

CONFEREE NETWORKING

Sunday, March 11, 2012, 1:30 - 3:30 PM

Career Options

Facilitator: Robert Stevenson, American LaboratoryRoom 311F

The employment paradigm is shifting to shorter term and expectation of a longer career. This session will compare various career options (consulting, entrepreneur, private contractor, etc.) to help attendees make suitable career plans.

How Can the Modern Analytical Chemist Overcome the Barriers of New Method

Introduction

Facilitator: Jack Driscoll, PID Analyzers, LLC

Co-Facilitator: Jennifer Maclachlan, PID Analyzers, LLC Room 312A

How can the modern analytical chemist overcome the barriers of new method introduction? If it is not an ASTM method, EPA method or other accepted method, how can the chemist justify to the laboratory the utilization of an unconventional analytical method that promises to achieve better results?

ICP-MS and Chromatography for Metals Speciation

Facilitator: Larry Irr, Bechtel Marine Propulsion Corporation Room 311E

This session will focus on elemental speciation using ICP-OES and MS techniques coupled with separation methods such as the chromatographies. Problems will be discussed and solutions suggested.

Laboratory Safety

Facilitator: James Kaufman, Laboratory Safety Institute Room 311G

This networking session will allow participants to share ideas and discuss current topics in lab safety. The topics will include: (1) Creating effective lab safety programs, (2) Complying with laboratory regulations, (3) Convincing others that lab safety is important, and (4) Preparing for laboratory emergencies.

Protein Aggregation - Developing Quantitative Methodologies for Characterization of Subvisible and Submicron Aggregation

Facilitator: Jeremy Warren, NanoSight..... Room 312B

Protein Aggregation - Developing Quantitative Methodologies for characterization of subvisible and submicron aggregation. A big challenge and a good time to get NanoSight, Malvern, Brightwell, Fluid Imaging etc around the table with Pharmaceutical companies and regulators.

Monday, March 12, 2012, 8:30 - 10:30 AM

Charged Aerosol Detection for HPLC

Facilitator: John Waraska, Thermo Fisher Scientific

Co-Facilitator: Ian Acworth, Thermo Fisher Scientific.....Room 311F

Charged aerosol detection for HPLC has now been available for several years and has been widely adopted by the pharmaceutical industry. Experience with the detector ranges from experts to novices. A forum in which users of the technique could exchange practical experience would greatly benefit those starting to use the technique.

Chromeleon

Facilitator: Andreas Brunner, Thermo Fisher Scientific Room 312B

This session will focus on Chromeleon CDS users and those interested in Chromeleon as their future CDS for knowledge exchange and questions and answers.

Non Invasive Biomedical Analysis - The Fast, the Furious, and the Brave - Innovative Analytical Instrumentation for Breath Gas Testing

Facilitator: Wolfram Miekisch, University of Rostock Room 311H

Very recent developments in biomedical breath analysis include (fast) online monitoring by direct MS (e.g. PTR-MS), enhanced (furious) separation and detection methods (e.g. NTD- GCxGC -TOF) and bedside applicable (brave) detection techniques (e.g. sensors and immunochemistry). These developments will promote scientific understanding as well as clinical application of biomedical analysis.

Regulation of Transportation Fuel

Facilitator: Michael Cheng, Chevron Room 312A

The regulation that a certain portion of transportation fuel need to be contributed by a renewable source will be enforce in the future. A robust and easily implemented method is needed for that determination. It is necessary to have a common understanding among the fuel manufacturers.

Standards for Instrument Outputs

Facilitator: Anand Mudambi, US Environmental Protection Agency Room 311G

This networking session is directed to the instrument vendors, practicing laboratories, laboratory information systems vendors, and agencies (national, state, and local) who would like to know the status of standards for instrument outputs. We are interested in hearing from instrument vendors and users about the delivery, storage and retrieval of electronic data from instruments and other electronic systems. We hope to provide all interested groups with feedback on the following topics: EPA, US Army Corps of Engineers, and other Federal Agency goals regarding desired instrument data attributes (format, content, retrieval and re-creation capability), status of current standards for instrument outputs and associated tools, and the future of raw and processed instrument and associated data.

