



Columbia Analytical prepares and conducts seminars and technical presentations on various laboratory testing diagnostics and environmental science topics. The following list details some of the seminars we routinely provide.

Columbia Analytical has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 1760 Old Meadow Road, Suite 500, McLean, VA 22102. In obtaining this approval, Columbia Analytical has demonstrated that it complies with the ANSI/IACET Standards which are widely recognized as standards of good practice internationally. As a result of their Authorized Provider membership status, Columbia Analytical is authorized to offer IACET continuing education units (CEUs) for its programs that qualify under the ANSI/IACET Standards.

## **Seminar Topics**

### **Chain of Custody Procedures and Other Sample Requirements**

Wouldn't you like to consistently avoid the hassle and expense of resampling? Find out how to be certain you collect appropriate sample volume and ship it to your laboratory in the right sample containers. Learn about sample holding requirements and how to properly execute a chain-of-custody.

# **Detection Limits and Regulatory Requirements**

Do the esoteric acronyms (MDL, PQL, and MCL, for example) used to describe method, reporting, and regulatory limits leave you feeling as if you're drowning in alphabet soup? Take heart! This seminar explains how these limits were derived.

### Detection of Polynuclear Aromatic Hydrocarbons Using Selected Ion Monitoring (GC/MS SIM)

Day by day, environmental regulations get progressively tougher. Learn how GC/MS SIM dramatically lowers detection limits for polynuclear aromatic hydrocarbons and how this technique can be used in petroleum hydrocarbon contaminated matrices.

### **Determination of Chlorinated Phenolics in Petroleum Hydrocarbon Contaminated Matrices**

Chlorinated phenolics are commonly used in agricultural products and wood preservatives. They can be dangerous contaminants. This seminar discusses appropriate techniques for assessing chlorinated phenolic compound contamination. It also examines the problems and solutions for determining chlorinated phenolic contamination in petroleum hydrocarbon contaminated matrices.

### **Hazardous Waste Testing**

What is hazardous waste? How important is it to know whether waste is hazardous before deciding what to do with it? What laboratory tests can be used to determine whether waste is hazardous? This seminar has the answers.

### ICP/MS and Other 'Clean' Techniques for Trace Metals

What are 'clean' analytical techniques for low level metals analyses? What are proper sample collection and handling and laboratory quality control methods? Learn about environmental applications for the newest low level analytical technique, ICP/MS, and how to include it in your analytical scheme.



## **Laboratory Overview**

Have you ever wondered what happens to your samples after they reach the laboratory? This seminar provides an overview of the path a sample takes after it is delivered to Columbia Analytical, from sample login to the final report. It also provides a photographic tour of Columbia Analytical facilities.

# Odor Investigations – Analytical Methods for Identification and Quantitation of Amines, Carboxylic Acids, Sulfur Compounds and Vocs

Increased public awareness about air quality, urban sprawl, and changes in agricultural practices have resulted in a need for methods to address concerns about odorous emissions from municipal waste treatment facilities, landfills, concentrated animal feeding operations and industrial processes. However, due to the complex chemical and physical properties of odorous compounds, a single method often will not adequately address all of the compounds of concern.

# **Passive Sampling and Currently Available Devices**

Advantages and limitations common to all passive sampling devices will be reviewed and results from passive sampling devices compared with results from conventional methods. The six most viable passive devices on the market today will be discussed in detail, including deployment, retrieval, laboratory considerations and interpretation of passive sampler data.

### **Project Initiation - Working with your Laboratory to Ensure Project Success**

You know the site needs analytical work. That's a good start, but what should you do next? This seminar covers determining project objectives, collecting background information, selecting cost effective methods, and setting up sampling schedules. It also shows how a project chemist can make life easier for the project manager and how increased communication can help avert potential project disasters.

### **Soil Vapor Intrusion to Indoor Air**

Interest in subsurface vapor intrusion to indoor air is increasing due to a number of factors, including greater emphasis on the remediation of contaminated sites that introduce harmful substances to indoor air, as well as the recent publication of several prominent federal and state draft guidance documents. This presentation offers an overview of analytical issues relevant to this topic.

### **Understanding Analytical Data and Laboratory Quality Control Reports**

How do you read an analytical report? What can be inferred from quality control results? What do all those quality control samples do, anyway? Are they necessary? Attend this seminar and find out!

### Using Leak Detecting Tracer Compounds In Soil Gas Sampling

Soil gas sampling is increasing in frequency across the country as vapor intrusion (VI) continues to gain momentum and regulatory attention. Using a tracer during soil gas sampling can give the end user qualitative and/or quantitative proof that the sampling system was installed and sealed correctly.

### **Understanding Petroleum Hydrocarbon Analyses**

Learn about the components of petroleum hydrocarbons and refined petroleum products. Understand specific and nonspecific, quantitative and semi quantitative analytical methods. Identify distinctive features of specific petroleum contaminants. See the differences in approved testing protocols in several states.

CEU credits are available upon request for Columbia Analytical seminars. Custom seminars are also available to meet your specific needs. Please contact Columbia Analytical to request a topic and for more information.

