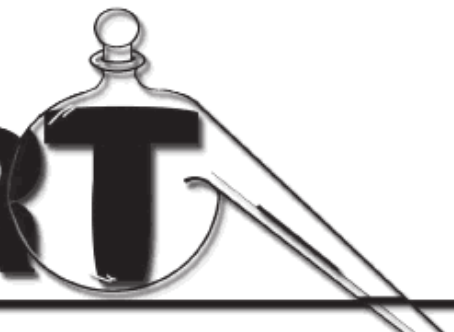




# RETORT



February 2019

Newsletter of the Eastern Analytical Symposium & Exposition

2019 EASTERN ANALYTICAL SYMPOSIUM & EXPOSITION



Crowne Plaza Princeton  
Conference Center  
Plainsboro, NJ  
November 18-20, 2019

ENHANCING ANALYTICAL CHEMISTRY  
WITH SUSTAINABLE SOLUTIONS



In November 2019 the 58<sup>th</sup> Eastern Analytical Symposium will be held at the Crowne Plaza Princeton Conference Center for the third year. After two successful years in our new venue, the EAS team is very excited as we prepare to present another great analytical chemistry exposition and symposium. We look forward to working with our exhibitors, presenters and instructors to ensure another informative & educational meeting. The theme for EAS 2019 is *Enhancing Analytical Chemistry with Sustainable Solutions*. EAS continues the **Going Green** theme to lead the way to focus the innovation and chemical solutions for our global sustainability. Our 2019 Program will feature our Keynote speaker, Professor Susan Olesik, Dow Professor and Chair of the Chemistry and Biochemistry Department of The Ohio State University. Professor Olesik will speak on enhancing our sus-

tainable practices in analytical chemistry. Our Plenary Lecture will be delivered by the 2019 EAS Awardee for Outstanding Achievements in the Fields of Analytical Chemistry, Distinguished Professor Joel Harris of the University of Utah. We are also delighted to announce that Inspector David Bowers of the United States Postal Service will be speaking at our breakfast session on the Amerithrax investigation. You will not want to miss these presentations!

EAS 2019 will offer a variety of informative and valuable technical presentations and short courses. A preliminary list of technical sessions and short courses are available in this issue of The Retort. Last year EAS went green by displaying our poster presentations in electronic format. If you were here you know that the e-posters were truly a success. We will continue with that format this year so if you have some useful information or new research please consider submitting an abstract for our poster sessions and share your knowledge.

Our exposition will again feature our exhibitors displaying their state-of-the-art technology and products all within the same building as our technical session. So you can browse the exhibition to learn about the newest of technologies that may help you with practical solutions for your workplace. We will continue with our highly successful Technology Tour and our very popular Green Tour which will allow you to interact with the participating exhibitors that are helping enhance our analytical chemistry future with sustainable solutions.

I encourage you to also visit our booth at PittCon (#1809), bookmark [www.eas.org](http://www.eas.org), and follow us on LinkedIn, Facebook or Twitter for news and information on the symposium. I look forward to welcoming you to the Crowne Plaza Conference Center in Princeton, Nov. 18-20 for the 58<sup>th</sup> EAS, *Enhancing Analytical Chemistry with Sustainable Solutions*.

Thomas Brettell  
EAS 2019 President



## TABLE OF CONTENTS

Message from the President.....	1
Message from the Program Chair ..	2
Invited Technical Sessions.....	2-3
Short Courses.....	4
2019 Awardees.....	5
Workshops & Employment Bureau	6
Student Seminars.....	6
Speed Mentoring.....	7
Call for Papers.....	8
Exhibiting Companies .....	9
Corporate Sponsorships.....	10
Important Dates.....	10

## Message from the Program Chair

It gives me great pleasure to introduce the Eastern Analytical Symposium program for 2019. EAS will be returning to the Crowne Plaza Conference Center in beautiful Princeton/Plainsboro, New Jersey for our third year!