CANCELLED Which Has the Highest Priority - LIMS or ELN?

Facilitator: David Hurt, Labvantage Solutions Room 311E

Many labs are entering the debate of which should have the highest priority. Start with LIMS and produce the final product of the lab; a certificate of Analysis or some other such report? Or start with an ELN, simplifying the end-user interaction and workflow automation? There is another question - why not both at the same time? We will discuss some of the many options that are available today and determine how to build a plan for an individual lab.

Monday, March 12, 2012, 4:30 - 6:30 PM

Challenges in Research

Facilitator: Olubukola Irurhe, National Agency for Food and Drug Administration and Control, Room 311H

Equipment supply, installation qualification, system suitability and maintenance are major challenges that have no solution proffered has solved. As a regulatory agency, the downtime of equipment and spare parts replacement and accessories supplies have negatively impacted research and development in scientific data generation and validity of such data are sometimes compromised

Data Integration

Facilitator: Jeff Vannest, Labvantage Solutions Room 312B

How do you effectively unify data from disparate systems to form a cohesive web of business intelligence? Many companies have critical data scattered through any number of data systems. We will discuss approaches and methods to unify this data into a carefully thought out data warehouse.

High-Speed Atomic Force Microscopy

Facilitator: Anne-Dorothea Mueller, Anfatac Instruments AG Room 311F

What does currently limit the imaging speed most? Electronics, cantilever design, scanner design, or other limits? What can be done to overcome these limits? Which are the most interesting future applications for high-speed AFM?

Protein Analysis - Electrophoresis - Different Methods for Analysis and Evaluation of Proteins in Different Tissues and Samples

Facilitator: Samy Abdel Azim, Cairo University Room 311E
Protein analysis - electrophoresis - different methods for analysis and evaluation of proteins in different tissues and samples - Application of a novel methods for determinations of traces amounts of proteins.

Tandem MS Library Development and Possible Screening Exercise Using the NIST/EPA Library

Facilitator: Lawrence Zintek, US Environmental Protection Agency
Co-Facilitator: Stephen Stein, National Institute of Standards and Technology Room 312A
Over the last decade there has been interest in the development of transferable LC/MS libraries. It has been demonstrated that after accounting for differences in collision energy, spectra for a compound are instrument independent. Moreover, while ion intensities may vary, major fragment ions are the same with few exceptions. Over the last few years NIST has extended its development of GC/MS Libraries and Search Programs to include Tandem MS Spectra. This library is now comprised of over 95,000 spectra for some 5,800 compounds. A range of other libraries are currently being constructed by other agencies and vendors. The EPA Chicago Regional Laboratory library database and protocol was multi-lab validated and used during the 2008 Democratic and Republican National Conventions. Such libraries may be effectively used for screening to assist in the identification of known/unknowns using high resolution mass spectrometry.

Tuesday, March 13, 2012, 8:30 - 10:30 AM

Challenges in CDS Software Development

Facilitator: Rajeev Kumaraswamy, Network SystemsTechnologies, Ltd. Room 311H
Challenges in CDS software development - mathematically sound and statistically proven algorithms, intelligent automation

Discussing Collaborative Opportunities to Leverage Resources

Facilitator: Lara Autry, US Environmental Protection Agency Room 311E
Discuss collaborative opportunities to leverage resources for meeting the critical needs of monitoring programs to expand scientific capabilities, information, and knowledge to meet continuously changing challenges before us.

Green Chemistry, Sustainability, and the Analytical Chemist

Facilitator: Dwight Tshudy, Gordon College
Co-Facilitator: Douglas Raynie, South Dakota University Room 312B
Green and Sustainability are heavily used terms. The concept of green chemistry has been around for over 10 years. There is a lot of momentum and this session will search for ways that the analytical chemist can be integral in furthering sustainability and green chemistry ideals.

How Can We Sustain Our Chemistry Outreach Beyond the International Year of Chemistry?

Facilitator: Jennifer Maclachlan, PID Analyzers, LLC
Co-Facilitator: George Ruger, Room 311F
What lessons have we learned about the public perception of chemistry during the International Year of Chemistry? How can we get more chemists to participate in K-12 science education in their local area communities-like Pittcon does with Science Week? How can we continue to educate the public about the chemistry of everyday life?

