



2018 EAS ELECTRONIC POSTER SESSIONS

All E-Posters will take place on the Bridge between the Crowne Plaza Conference Center & the Crowne Plaza Hotel.

Monday, November 12: E-Poster Session 1; 11:30am – 12:15pm	
	<i>Green Analytical Chemistry - with Enzymes</i> , <u>Ellen R. Campbell</u> , Wilbur H. Campbell, NECi, Nicolas Plumere', University of Bochum
	<i>Synthesis, Photocatalytic Properties and Langmuir-Blodgett Film Photoelectrochemical Behavior of CdS Nanoparticles with Hydrophilic or Hydrophobic Organic Shell</i> , <u>Momoka Nagamine</u> , Justyna Widera-Kalinowska, Adelphi University, Magdalena Osial, Pawel Krysinski, University of Warsaw
	<i>Automated Recycling Chromatography</i> , <u>Fabrice G. Gritti</u> , Waters Corporation
	<i>Modernization of USP Methods Using Ion Chromatography (IC) for Active Pharmaceutical Ingredient (API) Determination</i> , <u>Hua Yang</u> , Jingli Hu, Jeff Rohrer, Thermo Fisher Scientific
	<i>Combining Liquid Chromatography and Pyrolysis-Gas Chromatography-Mass Spectrometry for the Characterization of PPE Based Copolymers</i> , <u>Merle Corazon R. Ahearn</u> , SABIC, Allison Caron, Carnegie Mellon University
	<i>Express Protein Digestion by Automated, Micro Reaction Cartridges</i> , <u>Anne Jurek</u> , Peter Dawes, EST Analytical
	<i>Rapid Automated Sample Preparation for the Extraction of Semi-Volatile Organic Compounds from Soil</i> , <u>Alicia D. Stell</u> , Candice A. Olsson, Brittany A. Leffler, CEM Corporation
	<i>Diving Deep – Continued Studies of the Longitudinal Diffusion Coefficient in Liquid Chromatography</i> , <u>Dwight Stoll</u> , Devin Makey, Gustavus Adolphus College, Huiying Song, University of Leuven, Monika Dittmann, Agilent Technologies, Gert Desmet, Vrije University of Brussel, Deirdre Cabooter, University of Leuven
	<i>A Diphenyl Bonded-Phase on Wide Pore Superficially Porous Particles for Efficient Separations of Proteins</i> , <u>Edward A. Faden</u> , MAC-MOD Analytical, Stephanie Schuster, William Miles, Brian Wagner, Ben Libert, Barry Boyes, Advanced Materials Technology
	<i>Applications of Augmented Reality (AR) Technology in Scientific Education and Technical Learning</i> , <u>Helen Zhang</u> , DISTAT Co.
	<i>Integrating Clinical Analytical Research Projects into Chemistry Curriculum</i> , <u>Yuegang Zuo</u> , University of Massachusetts-Dartmouth
	<i>Mass Spectral Analysis of Fragrances</i> , <u>Anna Swyers</u> , Shirley Fischer-Drowos, Widener University
	<i>Strategies to Evaluate and Monitor Forced Degradation Studies Using a Dual Detection (UV-MS) System</i> , <u>Paula Hong</u> , Zhimin Li, Patricia R. McConville, Waters Corp.
	<i>Electrochemical-MS (EC-MS) Approach for Forced Degradation Studies</i> , <u>Nicholas Santiago</u> , Antec Scientific
	<i>Detection of Neutral CO Lost during Ionic Dissociation Using Atmospheric Pressure Thermal Dissociation Mass Spectrometry (APTD-MS)</i> , <u>Pengyi Zhao</u> , Travis A. White, Ohio University, R. Graham Cooks, Purdue University, Qinghao Chen, Yong Liu, Merck & Co., Hao Chen, New Jersey Institute of Technology
	<i>Analysis of Food Samples Using Thin Film Solid Phase Microextraction (TF-SPME) and Thermal Desorption GC-MS</i> , <u>Laurel A. Vernarelli</u> , Jackie Whitecavage, John Stuff, GERSTEL, Inc.
	<i>Characterization of LC Packing Materials by NMR Solvent Relaxation at High Field</i> , <u>Xiangjin Song</u> , Waters Corporation
	<i>Carryover Improvement Achieved Through Instrument Design Changes and Needle Wash Optimization for HPLC Systems</i> , <u>Amanda Dlugasch</u> , Jennifer Simeone, Waters Corp