The theme for this year's symposium is **Enhancing Analytical Chemistry with Sustainable Solutions**. Plans are well under way for technical presentations in more than 50 invited and contributed sessions on a wide variety of analytical science subjects. Among the topics planned for this meeting are the role of analytical chemistry in green chemistry, automation and process analytical chemistry in pharmaceutical development, multi-dimensional and hyphenated analytical techniques, surface chemistry, gene and cell therapies, forensic science, analytical chemistry in cultural heritage, and many more!

At this year's meeting, EAS is proud to be honoring six scientists for their groundbreaking research. **Professor Jennifer S. Brodbelt**, University of Texas-Austin, will be receiving the 2019 EAS Award for Outstanding Achievements in Mass Spectrometry, **Professor Peter de Boves Harrington**, Ohio University, for Outstanding Achievements in Chemometrics, **Professor Joseph J. Pesek**, San Jose State University, for Outstanding Achievements in Separation Science, **Professor Lucio Frydman**, Weizmann Institute of Science, for Outstanding Achievements in Nuclear Magnetic Resonance, **Professor Ishan Barman**, Johns Hopkins University, for the EAS Young Investigator Award, and **Professor Joel M. Harris**, University of Utah, will receive the prestigious EAS Award for Outstanding Achievements in the Fields of Analytical Chemistry. Award winners will be participating in special scientific and technical sessions highlighting their research as well as the research of chosen colleagues in their fields. These exciting sessions not to be missed!

EAS is pleased to welcome to the 2019 Symposium the NJ ACS Women's Chemistry Committee, the Chinese American Chemistry Association, and the HPTLC Association. These groups will be joining EAS for the first time and will be arranging scientific sessions highlighting the research of their members and colleagues.

Do you have interesting, novel, scientific research and data that you would like to present? Please consider submitting an abstract for this year's contributed program. Beginning on **March 1**, EAS will be accepting abstract submissions online. All abstracts are peer-reviewed to ensure high-quality and scientific rigor. Abstracts may be submitted for the oral technical session or for the electronic poster sessions. Last year's electronic poster sessions were a huge success with over 90 poster presented in vivid color and detail on 55" high-resolution LED monitors!

The Eastern Analytical Symposium is an excellent opportunity to see the latest technology and research in analytical chemistry, network with colleagues, and reconnect with friends in your field. Please mark your calendars to come celebrate analytical science with us in 2019!

**Matthew Wood**  
2019 EAS Program Chair

## 2019 EAS Invited Technical Sessions

*Note: This is a preliminary list of sessions. Contributed oral and poster sessions will be announced at a later date.*

We invite you to plan to join us at the EAS 2019! This is also an invitation to contribute a paper to EAS in your own analytical subject area for review and acceptance. Complementary papers to the topics mentioned below are especially welcome but we encourage all areas of analytical chemistry. Visit our website for more information about our **Call For Papers** from **March 1 - May 1** for **oral** abstracts and **March 1 - September 1** for **poster** abstracts at [www.EAS.org](http://www.EAS.org)

### AWARD SESSIONS

#### **EAS AWARD FOR OUTSTANDING ACHIEVEMENTS IN THE FIELDS OF ANALYTICAL CHEMISTRY**

Honoring **Joel M. Harris, University of Utah**  
Chair: Mary Wirth, Purdue University

#### **EAS AWARD FOR OUTSTANDING ACHIEVEMENTS IN CHEMOMETRICS**

Honoring **Peter de Boves Harrington, Ohio University**  
Chair: Paul Gemperline, Eastern Carolina University

#### **EAS AWARD FOR OUTSTANDING ACHIEVEMENTS IN SEPARATION SCIENCE**

Honoring **Joseph J. Pesek, San Jose State University**  
Chair: Kylene Whitaker, Procter & Gamble