Potential for Magnetic Bead-based Affinity Separations (MBAS) to Replace HPLAC

Facilitator: Richard Cook, Colloidal Science Solutions, Inc. Room 312A
Recent advances in magnetic bead design give MBAS certain advantages over their HPLAC counterparts. The advent of agarose for both MBAS and HPLAC will be discussed in relation to how their design impacts: speed of isolate recovery, yield and activity.

What are the Most Significant Potential Cross-Cutting Applications of Nano-enabled Sensing for Medical Uses and Environmental Applications

Facilitator: Warren Layne, US Environmental Protection Agency, Region 5 Room 311G

What do you see as the utility of the adaptation of the high sensitivity of nanoenabled medical sensing (use of antibodies, DNA, graphene platforms, etc) in future real world environmental scenarios (For example: Air detection of potential toxins, groundwater monitoring of potential toxins of concern, cosmetics, drugs, nanomaterial -embedded polymer fragments, etc.)?

Tuesday, March 13, 2012, 1:30 - 3:30 PM

Chemistry Careers Beyond the Bench

Facilitator: Christine Herman, University of Illinois at Urbana-Champaign Room 311H
Wondering what to do with your chemistry degree? Come and learn about careers beyond the bench! You'll meet a panel of chemists with nontraditional careers and get an overview of career options, complete with tips for exploring various career paths and finding the one that's right for you.

Harsh Environment Mass Spectroscopy

Facilitator: Richard Arkin, Hazard & Gas Detection Lab and James Wylde, 1st Detect CorporationRoom 311F
This session is targeted towards users and developers of portable mass spectrometers deployed to various harsh environments such as oceans, battlefields, outer space, hazardous waste sites, and volcanoes, to name a few. Building mass spectrometers to withstand the rigors of such harsh and remote environments poses unique technological challenges to engineering design and science objective planning. Stringent operational requirements for power, size and reliability must all be met while achieving the goals of the scientific mission. Many opportunities for innovation and application of these devices are now being recognized, and their use is growing. If you have a harsh environment application or are a designer of rugged mass spectrometers, this session is for you.

New Applications for SERS

Facilitator: Michael Natan, Cabot Security Materials Inc Room 311E
Fueled by advances in nanostructure synthesis and reductions in the cost/footprint of Raman spectrometers, surface enhanced Raman spectroscopy (SERS) is poised to (finally) to take its place in the analytical chemistry measurement toolbox. This networking session will focus on applications well-suited (and not well-suited) for SERS today, and going forward.

Oral Fluid TDM and Toxicology Testing

Facilitator: Erica Guice, Western Slope Laboratory Room 312A
Oral fluid is an up and coming matrix for drugs of abuse and prescription drugs. This forum will discuss the triumphs and problems.

Phase Appropriate GMP for Validation of Analytical Methods

Facilitator: Amir Malek, Genentech Room 311G
Phase appropriate validation of analytical methods is an ongoing challenge for the pharmaceutical industry. The extent of validation depends on nature of the method, intended use of the method, phase of the development and stage of the production. While different practices are utilized to complete the validation activities at various stages of product development the common goal is that the method is suitable for the intended purpose.

CANCELLED Textile Chemistry and Technology

Facilitator: Manal El-Sheikh, National Research Center Room 312B
Textile chemistry and technology, utilization of nano technology in the textile finishing. Medica textile, use of nano technology in the preparation of hydrogel, use of both nano technology and solar radiation in the above mentioned titles.

Wednesday, March 14, 2012, 8:30 - 10:30 AM

Bioanalytical Sensors for Structural Analysis of Biomolecules

Facilitator: Electra Gizeli, Foundation for Research and Technology - Hellas (FORTH)..Room 312B

Probing the structure of DNA and protein molecules is important in nanobiotechnology, clinical diagnosis and drug screening; acoustic, electrochemical and optical sensors are currently used as powerful tools for such studies.

Chromatography and Mass Spectrometry User's Forum

Facilitator: Arindam Roy, Oakwood Laboratories, LLC..... Room 311H

This has been an informal session of separation scientists and taking place for last 5 years at Pittcon. The participants provide the topics for discussion and it has been one of the most successful networking event for Pittcon.

