

Pyrolysis User's Training Course

Lecture and Lab Training on Frontier Lab Pyrolysis Products



- Pyrolysis Demystified
- Hardware Overview
- Pyrolysis GC/MS Use
- Run real samples
- Data review tools
- F-Search Workshop

- Sample Preparation
- Method Development
- Materials Characterization & Unknowns Method Map

- Routine Maintenance
- Common Questions
- Universal Applications
- Advanced Techniques



Located in the
San Francisco Bay Area

Provided:

- Lite Breakfast
- Lunch
- Refreshments
- Course Materials
- Certificate

- Classroom Lectures
- Hands-on Lab Sessions
- Software Training
- Hardware Training
- Py GC/MS Training
- 3 Full Days

Dates December 4, 5, 6, 2018

Time 9:00 a.m. to 5:00 p.m.

Location Diablo Analytical

Address 5141 Lone Tree Way, Antioch CA 94531

Optional GC/MS Basics Training available for \$650 on Dec. 3rd, 2018
Special guest instructor-see next page for details

Register Today!

\$1750 per person

Credit cards, checks, PO's accepted.

Class Size*: 3-10

For more information

Contact: **Rojin Belganeh**

rojin@frontier-lab.com

(925) 813-0498

Join Terry Ramus, Ph.D., Rojin Belganeh, Technical & Marketing Director, and Itsuko Iwai, Research Chemist, for 3 full days of lectures and labs. You'll learn how to quickly characterize materials, optimize parameters, perform precise quantitation, and maintain your Frontier pyrolyzer for quality results in your lab. Register early on-line at:

www.diabloanalytical.com Click on Events, then Frontier Lab Events.

Airport choices are Oakland (OAK), San Francisco (SFO) or Sacramento (SMF).
*We require a minimum of 3 attendees or we reserve the right to reschedule the class. 10 is the maximum enrollment.



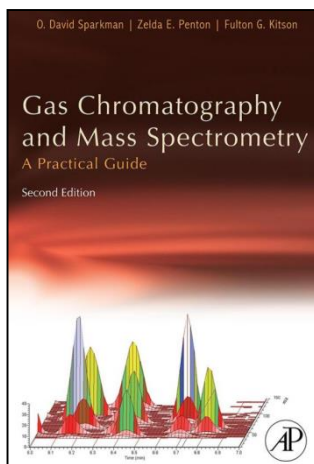
GC/MS Basics

Optional Training on Monday December 3rd, 2018

- Definition of GC/MS techniques
- Types and components of GC/MS
- Data acquisition requirements
- Columns and injectors
- MS ionization types

• **Data Analysis Introduction:**

- interpretation
- nitrogen rule
- fragmentation mechanisms
- Introduction to MS databases for identification of unknowns
- Introduction to AMDIS



Provided:

- **Lite Breakfast**
- **Book:**
Gas Chromatography and Mass Spectrometry: A Practical Guide, 2nd Edition.
O. David Sparkman, et al.
- **Lunch**
- **Refreshments**
- **Course Materials**

Special Guest Instructor:

Dr. O. David Sparkman: Adjunct Professor of Chemistry at University of the Pacific; Contractor to NIST Mass Spectrometry Data Center; Consultant; MS instructor (www.mass-spec-training.com). See LinkedIn for more information.

Dates December 3rd, 2018

Time 9:00 a.m. to 5:00 p.m.

Location Diablo Analytical

Address 5141 Lone Tree Way, Antioch CA 94531

GC/MS Basics

- **Classroom Lectures**
- **GC/MS Topics**
- **1 Full Day**

Register Today!

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Credit cards, checks, PO's accepted.

Class Size*: 3-10

For more information

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Join world renowned professor, author, and mass spectrometry expert, Dr. O. David Sparkman, for an information packed day all about GC/MS. The course is optional to the Pyrolysis User's Training Course. Register early on-line at:

www.diabloanalytical.com Click on Events, then Frontier Lab Events. You can select the optional GC/MS Basics training when you register for the Pyrolysis User's Training Course.

 **FRONTIER LAB**
www.frontier-lab.com

 **Diablo Analytical, Inc.**
A Technology and Development Company