

Agenda of Sessions

SUNDAY AFTERNOON, MARCH 1, 2020

1:30 PM

SYMPOSIA

ACS-Analytical Chemistry and ANYL- Chemical Analysis of Energy Materials at the Nanoscale
Advances in Raman Spectroscopy
Biochemical Tomography and NanoMedicine
Enhanced Neuroanalytical Measurements: From Single Cells to Whole Organisms
New Wave of Nanoscale Electroanalytical Chemistry
Novel Probes for Visualizing Biochemical Processes in Cells, Tissues, and Tumors
Supramolecular Chemistry from Sensing, Sequestration and Separation

ORAL SESSIONS

Bioanalytical Detection Using Mass Spectrometry
Bioassay and Immunoassay Development
Cannabis – Terpenes, Cannabinoids and Particulate Testing
Ecological Focus Methods
Food Safety: Extraction, Detection and Analysis of Contaminants
LC Column, Stationary Phase and Mobile Phase Updates
Material Science: New Techniques
Microfluidics/Lab-on-a-Chip for Analysis and Preparation
Neurochemistry I: Sensitivity and Measurement Optimization
Novel Methodology and Detection Tools
Paint, Plastics and Polymers
Raman Spectroscopy

POSTER SESSIONS

ACS (American Chemical Society) - 5:30 PM
Sunday Posters - 5:30 PM

MONDAY MORNING, MARCH 2, 2020

8:30 AM

AWARD AND SYMPOSIA

Satinder Ahuja Award for Young Investigators in Separation Science – Katelynn Perrault
The Chromatography Forum of Delaware Valley Dal Nogare Award – Ronald Majors
Addressing the Analytical Challenges of New Biotherapeutic Drug Modalities
Aptamer-Based Sensors
Frontiers in Vibrational Spectroscopy of Surfaces and Interfaces: Evolution, Revolution or Back to the Future
IAEAC (International Association of Environmental Analytical Chemistry) – The Future of Environmental and Food Monitoring
NIJ (National Institute of Justice) – Emerging Methods for Chemical and Biological Forensic Evidence
Novel Separations and Detection Modes for Microchip and Capillary Electrophoresis
Truth in Labeling? Dietary Supplement Analysis: Authentication, Adulteration and Contaminant Testing

WORKSHOP SESSION

Industrial Applications of GCxGC

ORGANIZED CONTRIBUTED SESSIONS

Extractables and Leachables Analysis
Specialty Gases

ORAL SESSIONS

Advances in Pharmaceutical Analysis
Bioanalytical Electrochemical Methods
Bioinformatics, Lab Informatics and LIMS
Clinical Analysis Applications
Environmental Method Development (Half Session)
Handheld and Standoff Detectors for Drugs and Explosives
LC Methods – Recent Advances
Process Analysis Chemistry and Technology (Half Session)

NETWORKING SESSIONS

10:30 AM

Embracing Regulatory/Design Control Constraints as a Viable Innovation/Development Strategy
Food Contact Materials - Yet Another Source of Contamination in Our Food
Quantitative Polymerase Chain Reactions as a Tool for Detection and Enumeration of Pathogens in Wastewater and Biosolids
Raman Spectroscopy: Metrology, Standardization and Quantification

MONDAY AFTERNOON, MARCH 2, 2020

1:30 PM

AWARDS AND SYMPOSIA

SEAC - The Charles N Reilley and Royce W Murray Awards
Shelley Minter – Reilley Award
Martin Edwards – Murray Award
The Pittsburgh Conference Achievement Award – Livia Schiavinato Eberlin
The Ralph N. Adams Award – Nancy Allbritton
Automation of Proteomics Sample Preparation
Challenges in Surface Vibrational Spectroscopy
SAS (Society for Applied Spectroscopy) – Smartphone Spectroscopy for Analyses and Assays in Low Resource Areas
State of the Art in Nanosensing
The Thirty-First James L. Waters Symposium – Ion Mobility Spectrometry-Mass Spectrometry (IMS-MS)
Michael T. Bowers
Martin F. Jarrold
David E. Clemmer
Kevin Giles
David H. Russell
Richard D. Smith
Understanding Food Packaging Materials: Challenges in the Analysis of Packaging Components and Migrants in Food