#### **EAS AWARD FOR OUTSTANDING ACHIEVEMENTS IN MASS SPECTROMETRY**

Honoring **Jennifer Brodbelt, University of Texas-Austin**  
Chair: Jim Shen, Bristol-Myers Squibb

#### **EAS YOUNG INVESTIGATOR AWARD**

Honoring **Ishan Barman, Johns Hopkins University**  
Chair: To be announced

### AWARD SESSIONS

#### **EAS AWARD FOR OUTSTANDING ACHIEVEMENTS IN MAGNETIC RESONANCE**

Honoring **Lucio Frydman, Weizmann Institute of Science**  
Chair: Warren Warren, Duke University

#### **NEW YORK MICROSCOPICAL SOCIETY ERNST ABBE AWARD**

Honoring: Fran Adar, HORIBA Scientific  
Chairs: John Reffner, John Jay College of Criminal Justice,  
Brooke Kammrath, University of New Haven

#### **NY/NJ SECTION OF THE SOCIETY OF APPLIED SPECTROSCOPY GOLD MEDAL AWARD**

Honoring: *To be announced*  
Chair: Dana Garcia, Debbie Peru

#### **AMERICAN MICROCHEMICAL SOCIETY BENEDETTI PICHLER AWARD**

Honoring: *To be announced*  
Chair: Robert Vetrecin

# 2019 EAS Invited Technical Sessions cont.

## NON-AWARD SESSIONS

### NEW FOR 2019

- **Breakfast Lecture**  
David Bowers, United States Postal Service
- **Keynote Speaker**  
Susan Olesik, Ohio State University
- **Plenary Lecture**  
Joel M. Harris, University of Utah

### CHEMOMETRICS

- Chemometrics in Forensic Science  
Chair: Brooke Kammrath, University of New Haven

### CHROMATOGRAPHY

- Multidimensional and Hyphenated Techniques: From Development to Routine Analysis, Part I  
Chair: Mary Ellen McNally, FMC
- Multidimensional and Hyphenated Techniques: From Development to Routine Analysis, Part II  
Chair: Marcelo Filgueira, Dow Chemical Company
- Unique Applications and Novel Concepts of High-Performance Thin-Layer Chromatography (HPTLC)  
Chair: Maged Sharaf, The International Association for the Advancement of HPTLC
- Industrial and Medical Innovation Involving Odor Analysis and GC Instrumentation  
Chair: Michelle Gallagher, Dow Chemical Company

### CULTURAL HERITAGE

*Organized by the New York Conservation Foundation*

- "Traditional" Analyses for Cultural Heritage  
Chair: John Scott, New York Conservation Foundation
- DNA Analysis for Cultural Heritage  
Chair: John Scott, New York Conservation Foundation
- Proteomics for Cultural Heritage  
Chair: John Scott, New York Conservation Foundation
- Analytical Science in Cultural Heritage  
Chair: John Scott, New York Conservation Foundation

### FORENSIC ANALYSIS

- Advances in Forensic Toxicology and Counterfeit Pharmaceutical Analysis  
Chair: Yi He, John Jay College of Criminal Justice
- Chemical Considerations in the Transportation Industry  
Chair: Vincent Desiderio, US Postal Service
- The Research from our Emerging Forensic Scientists  
Chair: Monica Joshi, West Chester University of PA
- Chemometrics in Forensic Science  
Chair: Brooke Kammrath, University of New Haven

### GREEN ANALYSIS

- Role of Analytical Chemistry in Greening Chemistry  
Chair: Satinder Ahuja, Ahuja Consulting

### LABORATORY ANALYSIS

- Lab Management  
Chairs: Dennis Swijter, ALMA

### MASS SPECTROMETRY

- Applications of High Resolution Mass Spectrometry in Food Safety: Cannabis, Dietary Supplements, and Drinking Water  
Chair: Gene Hall, Rutgers University
- Applications of High Resolution Mass Spectrometry in the Pharmaceutical Industry  
Chair: Carolina Cabral, Prolong Pharma
- Mass Spectrometry for Biopharmaceutical Discovery and Development  
Chair: Xi Qiu, Agilent Technologies