2018 EAS ELECTRONIC POSTER SESSIONS *continued*

Monday, November 12: E-Poster Session 2; 12:15pm – 1:00pm	
	<i>Fully Automated Determination of pH in Cell Culture Media Using Flow Cell Technology</i> , <u>Kerri-Ann Blake</u> , Metrohm USA
	<i>Assessment of Deamidation and Aggregation of Peptide Variants</i> , <u>Eileen Zhao</u> , Mohammad Al-Sayah, Genentech Inc.
	<i>Determination of Aminoglycoside Antibiotics by LC-PAD</i> , <u>Jingli Hu</u> , Jeff Rohrer, Thermo Fisher Scientific
	<i>Triboluminescence (TL): Fast Detection of Crystallinity within Amorphous Solid Dispersions</i> , <u>Julie M. Novak</u> , Siwei Zhang, Zhen Liu, Timothy Rhodes, Merck & Co., Casey J. Smith, Scott R. Griffin, Julia K. White, Garth J. Simpson, Purdue University
	<i>Automated Rapid Drug Extraction at Trace Levels from Serum and Blood Using a Novel Small Particle Micro-SPE Cartridge</i> , <u>Anne Jurek</u> , Peter Dawes, EST Analytical
	<i>Analysis of Dibenzo[a,h]pyrene in Marine Sediment Samples via High-Performance Liquid Chromatography – Laser Excited Time Resolved Shpol'skii Spectroscopy</i> , <u>Ahmed Comas</u> , Jennifer Ferrante, Anthony Santana, Andres D. Campiglia, University of Central Florida
	<i>The Hydrophobic Subtraction Model of Reversed-Phase Selectivity – Principles and the Public Column Database</i> , <u>Dwight Stoll</u> , Tina Dahlseid, Gustavus Adolphus College
	<i>Investigating the Effects of Chromatographic Parameters on Column Equilibration in Isocratic and Gradient HILIC Separations</i> , <u>Alex Nasseh</u> , Geoffrey M. Faden, Edward A. Faden, MAC-MOD Analytical, Alan Mckeown, Hichrom Limited
	<i>Fast HPLC Separation of Triptans in Plasma on a ZirChrom®-PBD Column</i> , <u>Julie A. Jenkins</u> , ZirChrom Separations, Richard A. Henry, Technical Advisor
	<i>New Wide Pore Epoxy Activated Monolithic Silica: Attach any Ligand to Prepare Your Own Column</i> , <u>Egidijus Machtejevas</u> , Benjamin Peters, MilliporeSigma
	<i>High-Performance Separations Using 100% Aqueous Mobile Phase Compatible Superficially Porous Particle Columns Coupled with Mass Spectrometry</i> , <u>Thomas M. Waeghe</u> , MAC-MOD Analytical, Chuping Luo, Justin Godinho, Ben Libert, Stephanie Schuster, Barry Boyes, Advanced Materials Technology
	<i>Differentiating Isomeric Deprotonated Glucuronide Drug Metabolites via Ion/Molecule Reactions in Tandem Mass Spectrometry</i> , <u>John Y. Kong</u> , Huaming Sheng, Tiffany M. Jarrell, Zhoupeng Zhang, Merck & Co., Zaikuan Yu, Mckay W. Easton, Edouard Niyonsaba, Xin Ma, Ravikiran Yerabolu, Arun K. Ghosh, Hilikka I. Kenttämä, Purdue University
	<i>Characterization of Anionic and Cationic Metabolites in a Single Embryonic Cell (<i>Xenopus laevis</i>) Using CE-ESI-MS</i> , <u>Erika P. Portero</u> , Peter Nemes, University of Maryland
	<i>Mass Spectrometry Based Proteomics to Investigate and Characterize the Jumping Translocation Breakpoint (JTB) Protein Using Cancer Cell Lines</i> , <u>Madhuri Jayathirtha</u> , Devika Channaveerappa, Kangning Li, Costel C. Darie, Clarkson University
	<i>Investigation of the Molecular Changes in Rat Atria during Obstructive Sleep Apnea Using Mass Spectrometry Based Proteomics</i> , <u>Devika Channaveerappa</u> , Costel C. Darie, Clarkson University, Jacob Lux, Meredith McLerie, Brian K. Panama, Masonic Medical Research Laboratory
	<i>GC-MS-Based Untargeted Metabolomics Workflow for Biomarker Discovery in Crohn's Disease</i> , <u>Xin Zheng</u> , Suresh Seethapathy, Jason Cole, Thermo Fisher Scientific
	<i>Transfer and Scaling of a USP Assay for Quetiapine Fumarate across Liquid Chromatographic Systems</i> , <u>Amanda Dlugasch</u> , Jennifer Simeone, Waters Corp.

