

2019 PAAEL Conference Agenda

Tuesday, October 22

- 7:30 to 8:30 **Registration**
7:45 to 9:00 **Breakfast Buffet**
8:40 **Welcome Address by President Adamsky**

At this point you can select to follow the presentations in **Session I** or **Session II**.

Session I - Quality Assurance

- 9:00 to 10:15 **Defining Our Business**
 Presenter: Larissa Hoover, Cranberry Township Laboratory

The presentation will review the common terms used in the Environmental Testing Laboratory.

- 10:15 to 10:30 **Networking Break - Visit with the Vendors**

- 10:30 to 12:00 **Defining Our Business Part 2**
 Presenter: Larissa Hoover, Cranberry Township Laboratory
 (Continued)

- 12:00 to 1:00 **Lunch Buffet and Business Meeting**

- 1:00 to 2:15 **Providing a Quality Product to Your Customer**
 Presenter: Marlene Moore, Advanced Systems

This presentation provides an overview of the laboratory product: DATA
How do you define quality? The presentation lists several ways a laboratory defines quality data. The report is the packaging that presents quality data and the format of the report must demonstrate quality. We will explore various possibilities for a laboratory to provide a quality product to its customer. We will explore various possibilities for a laboratory to provide a quality product to its customer. We will explore various possibilities for a laboratory to provide a quality product to its customer.

2:15 to 2:45 Networking Break - Visit with the Vendors

2:45 to 4:00 Maintaining Your Quality Systems
Presenter: Marlene Moore, Advanced Systems

Now that you have a quality system, how do you ensure it continues and is working? The presentation will review how to maintain a quality system through your document control procedure, corrective action and preventive action program, internal audit and getting feedback from your customers. Using the information from these processes allows the laboratory to know if the system is effective and the quality of the work is acceptable. The quality control gives you information about the quality of the data. These other processes provide information about the effectiveness of the system.

4:00 to 6:00 Meet and Greet with the Vendors

Tour the Trade Show and visit with the vendors at their booths. Poster Presentations will be displayed on topics of interest to Environmental Testing Labs. Vendor Door Prize Drawings will be done. Drink tickets will be distributed at registration. Hors d'Oeuvres will be served.

Session II - Technical

9:00 to 10:15 Using and Implementing Colitag for the detection of Coliforms
Presenter: David Smith, Environmental Express

Enzyme substrate methods are becoming the preferred method of reporting various coliform parameters for EPA compliance. Colitag is an alternative that has been approved for various EPA reporting programs. We will discuss how Colitag compares to other methods of monitoring coliforms, how laboratories can be approved for its use, and the limitations that currently exist for this method.

10:15 to 10:30 Networking Break - Visit with the Vendors

10:30 to 12:00 Legionella and other waterborne pathogens
Presenter: Brian Verdi, Special Pathogen Laboratory

This presentation is a general overview of Legionella. Topics covered will include a review of the microbial and infectious characteristics of the Genus Legionella, overview of the growth of Legionella in building water systems, environmental sampling, laboratory isolation/identification, and interpretation of results. Come prepared to learn the Legionella basics complete with many colorful photos of an interesting microbe.

12:00 to 1:00 Lunch Buffet and Business Meeting

1:00 to 2:15 Whole Effluent Toxicity Testing-Overview and Factors for Defendable Testing Results
Presenter: Michael Chanov, EA Engineering, Science, and Technology, Inc.

Whole effluent toxicity (WET) testing allows for samples to be evaluated through a holistic approach, rather than through the analysis of specific compounds which would be immensely expensive. Additionally, the results of the chemical scans would be unreliable for predicting toxicity as water quality criteria are not available for every toxic pollutant in wastewater

discharges and the interactions between all the toxicants cannot be predicted. Therefore, whole effluent toxicity testing offers a valuable tool for evaluating potential ecological effects for any type of wastewater discharge. This presentation provides an overview of the current WET testing methodologies and discusses the factors and challenges that accompany this type of testing.