### NMR SPECTROSCOPY

- Innovative Applications of NMR Spectroscopy to Materials  
Chair: Cecil Dybowski, University of Delaware
- Pharmaceutical Solid-State NMR: Moving Beyond Carbon  
Chair: Joseph Lubach, Genentech

### PHARMACEUTICAL ANALYSIS

- Analytical Challenges Impacting Biologics Drug Development  
Chair: Kim Huynh-Ba, Pharmalytik, Karen Lucas, Janssen
- Automation and PAT in Pharmaceuticals  
Chair: David Shenck, Merck & Co.
- Method Lifecycle Management  
Chair: Isabelle Vu Trieu, Waters
- Challenges Working with Organic Impurities and Genotoxic Impurities Found in Pharmaceutical Products  
Chair: Kim Huynh-Ba, Pharmalytik
- Challenges and Innovations in Analytical Assays for Cell and Gene Therapy Products  
Chair: Robert Dodge, Novartis
- Advances in Forensic Toxicology and Counterfeit Pharmaceutical Analysis  
Chair: Yi He, John Jay College of Criminal Justice

### SPECTROSCOPY

- Lasers in Analytical Chemistry  
Chair: Lydia Breckenridge, Bristol-Myers Squibb
- Advances in Portable Spectroscopy  
Chair: Brandye Smith-Goettler, Merck & Co.
- Applying Machine Learning to Spectroscopic Data  
Chair: Brandye Smith-Goettler, Merck & Co.

### SURFACE SCIENCE

- Analytical Techniques for Surface and Interfacial Characterization  
Chair: Michael Clark, Dow Chemical Company

## 2019 PRELIMINARY LIST OF SHORT COURSES

EAS short courses are designed to help the practicing analyst develop new skills and enhance knowledge. Taught by experts, the short courses emphasize practical knowledge of a variety of important topics to help one keep current with best practices and new techniques. Whether you want to learn of a new analytical technology, understand new regulations, explore a new analytical field, or just brush up a new concept in your area of expertise, there is a course for you. **Richard Nguyen, 2019 Short Course Chair**

*Course descriptions are posted on our website; [click on course title](#) to link to the description.*