2018 EAS ELECTRONIC POSTER SESSIONS *continued*

Tuesday, November 13: E-Poster Session; 11:30am – 12:15pm

STUDENT AWARDEES

<i>Effects of Legacy Chemical Exposure in the Great Lakes Ecosystem on the Human Proteome</i> , <u>Emmalyn J. Dupree</u> , Bernard Crimmins, Thomas Holsen, Costel C. Darie, Clarkson University, James Pagano, SUNY Oswego, Brooke Thompson, Krista Christensen, Michelle Raymond, Jon Meiman, Wisconsin Department of Health Services
<i>Dual nESI-DIMS-MS for Measurement of Differential Lipid Expression</i> , <u>James E. Keating</u> , Gary L. Gish, University of North Carolina-Chapel Hill
<i>Digital Breast Cancer Diagnosis and Microenvironment Analysis Using Chemical Imaging</i> , <u>Shachi Mittal</u> , Kevin Yeh, Andre Kadjacsy-Balla, Rohit Bhargava, University of Illinois at Urbana Champaign
<i>Raman Spectroscopy and MCR-ALS Applications for Polymorph Identification in Chinese Architectural Paints</i> , <u>Marcie B. Wiggins</u> , Karl S. Booksh, University of Delaware, Liu Mengyu, Liu Chang, Tsinghua University, Catherine Matsen, Winterthur Museum
<i>Microfluidic Single-Cell Analysis of Oxidative Stress in Dictyostelium Discoideum</i> , <u>Jessica T. Duong</u> , Kathy Rodogiannis, Michelle L. Kovarik, Trinity College
<i>HOMEChem (House Observations of Microbial and Environmental Chemistry): Preliminary High-Resolution Aerosol Mass Spectrometry Results from an Indoor Air Field Measurement Campaign</i> , <u>Erin F. Katz</u> , Michael R. Giordano, Benjamin S. Werden, Laura Ampollini, Peter F. DeCarlo, Drexel University, Delphine K. Farmer, Colorado State University, Marina E. Vance, University of Colorado Boulder
<i>Characterization of CZE-MS Detection and Quantification of Beta-N-Methylamino-L-Alanine in Plasma Samples</i> , <u>Kaylie I. Kirkwood</u> , Joshua Beri, Allyson L. Mellinger, Michael S. Bereman, David C. Muddiman, North Carolina State University
<i>In-Situ Derivatization of Flavor Additives in E-Cigarette Liquids during Nano-Electrospray Ionization Mass Spectrometry</i> , <u>Megan R. Ogorchock</u> , Tavleen K. Kochar, Gary L. Glish, University of North Carolina at Chapel Hill

Tuesday, November 13: E-Poster Session 1; 11:30am – 12:15pm

<i>LabVIEW Controlled Instrumentation for the Acquisition and Automation of Time-Based Fluorescence and Phosphorescence Measurements</i> , <u>Anthony M. Santana</u> , Khang D. Trieu, Andres D. Campiglia, University of Central Florida, Stacy M. Wise, Chemosapiens Analytical
<i>Spectroscopic and Computational Studies of PRODAN</i> , <u>Matthew J. Phillips</u> , Swapnil Baral, Edward Lyman, Lars Gundlach, University of Delaware, Bjoern Baumeier, Eindhoven University of Technology
<i>Use of FT-IR Spectroscopy to Classify and Discriminate Food Protein Powders</i> , <u>Ronald Rubinovitz</u> , Thermo Fisher Scientific
<i>Multimodal Tissue Segmentation of Prostate Cancer Biopsies Using Chemical Imaging</i> , <u>Anirudh Mittal</u> , Shachi Mittal, Kevin Yeh, Jennifer Pfister, Rohit Bhargava, University of Illinois at Urbana-Champaign
<i>Binary Spectronephelometry (BSN) of Bacterial Cultures: Noninvasive Quantitative Raman Spectroscopy in Optically Thin or Dilute Two-Phase Samples</i> , <u>Steven Ortiz</u> , Richard McDonough, Paul W. Dent, Jerry Goodisman, Joseph Chaiken, Syracuse University
<i>Easy Monitoring of Cell Culture Growth Using Disposable Electrochemical Enzymatic Sensors</i> , <u>Harihara Subramanian Narayanan</u> , Pablo Fanjul-Bolado, Metrohm USA
<i>Analysis of Greenhouse Gases Using the Shimadzu GC-2014 with the ARC Jetanizer for CO₂ and CO In-Jet Methanization</i> , <u>Ian W. Shaffer</u> , Kyle O. Reddick, Yuan Lin, Martin D. Smith, Allison M. Mason, Shimadzu Scientific Instruments
<i>Removing Polycyclic Aromatic Hydrocarbons (PAHs) by Adsorption onto Silica Gel Treated with Lipophilic Carboxylic Acids</i> , <u>Jessi Dolores</u> , Jianwei Fan, Manhattan College
<i>An Acoustic Levitator for Heterogeneous Chemical Reactions</i> , <u>Beni B. Dangji</u> , Jordan Dixon, Florida A & M University
<i>Low Temperature Phosphorescence Excitation Emission Matrices and Second Order Multivariate Calibration Approach for the Analysis of Benzo[b]naphtho[2,1-b]thiophene in HPLC Fractions</i> , <u>Sadia Arif</u> , Maha Al-Tameemi, Andres D. Campiglia, Walter B. Wilson, Stephen A. Wise, University of Central Florida