2:15 to 2:45 Networking Break - Visit with the Vendors

**2:45 to 4:00 Toxicity Reduction Evaluations/ Toxicity Identification Evaluations – Design, Methods, Execution and Interpretation
Presenter: Michael Chanov, EA Engineering, Science, and Technology, Inc.**

Wastewater treatment plant facilities that discharge unacceptable levels of toxicity must perform a Toxicity Reduction Evaluation (TRE) to identify and control the causes of toxicity. One common component of a TRE is the application of US EPA's Toxicity Identification Evaluation (TIE) procedures to identify and confirm the causes of toxicity. The TRE, by necessity, must be flexible and subject to on-going evaluation and modification as the program develops. More specifically, the results of each phase of the study are used to provide direction to subsequent testing in order to make weight of evidence determinations which will achieve compliance in a timely and cost-effective manner with the facility's permit limits. The consequences of unidentified toxicity are uncertain treatment measures and costly and possibly endless testing to regain compliance. This presentation will provide an overview of the TRE/TIE process, case study examples, in addition to issues and strategies that have been encountered and utilized during TRE studies.

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2018 PAAEL Conference Agenda

Wednesday, October 23

7:30 to 8:30 **Registration**
7:45 to 9:00 **Breakfast Buffet**

Regulatory

9:00 to 10:00 PADEP Bureau of Labs Presentation by Aaren Alger
Presenter: Aaren Alger, PA DEP Bureau of Laboratories, Laboratory Accreditation Program Chief

Discussion items to include:
Laboratory Accreditation - Answers to Common Questions:
How can I add a new technology?
How do I modify a method in an acceptable way?
How can I ensure a successful assessment and corrective action?
What are common deviations?

10:00 to 10:15 Networking Break

10:15 to 11:30 Regulatory Panel: Representatives invited from: Clean Water, Drinking water, Bureau of Labs, Department of Health

Invited Panelists: Dawn Hissner, PADEP, Maria Schumack, PADEP, Aaren Alger PADEP, Richard Pugh, PA Department of Health

This Regulatory Panel will begin with presentations by each of the representatives from the various PADEP Bureaus. The presentations will be followed by a question and answer session. Forms will be available at Registration for attendees to provide questions in advance to the panel. Forms should be completed and returned to Registration by Noon.

11:30 to 12:00 Keynote Speaker: PADEP Secretary McDonnell - PFAS and the upcoming regulations in PA

12:00 to 1:00 Lunch Buffet

1:00 to 1:45

PFAS

Presenter: Steve Zeiner, Environmental Standards

This presentation will provide a PFAS overview of history, regulations, methodology including Sample Collection and Solid Matrix

1:45 to 2:30

What's in My Water? Practical Considerations for Monitoring PFASs and Other Emerging Environmental Contaminants by LC-MS/MS

Presenter: Michael T. Costanzo, Perkin Elmer

Growing environmental concern has led to stricter regulations of drinking water and water supplies in general over the past decade. Several applications of interest have emerged in recent years as issues of mounting importance to ensure the health and well being of people and animals who drink water from or swim in our nation's waterways. This includes routine monitoring and detection of perfluoroalkyl substances (PFASs) from industrial manufacturing (surfactants, fire-retardants, and nonstick cookware like Teflon), pharmaceuticals and personal care products (PPCPs), and most topically, cyanotoxins from ever-growing algae blooms. Liquid chromatography tandem-mass spectrometry (LC-MS/MS) affords a versatile technique for analysis of a variety of environmental applications, in addition to countless others. In this talk I will speak to how LC-MS/MS is the ideal system for monitoring these environmental contaminants in water, and some practical considerations to keep in mind when setting up a laboratory for routine analysis of these applications.

10:15 to 10:30

Networking Break

3:00 to 4:00

Are you ready for monitoring PFAS in your waters? Lessons learned since UCMR3

Presenter: Ruth Marfil-Vega, Shimadzu Scientific Instruments

PFCs or PFAS? EPA 537 with 6 or 14 compounds, EPA 537.1 or EPA 8327? and what about and short chain PFAS? These are some of the questions environmental laboratories need to respond to for quickly addressing 1) customers' concerns and 2) upcoming regulatory requirements regarding the occurrence of PFAS in the environment. Liquid Chromatography with Mass Spectrometry-based detection is established as the most suitable technology for meeting PFAS monitoring needs. However, the rapid release of new analytical methods and changes in their

requirements (e.g. lower detection limits, modified targets lists) pose a challenge for laboratories that are less familiar with the use of LC/MS/MS and LC/QTOF. To help environmental laboratories in implementing PFAS monitoring, the following topics will be covered in this presentation: 1) overview of requirements from current official methods for the analysis of PFAS in environmental samples, 2) results from the monitoring of PFAS since UCMR3 and 3) lessons learnt from this experience.