TWO-DAY COURSES	INSTRUCTORS
Modern Mass Spectrometry: Fundamentals to Frontiers <b>(NEW)</b>	Athula Attygalle, Stevens Institute of Technology
Modern HPLC/UPLC For Practicing Scientists Part 1 &/or Part 2: Fundamentals, Best Practices and Applications	Michael W. Dong, MWD Consulting
Practical LC-MS Method Development for Small Molecule Pharmaceuticals	Perry Wang, LC-MS Technical Expert
Quality-by-Design: A New Paradigm for the Analytical Laboratory	Zenaida Otero Gephardt, Otero Associates
Systematic LC and GC Troubleshooting	Merlin K.L. Bicking, ACCTA, Inc. Douglas E. Raynie, SD State University
LC/MS: Theory, Instruments, and Applications	Guodong Chen, Bristol-Myers Squibb Ragu Ramanathan, Pfizer
How to Develop Validated HPLC Methods: Rational Design with Practical Statistics and Troubleshooting	Brian Bidlingmeyer, Analytical Acumen Inc. Stanley Deming, Statistical Designs
Chemometrics without Equations Part 1 &/or Part 2	Donald Dahlberg, Lebanon Valley College Neal Gallagher, Eigenvector
ONE-DAY COURSES	INSTRUCTORS
High-Performance TLC, Planar Chromatography Beyond the Ordinary! <b>(NEW)</b>	Eike Reich, HPTLC Association Maged Sharaf, HPTLC Association
Faster HPLC Method Development and Optimization of Polar and Nonpolar Analyte Mixtures <b>(NEW)</b>	Joseph Pesek, San Jose State University Maria Matyska-Pesek, San Jose State University
A Systematic Way to Prepare Your Laboratory for Pre-Approval Inspections (PAIs) and Compliance Audit <b>(NEW)</b>	Kim Huynh-Ba, Pharmalytik, Consulting
The Chromatographic & Spectroscopic Tools of an Analytical Chemist for Measuring Polycyclic Aromatic Compounds in Complex Samples <b>(NEW)</b>	Andres Campiglia, University of Central Florida Walter Brent Wilson, NIST
Raman Microscopy Imaging <b>(NEW)</b>	Carlos Morillo, JASCO Inc.
Polymers: An Introduction and Characterization Techniques <b>(NEW)</b>	Diep Nguyen, Illinois Institute of Technology
Effective Utilization of PDA and MS Data in LC & SFC Method Development <b>(NEW)</b>	Joseph Turpin, S-Matrix Corporation
Process Analytical Technology and Quality by Design Integration for Effectiveness in the Analytical Lab <b>(NEW)</b>	Zenaida Otero Gephardt, Otero Associates
Headspace-Gas Chromatography Fundamentals, Method Development and Method Transfer <b>(NEW)</b>	Matthew Klee, XO Associates LLC
Mass Spectrometry Fundamentals for Operators <b>(NEW)</b>	Matthew Klee, XO Associates LLC
HPLC and UPLC Troubleshooting	Imad Haidar Ahmad, Merck & Co.
Practical NMR Spectroscopy	Damodaran Achary, University of Pittsburgh
Analytical Sampling and Sample Preparation for Chromatography	Douglas E. Raynie, SD State University
How Liquid Chromatography Works: Separation Principles Explained in Chromatograms	Martin Gilar, Waters
Intact and Top-Down Protein Characterization and Quantitation by Mass Spectrometry: Approaches for Pharmaceutical Drug Discovery, Development, and Bioanalysis	John Kellie, GlaxoSmithKline Wenyong Jian, Janssen R&D
Physical Characterization of Pharmaceuticals and Biopharmaceuticals Using Synchrotron Methods	Stephen Byrn, University of Purdue Sean Chen, Antares Pharma
Modern Size Exclusion Chromatography of Synthetic Polymers and Biopolymers	Howard Barth, Analytical Chemistry Consultants Brian Bidlingmeyer, Analytical Acumen Inc.
Modern Portable Analytical Spectroscopy	Richard Crocombe, Crocombe Spectroscopic Consulting Pauline Leary, Federal Resources
Supercritical Fluid Chromatography: A Powerful and Greener Tool for Analytical and Preparative Separations	Yingr Zhang, Bristol-Myers Squibb Mike Hicks, Merck & Co.
Life Cycle Management of Analytical Validation for Pharmaceutical Products	Kim Huynh-Ba, Pharmalytik Consulting
Getting the most from GC and GC/MS	Gregory Slack, Clarkson University Nicholas Snow, Seton Hall University
Interpretation of Mass Spectra with Practical Solutions to Problems	Mike Lee, Milestone Development
Lifecycle Approach to Analytical Methods for Drug Products, Incorporating Quality-by-Design Concepts	Gregory Martin, Complectors Consulting

## EAS Awards Program

### Gregory Slack, 2019 EAS Awards Chair

Each year the Eastern Analytical Symposium honors Analytical Chemists who have distinguished career achievements. The recipients of these awards advanced these fields by superior work in developing theory, techniques or instrumentation. This year scientists in six areas of endeavor, will be presented awards.