WORKSHOP SESSION

Addressing Water Quality and Environmental Chemistry Challenges in the Digital Era

ORGANIZED CONTRIBUTED SESSIONS

NIJ (National Institute of Justice) – Advancements in the Analysis of Forensic Trace Evidence
PAI-NET (Professionals' Network in Advanced Instrumentation Society) – Immunoassay and Aptamer Assay: Instrumentation and Molecular Approach

ORAL SESSIONS

Advanced Techniques for Biomedical Analysis
Advances in GC/MS
Biological Applications: Improved Characterization and Control of Drugs, Tissues and Proteins

Carbohydrates, Amino Acids and Proteins (Half Session)
Education, Automation, New Techniques (Half Session)
Forensic Analysis: New Methodology (Half Session)
High-Throughput Methods in LC, MS and SFC
Leading Edge Sensor Design
Proteomics (Half Session)

NETWORKING SESSIONS

2:00 PM

Extractables and Leachables Analytical Technology Provider and User Forum
Improving Data Integrity through Software User Administration and Training
Industry-University Collaborations in Measurement Science:
Collaborative Development of Enabling Technologies for Industry Surface and Nanomaterial Characterization
What is Flow Imaging Microscopy, And Why is it Time to Implement This Technology

AWARD - 4:45 PM

The Pittcon Heritage Award – Stan Stearns

THE WALLACE H. COULTER LECTURE - 5:00PM

John A. Rogers

TUESDAY MORNING, MARCH 3, 2020

8:30 AM

AWARD AND SYMPOSIA

The Pittsburgh Spectroscopy Award – Ji-Xin Cheng
ACS Sensors and ANYL – Frontiers in Sensing: Novel Optical Methods
Analytical Plasma Spectrometry – The Next Generation
Bioanalysis in Injured and Inflamed Tissues
Bioanalysis, Sensing and Imaging with Optically-Active Nanomaterials
Creative Developments in Electric Field-based Separation
IAEAC (International Association of Environmental Analytical Chemistry) – Thinking Outside of the Box: Analytical Approaches towards the Grand Challenge
JAIMA (Japan Analytical Instruments Manufacturers Association) & ETC (Enabling Technology Consortium) – Advanced Drug Discovery for Biopharma and Biotherapeutics: Technologies for Structural Analysis and Spectroscopic Cell Imaging
Matrix Compatible Thin Films of Sorbents: A Green Alternative Facilitating Wide Range of Sample Preparation Tasks
NIJ (National Institute of Justice) – Innovations and Trends in Forensic Examination of Seized Drugs and Forensic Toxicology

ORGANIZED CONTRIBUTED SESSIONS

An Update on Advances and Trends in Lab Automation
Analytical Applications of Benchtop NMR
Ionophore-Based Chemical Sensors Part I

ORAL SESSIONS

Analytical Methods in Food Science
Biomarker and Aptamer Based Detection Methods
Chemometric Methods (Half Session)
Computational Chemistry and Analytics (Half Session)
Fuels, Energy and Petrochemical Research Advances
HPLC Methods for Pharmaceutical Analysis
Materials Characterization
Raman, Surface Enhanced Raman (SERS) and Imaging

POSTER SESSIONS

Advances in Separation Science
Atomic Spectroscopy and Elemental Analysis
Cannabis Testing and Method Development
Food Safety, Science and Identification
Mass Spectrometry
Novel Method Development and Modifications

NETWORKING SESSIONS

10:30 AM

An Introduction to Valve Gas Chromatography Systems
Health and Safety in the Laboratory
Microscopy in the Classroom - Inspire STEM Education Outreach Program
Prepared? Frustrated? Anxious? Successful? – PFAS: Questions, Concerns and Successes From Environmental Labs
Understanding The Nuances of Accreditation For Cannabis Testing Laboratories

TUESDAY AFTERNOON, MARCH 3, 2020

1:30 PM

AWARDS AND SYMPOSIA

The LCGC Lifetime Achievement and Emerging Leader in Chromatography Awards
Daniel Armstrong – Lifetime Achievement
Szabolcs Fekete – Emerging Leader
The Pittsburgh Analytical Chemistry Award – Milan Mrksich
Economically Motivated Adulteration of Food and Analytical Methodologies to Monitor Food and Quality
Implementation of Ultra-High-Pressure Chromatography Methodologies in Drug Discovery and Development
New Reporters for Optical Biological Imaging and Bioanalysis: From Small Molecules to Nanomaterials
Portable Instrumentation for Illicit Material Detection
Robotics and Artificial Intelligence in the Research and Development Laboratory
SAS (Society for Applied Spectroscopy) – Portable Spectroscopy in 2020
Spatially Resolved Analysis of Tissue Function

