than 25 years experience in chromatography, covering gas, liquid, and supercritical fluid chromatography. As President, ACCTA, (USA) Inc. he has been teaching chromatographers for more than 15 years, has published more than 20 papers on chromatography theory and application, and has presented numerous lectures and national and international conferences. His entertaining and interactive teaching style always gets good reviews from the students. As co-founder of ChromAfrica LLC, he is actively involved in bringing scientific and technical expertise to the African continent.

For more information:

Call 02-752-9009. Our special training hotline is 0808-511-5536. Visit our website <http://www.advantlabs.com/training>