**Prof. Joel M. Harris**  
University of Utah  
*EAS Award for Outstanding Achievements in the Fields of Analytical Chemistry*



**Dr. Lucio Frydman**  
Weizmann Institute of Science  
*EAS Award for Outstanding Achievements in Magnetic Resonance*



**Prof. Peter de Boves Harrington**  
Ohio University  
*EAS Award for Outstanding Achievements in Chemometrics*



**Prof. Joseph J. Pesek**  
San Jose State University  
*EAS Award for Outstanding Achievements in Separation Science*



**Prof. Jennifer S. Brodbelt**  
University of Texas - Austin  
*EAS Award for Outstanding Achievements in Mass Spectroscopy*



**Prof. Ishan Barman**  
Johns Hopkins University  
*EAS Young Investigator Award*

Three other awards will be presented at the Annual Symposium in November under the auspices of the EAS Sponsoring Organizations



**Dr. Fran Adar**  
HORIBA Scientific  
*New York Microscopical Society Ernst Abbe Award*

**To Be Announced**

*NY/NJ Section of the Society for Applied Spectroscopy Gold Medal Award*

**To Be Announced**

*American Microchemical Society Benedetti-Pichler Award*

EAS Awards are selected by independent juries of experts in these respective fields from nominations received by the Award Committee from the scientific community at large or by the jury members. Each award consists of an honorarium, travel expenses to EAS, a plaque, and the opportunity for the Awardee to present his or her work at EAS at an Award Symposium in his/her honor. Visit our website for full biographies for each Awardee.

Persons wishing to make a nomination for any of the awards given by EAS should send complete documentation of the candidate (nominating letter summarizing achievements, curriculum vita or resume, a statement of the nominee's willingness to present an address as part of an EAS Award Symposium, and arrange for at least one seconding letter) electronically (**single PDF file is preferred**) to: [awards@eas.org](mailto:awards@eas.org). The length of the nomination packet should be commensurate with the nominee's accomplishments, but should be limited to eight to ten pages. The deadline for all 2020 award nominations is September 1, 2019.

## 2019 EAS Workshops

EAS is committed to your professional development, as well as the enhancement of knowledge. Our workshops include topics to help develop your professional skills, as well as to hone other skills critical for career success. These workshops will provide insight into the best techniques for presenting your background and relevant experience using both social media and traditional resume formats. Skills such as these are essential today, and EAS is the place to begin or continue developing them. We offer different workshops each day, which are free to all registered attendees. Workshop descriptions and registration details will be posted on the EAS website in early June -stay tuned!

## Employment Bureau

An Employment Bureau is available to provide ample opportunity for employees to meet prospective employers. The Employment Bureau is located on the **3<sup>rd</sup> Floor** of the Crowne Plaza Conference Center and is free to all registered attendees.

The Employment Bureau will operate from 9:00am until 4:00pm on Monday and Tuesday. On Wednesday, the hours will be 9:00am to 1:00pm. Job postings will be available for applicant review beginning at 11:00am on Monday morning. Interviews will not be scheduled until after 12:00noon on Monday. Job postings are continually updated during EAS and applicants are encouraged to visit the Job Posting bulletin boards on a regular basis.

### **Back by Popular Demand!**

- ◆ All resumes can be submitted and sent via email once you have registered for the conference! Resumes must be submitted in a SEARCHABLE PDF file format. This is to make it easier and faster for employers to find prospective applicants.
- ◆ Employers will be given access to EAS's secure portal to search and review resumes on-line.

**Brandye Smith-Goettler**  
**Employment Committee Chair**

## 2019 Student Seminars

The Eastern Analytical Symposium has an Outreach Program for high school chemistry and science teachers, collegiate undergraduates, as well as high school students.

On Sunday, November 17th, EAS will hold a **Free** professional development seminar offered exclusively to high school teachers.

EAS will also offer one Outreach Seminar each day, Monday, November 18 and Tuesday, November 19 for college undergraduate students and high school students. Each seminar will have recognized leaders from academia and industry presenting perspectives on careers in chemistry and fields of interest.