WORKSHOP SESSION

JAIMA (Japan Analytical Instruments Manufacturers Association) & ETC (Enabling Technology Consortium) – Advanced Drug Discovery for Biopharma and Biotherapeutics: Technologies for Structural Analysis and Spectroscopic Cell Imaging

ORGANIZED CONTRIBUTED SESSIONS

Ionophore-Based Chemical Sensors Part II
NIJ (National Institute of Justice) – Innovations in Forensic Examination of Seized Drugs and Forensic Toxicology

ORAL SESSIONS

Biopharmaceutical Analysis
Critical Studies of PFAS (Perfluorinated Alkyl Substances)
Gas Chromatography Applications
Infrared (IR), Fluorescence and Luminescence Spectroscopy
Magnetic Resonance, Microscopy and Imaging
Neurochemistry 2: Advances in Monitoring Neurochemicals
Novel Applications of Microfluidics

POSTER SESSIONS

Agricultural and Consumer Products Research
Bioanalytical Methods
Electrochemistry
Laboratory Informatics/LIMS
Nanotechnology
Pharmaceutical Analysis

Surface Analysis, Imaging and Microscopy
Vibrational Spectroscopy

NETWORKING SESSIONS

2:00 PM

Emerging Rapid Methodologies in Detection of Unhealthy and Low Quality Food
Finding Greener Alternative Solvents and Reagents for Product Testing and Manufacturing
Toolbox for High-Throughput Screening Using Mass Spectrometry
Trends and Hot Topics in Cannabis and Hemp Analytical Testing
Use of SCDs for Sulfur Determination: Why it's Important and Optimizing Your System

PLENARY LECTURE - 5:00 PM

Ziva D. Cooper

NIJ (National Institute of Justice) – POSTER SESSION - 5:30 PM

WEDNESDAY MORNING, MARCH 4, 2020 8:30 AM

AWARDS AND SYMPOSIA

Advances in Measurement Science Lectureship Awards –
Andrew deMello
Zhen Liu
Jennifer Brodbelt
The Coblenz Society – Williams Wright Award – Christopher Brown
Advanced NMR and MRI Studies of Lithium Ion Batteries
Advances in Nanomedicine and Theranostics: Characterization of Extracellular Vesicles by Vibrational Spectroscopy
Censored Data in Environmental and Analytical Chemistry
Innovative Screening Strategies for the Directed Evolution of Enzymes
Pushing the Boundaries of Brain Detection
Two-Dimensional Liquid Chromatography after 40 Years: State-of-the-Art, and Future Prospects

ORGANIZED CONTRIBUTED SESSIONS

NIJ (National Institute of Justice) – Innovations in Technology to Advance Forensic Science
SEAC (Society for Electroanalytical Chemistry): The Student Session in Electroanalysis
The LCGC Awards, Part II: Advancing the Frontiers of Separation Science
The Science behind the Cultural Heritage Materials: Preserving our Past

ORAL SESSIONS

Atomic Force Microscopy (AFM), Aerosols and Particulates (Half Session)
Bioanalytical Electrochemistry Advances
Cannabis – Cannabinoids Testing and Analysis Methods
Capillary Electrophoresis Applications
Clean-Up, Extraction and Analysis of Organic Pollutants
Electrochemistry – Electrodes and Materials
Methods for Air Quality and Emissions Monitoring (Half Session)
Techniques for Elemental Analysis

POSTER SESSIONS

Analytical Methods for Pollutants, Contaminants, Byproducts and Species of Environmental Interest
Biomedical and Biopharmaceutical Research
Forensics and Homeland Security

NETWORKING SESSIONS

10:30 AM

Automation in the Research and Development Laboratory
Cannabis QC Testing and Research Forum: New Opportunities for Advancing Standardization and Research
Latest Trends in Petrochemical Testing
Threshold Concepts in Teaching Analytical Chemistry

