Air Quality Lab - Technical Seminars



We want to make your job a little easier...



We can do that by sharing with you some of the expertise and knowledge we have gained in our years of experience in a wide range of applications. We want to provide you with new information and tools that you can use on your next air project.

Toward that end, Columbia Analytical Services, Inc. offers technical presentations on a variety of topics related to air sampling and analyses. Designed to accommodate our clients' busy schedules, the presentations can typically be completed in 25 to 30 minutes with a Q&A session at the end, easily fitting into a lunch hour. While these are not intended to be comprehensive training seminars and cannot substitute for coursework, they do offer a wealth of useful information. We promise that each attendee will learn something new! The following list illustrates some of the seminars we routinely provide:

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introduce harmful substances to indoor air, as well as the recent publication of several prominent federal and state draft guidance documents.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.

- Soil Gas Determinations
 - Appropriate Methods and supplies
 - Summa Canisters vs. Tedlar Bags
- Volatile Organic Compound Analysis
 - What's wrong with 8260B on air samples?
 - Differences between 8260B and TO-15
- VOC analysis by EPA TO-15 GC/M
 - Selective Ion Monitoring Mode (SIM) for ultra low level determinations
 - SCAN vs. SIM
- Sampling Media Considerations for SIM Analysis

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. This presentation will cover the following topics:

- Soil Gas Sampling Tracers: Why do I need one?
- Review of Soil Gas Sampling equipment
- Selected State Guidance & References
- Tracer Compounds: Pros & Cons
- Case Study & Example Calculation



An Employee-Owned Company

Air Sampling Media – The Case of the Summa Canister



Good for a general audience—this presentation covers the factors involved in selecting the appropriate media to meet project objectives and method requirements. Using a Summa canister as an example, it also tracks how a sample moves through the laboratory, from the initial request for sampling media, out to the client, back to the lab for analysis and cleaning.

- Summa Canisters vs. Tedlar Bags
- Canisters vs. Solid Sorbents
- Solvent vs. Thermal Desorption
 - Grab Sample vs. Time Integrated
 - Canister Cleaning and Certification
 - Analysis: GC/MS
 - Unknowns:TICs

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.

In response to the need to identify and quantify these odorous compounds, Columbia Analytical offers four methods that may be used independently or in combination to provide highly useful information for odor investigations.

This presentation will cover the following topics:

- Introduction to Odor Issues
 - Odorous Compounds
 - Sources of Odorous Compounds
- Development and Validation of Methods for:
 - Carboxylic acids
 - Amines
- Reduced Sulfur Compounds by ASTM D5504
- Volatile Organic Compound Screen by EPA TO-17
- Includes information on sample collection techniques and analytical methodology.

If there is a particular topic of interest to you and your organization that we may be able to present, please let us know. We are always looking for new opportunities to share our knowledge and expertise with our clients in a useful way!

Contact Information

2655 Park Center Drive, Ste. A Simi Valley, CA 93065

805.526.7161 805.526.7270 (fax)





An Employee-Owned Company

www.caslab.com