Registration for the Outreach Seminars is required to reserve a space. High school students attending with their teacher may register for a Seminar for free; the EAS registration fee, valid for all three days for college students is \$30 and it includes all the seminars. Information on course descriptions and schedules will be posted on our website as soon as they are finalized. Registration will open in early July.

Please contact Eastern Analytical Symposium at [askeas@eas.org](mailto:askeas@eas.org) or visit our website at [www.EAS.org](http://www.EAS.org) for more information.

**Peter Bratin**  
**Seminar Chair**

## Speed Mentoring at EAS

This year the Coblenz Society is bringing their Speed Mentoring activity to EAS!

What is speed mentoring you ask? Speed Mentoring is a fun, fast past session that enables a structured interaction with a dozen or more Analytical Chemists with different specialties from various industries, academia, and government labs that enable the mentees to get an understanding of what it's like to work in those areas.

How does it work? Mentees and Mentors need to sign up for the speed session in advance so we can get a number of people that are participating (spots are limited). If you sign up you get a free lunch at the session, sponsored by the Coblenz Society. We need professionals with various technical disciplines and from variety of industries, academia, and government labs to sign up as mentors. Graduate students and young professionals who are interested in finding out more about working in the various areas of chemistry also need to sign up.



- ◆ We start with a quick lunch and explanation of the process
- ◆ Mentors and mentees take seats facing one another
- ◆ Mentors start by introducing themselves, what their specialty (FTIR, NMR...), what industry etc., key jobs
- ◆ Mentees respond with their University, thesis area and begin asking questions
- ◆ A five-minute discussion ensues enabling mentees to learn about possible career avenues
- ◆ After 5 minutes mentees rotate a seat and the process starts up again.

These interactions can be the basis of an ongoing mentoring relationship session if that is of interest and is a wonderful networking opportunity for job hunting or just getting a better understanding of life in the various industries, government labs or academic institutions. It's also a way for chemists to give back to the community by sharing your experiences. Mentors and Mentees must register for the Eastern Analytical Symposium & Exposition. Part of the online registration process you will need to respond to the question asking if you want to be a mentor or a mentee. The Speed Session will be offered one day and will be approximately 1.5 hrs; date/time to be announced. Space is limited and we encourage you to register in advance. Space is limited and we encourage you to register in advance. Mentors and mentees can sign up just by sending your information (Name, title, affiliation/school, preferred email address) to Bernadette Taylor, EAS Executive Secretary at [askeas@eas.org](mailto:askeas@eas.org). Formal registration for EAS will open in July.



# ENHANCING ANALYTICAL CHEMISTRY

WITH SUSTAINABLE SOLUTIONS



Crowne Plaza Princeton  
Conference Center  
Plainsboro, NJ  
November 18-20, 2019

EAS invites YOU to be a part of the Technical Program next year.

Contribute a paper for oral or poster consideration via our website.

Bioanalysis  
Capillary Electrophoresis  
Chemometrics  
Conservation Science  
Environmental Analysis  
Forensic Analysis  
Gas Chromatography  
Liquid Chromatography  
Immunochemistry  
Industrial Hygiene  
IR/NIR/Raman Spectroscopy  
Laboratory Automation  
Laboratory Management  
Mass Spectrometry  
Microchemistry  
Microscopy  
NMR Spectroscopy  
Pharmaceutical Analysis  
Process Analytical Science  
Quality by Design  
Quality/Regulatory/Compliance  
Sample Preparation  
Science Education  
Separation Sciences  
SFC & Size Exclusion Chromatography  
Surface Science  
Vibrational Spectroscopy