CANCELLED

Is Today's Laboratory Ready for Tablet Computers?

Facilitator: David Hurt, Labvantage SolutionsRoom 311F

The IT world is on its second or third honeymoon with tablet computers, but now this technology seems more feasible. The Apple iPad and low cost Android tablets are pointing the way to the often dreamed of, always on, data appliance for everyone to carry. But for the lab to take this seriously, there are more considerations; are they tough enough for the harsh lab environment, is the form factor right to carry around all day, are they a replacement for the bench top computer or are the capabilities better applied to niche applications.

Laser Based Gas Analysis

Facilitator: Paul Nesdore, Gases and Instrumentation Magazine

Co-Facilitator: Lisa Bergson, Tiger Optics, Inc. Room 312A

Laser based gas analyzers are at the cutting edge of gas analysis for speed sensitivity, and other quality attributes. This discussion should include TDLAS, CRDS, QCL and other related technologies and their applications and advantages and comparison to legacy methods.

Process Analytical Technologies - PAT

Facilitator: James Rydzak, GlaxoSmithKline Room 311G

The PAT networking session this year will provide a forum for discussion and exchange of ideas on a broad area of PAT. Instrumentation including Process IR, NIR, Raman and other techniques will be discussed along with what new technologies such as Quantum Cascade Laser Applications and near line NMR. Discussion will include the topics of software and interfaces and regulatory aspects of PAT. The forum will include Suppliers of PAT equipment and software along with users of the technology. Hope to see you there.

Sample Preparation Techniques with HPLC

Facilitator: Frank Steiner, Thermo Fisher Scientific..... Room 311E

Current use and developments of sample preparation techniques for and with (U)HPLC - enrichment and cleanup by SPE (on- and offline), TurboFlow techniques, multiplexing for increased sample throughput, facilitated MS sample introduction.

Wednesday, March 14, 2012, 1:30 - 3:30 PM

Analysis and Control of Genotoxic Impurities in Drug Development

Facilitator: Jane Li, Genentech

Co-Facilitator: Shelly Li, Pfizer, Inc..... Room 311E

We will be discussing the status and current advancement in the analysis and control of genotox impurities during drug development. Regulatory strategies in dealing with different categories and toxicities of specific impurities for various indications are also of relevance to the discussion. Attendees are envisioned to come together sharing knowledge and leave the network session with a better understanding of the "best practices" in working with genotoxic impurities.

Application and Submission Process for SBIR and STTR NIH Grants

Facilitator: Erica Guice, Western Slope Laboratory..... Room 311G

The application and submission process for SBIR and STTR NIH grants. These grants are specific for small businesses and are very unique especially for those who have never submitted a grant.

Chromatography Applications and Marketing in China

Facilitator: Perry Wang, US FDA..... Room 312B

This session will give Chinese scientists an opportunity to introduce themselves to major vendors, which can further understand the tremendous market in China.

FDA Food Safety Modernization ACT - Product Testing and Preventive Controls

Facilitator: Carol Schneider, Alpha MOS, Inc. Room 311H

The newly passed Food Safety Modernization ACT demands more intensive testing and preventive controls to guarantee the food supply chain safety. This session proposes to discuss how analytical instruments such as the Electronic Nose & Electronic Tongue can help meet the legislation requirements and ensure product traceability.

Making the Most Out of Graduate School

Facilitator: Helen Boylan, Westminster College Room 312A

This conference session targets all current graduate students and those who are considering graduate studies. All topics relevant to the graduate school experience are open for discussion, including, but not limited to:

- . Getting into/selecting the best graduate school.
- . Selecting the right advisor
- . Maintaining productivity
- . Writing effectively
- . Planning for the next stage of your career
- . Networking
- . Getting to candidacy
- . Dealing with your lab's/department's politics

Techniques and Methodologies for Direct Speciation

Facilitator: Manuel Valiente, Universitat Autònoma de Barcelona Room 311F

Sample preparation not always respect the original form of chemical species. Methodologies for direct speciation will overcome such problem and also validate results obtained by most conventional indirect speciation.