WEDNESDAY AFTERNOON, MARCH 4, 2020 - 1:30 PM

SYMPOSIA

Analytical Chemistry of Beer and Brewing
Biological Mass Spectrometry: Innovative Advances in Understanding and Diagnosing Disease
Developing and Adapting Analytical Technologies to Preserve Our Past
Emerging Developments in Cannabis Science

NO OTHER ORAL SESSIONS ON WEDNESDAY AFTERNOON

POSTER SESSIONS

Aerosols and Particulates Research
Bioanalytical Methods II
Education and Teaching
Fuels, Energy and Petrochemical Analysis
Material Science
Microfluidics/Lab-on-a-Chip
Neurochemistry, Immunoassay and Drug Discovery
SEAC (Society for Electroanalytical Chemistry) Poster Session
Undergraduate Poster Session

THURSDAY MORNING, MARCH 5, 2020 8:30 AM

SYMPOSIA

ACS – Journal of Proteome Research – Precision Proteomics for Personalized Medicine
Applications of Photoionization in Mass Spectrometry
Developments in Suspect and Non-Target Screening Applied to Environmental Analysis
Innovations in Technology and Applications of Differential Ion Mobility Separations
Machine Learning in Analytical Chemistry
Recent Trends in Laser Induced Breakdown Spectroscopy
The Applications of Analytical Chemistry in Biofuel and Bioproduct Study
To Selectivity and Beyond: Celebrating 18 Years of the Hydrophobic Subtraction Model

ORGANIZED CONTRIBUTED SESSION

Applications of Microdialysis From A to Z

ORAL SESSIONS

Bioanalytical Sensor Design and Application
Cannabis – Foods, Metals and Pesticide Analyses
Drinking Water Methods (Half Session)
Lab-on-a-Chip/Microfluidics: Recent Progress
Mass Spectrometry – Instrumentation, Identification and Characterization

Neurochemistry 3: Improved Characterization Techniques:
Examination of Brain Insults
Recent Developments in Microfluidics/Lab-on-a-Chip
Sensor Advances for Biological Applications I
Technical Advances in Microfluidics using 3D Printing
Treatment and Sampling of Wastewater, Drinking Water and Soil (Half Session)

POSTER SESSIONS

Applications of GC and GC/MS
Environmental Methods for Air, Soil and Water
LC and LC/MS for Bioanalytical, Pharmaceutical and Clinical Methods
Polymers and Plastics
Sampling, Sample Preparation and Calibration
Sensors

NETWORKING SESSIONS

10:30 AM

Hot Topics and Use of Multidimensional GC (GCxGC)
Leveraging Social Media and Modern Marketing Tools to Share Your Research and Solutions
Removing Risk of Data Errors in Labs and Incorporating Metadata
Speed Mentoring

THURSDAY AFTERNOON, MARCH 5, 2020 1:30 PM

SYMPOSIA

Analytical Tools Enabling Molecular-Level Studies of Environmental Multi-Phase Air-Water-Soil Systems
Innovative Training for the Next Generation of Analytical Chemists
Molecule and Materials for Solar Fuels
Process Analytical Technologies for Pharmaceutical and Biopharmaceutical Continuous Manufacturing 2.0

ORAL SESSIONS

Bioanalytical Applications
Bioanalytical Separations and Mass Spectrometry Methods
Electrochemistry for Biochemistry Neurochemistry & Detection
GC Column Development (Half Session)
Ion Chromatography (Half Session)
LC and LC/MS Methods for Bio-Organics (Half Session)
LC/MS –Proteins, Peptides, Metabolomics and Cannabis (Half Session)
Mass Spectrometry – New Capabilities
Nanotechnology
New and Improved Methods for Insuring Food Safety
New Methods for Environmentally Relevant Analytes
Sample Preparation – Novel Tools and Techniques
Sensor Advances for Biological Applications II

NETWORKING SESSIONS

2:00 PM

ISO 20387 – A New Standard for Biobanking Accreditation
SPME Arrow: Dramatically Increase Throughput in GC-MS Analysis
Utilizing a New, Robust Microextraction Sampling Technique
Project Management for Technical Professionals; Applying Project Management Skills in R&D Project Implementation
Testing Challenges in the Cannabis and Hemp Industries