**CALL for PAPERS 2019**  
**Opens March 1st**



## Explore Sustainable Solutions to Analytical Problems at the 2019 EAS With These Exhibitors

*Last updated February 20, 2019*

ACS New York Section	Molnar Institute
Activated Research	New Era Enterprises
Agilent Technologies	New York Microscopical Society
Airgas USA	New York Section of SAS
American Chromatography Supplies	NJ Mass Spec Discussion Group
American Laboratory	Omicron Scientific
American Pharmaceutical Review	Parker Hannifin
AMETEK Arizona Instruments	PerkinElmer Inc.
Analytik Jena	Photothermal Spectroscopy Corporation
Bruker Corporation	Regis Technologies
CEM Corporation	Renishaw
Chiral Technologies Daicel	Restek
Chromatography Forum of DE Valley	Rigaku Americas Corp.
Coblentz Society	Rudolph Research Analytical
Cornerstone Scientific	Sciex
Distek	SCP SCIENCE
Dissolution Technologies	Shimadzu Scientific Instruments
DWK Life Sciences	S-Matrix Corporation
GenTech Scientific	Sotax
GERSTEL, Inc.	Spex Sample Prep
Inorganic Ventures	TA Instruments
JASCO	Teledyne Princeton Instruments
JEOL	Thermo Fisher Scientific
Lab Manager/LabX	Thomson Instrument Company
LCGC and Spectroscopy Magazines	Trajan Scientific and Medical
LGC Standards	USP
Mac-Mod Analytical	VUV Analytics
Martel Instruments LLC	Waters Corporation
Metrohm USA	Wyatt Technology
Mettler Toledo	YMC America
MicroSolv	

Don't Miss Your Chance to Exhibit at the 2019 EAS.

For information, please contact Sheree Gold, Exposition Director at [easinfo@aol.com](mailto:easinfo@aol.com) or 610-742-4981 (cell).

The Governing Board of EAS would like to thank the following sponsors for their support in 2018

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NY Section of ACS  
Shimadzu Scientific Instruments

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The Dow Chemical Company  
Thermo Fisher Scientific

2018 Exposition Mixer Sponsor

Shimadzu Scientific Instruments

*Corporate Sponsors actively participate in the Eastern Analytical Symposium and Exposition. There are numerous opportunities for Corporate Sponsorship of technical sessions, awards, and other activities at the 2019 EAS as well as advertising opportunities in our Final Program. For information, please contact the EAS Executive Secretary at [askeas@eas.org](mailto:askeas@eas.org)*

2019 EAS

November 18-20, 2019

Plainsboro, NJ

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*Short Courses:* Richard Nguyen, US Pharmacopeia  
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*Student Awards:* Barbara Kebbekus

**EXPOSITION DIRECTOR**

Sheree Gold at [easinfo@aol.com](mailto:easinfo@aol.com)

**EXECUTIVE SECRETARY**

Bernadette Taylor at [askeas@eas.org](mailto:askeas@eas.org)

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**IMPORTANT DATES**

<b>March 1</b>	Abstract submission opens for contributed oral and poster abstracts
<b>May 1</b>	Abstract submission deadline for contributed <b>oral</b> abstracts
<b>June 15</b>	Presenters of invited presentations are contacted by email with session schedules & instructions for the submission of final abstracts
<b>July 1</b>	Presenters of contributed oral presentations are contacted by email with session schedules and presentation guidelines
<b>July 15</b>	Registration opens
<b>July 31</b>	Deadline for receipt of final abstracts for invited presentations
<b>Aug. 1</b>	Preliminary Program posted on <a href="http://www.EAS.org">www.EAS.org</a>
<b>Sept. 1</b>	Abstract submission deadline for contributed <b>poster</b> abstracts
<b>Oct. 15</b>	Deadline to register for 2019 EAS at a reduced price
<b>Nov. 18-20</b>	<b>58th Eastern Analytical Symposium &amp; Exposition</b>

**How to contact us....**

General Information  
**EAS Executive Secretary and Retort Editor**  
**Eastern Analytical Symposium, Inc.**  
PO Box 185  
Spring Lake, NJ 07762  
Phone: 732-449-2290  
Email: [askeas@eas.org](mailto:askeas@eas.org)

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