2018 EAS ELECTRONIC POSTER SESSIONS *continued*

Tuesday, November 13: E-Poster Session 2: 12:15pm-1:00pm	
	<i>Selective Liquid Phase Hydrogenation of Cinnamaldehyde Using Metal Salts and Pd/Al₂O₃</i> , <u>Jessica M. Miller</u> , Lindsey A. Welch, Cedar Crest College
	<i>The Effects of Solvents on the Hydrogenation of α-Methyl-Trans-Cinnamaldehyde with the use of Metal Chloride Additives</i> , <u>Kirsten R. Replogle</u> , Cedar Crest College
	<i>Analysis of Biodiesel-Diesel Blended Fuels Using Gas Chromatography and Chemometric Methods</i> , <u>Helen V. Tsiagras</u> , Karina L. Ramos, Alicia M. Riddell, Amber M. Hupp, College of the Holy Cross
	<i>Quality-by-Design Based Development of a Fast and Robust Method for Impurity Profiling of Carbamazepine Using SFC and the Fusion QbD® Software Platform</i> , <u>Mijo Stanic</u> , Alexander Schmidt, Chromicent GmbH, Richard Versepunt, S-Matrix Corporation
	<i>The Application of Photometric TOC Test Kits and a Spectrophotometer for the Analysis of Cleaning Validation Samples</i> , <u>Bruce Herzig</u> , William Sebastian, MilliporeSigma
	<i>A Simple and Rapid Method for Detecting the Pesticide Fipronil on Egg Shells and in Liquid Eggs by Raman Microscopy</i> , <u>Qin Tu</u> , Northwest A&F University, Lili He, University of Massachusetts-Amherst
	<i>Poly(diallyldimethylammonium chloride) Treatment of Cotton Surfaces. A Raman Study</i> , <u>Dana Garcia</u> , Pan Pan, Arkema Inc.
	<i>Depth Profiling Composition and Color of a Surface Treated Thermoplastic Material</i> , <u>Michael L. Hall</u> , Nancy Jestel, SABIC
	<i>Imidazole and RNO Method for Singlet Oxygen Detection by Time-resolved, Broadband UV-Vis Absorbance Measurements</i> , <u>Johanna Herman</u> , Sharon Neal, University of Delaware
	<i>Race Differentiation by Raman Spectroscopy of a Bloodstain for Forensic Purposes</i> , <u>Ewelina M. Mistek</u> , Lenka Halámková, Kyle C. Doty, Claire K. Muro, Igor K. Lednev, University at Albany, SUNY
	<i>Multiple Transfers of Drug Contaminated Fingermarks and their Analysis with Raman Spectroscopy</i> , <u>Victoria R. DePrimo</u> , Kenneth Zercie, Lisa Dadio, Brooke Kammrath, University of New Haven, Pauline Leary, Smiths Detection, Nicholas Petraco, John Jay College of Criminal Justice CUNY
	<i>Discrimination of Cosmetic Foundations Using Several Spectroscopic Techniques</i> , <u>Jessica McFarland</u> , Thomas Brettell, Lawrence Quarino, Cedar Crest College, Megan Zellner, L'Oreal US
	<i>Forensic Characterization and Discrimination of Manila Envelopes</i> , <u>Isabel Sanchez-Melo</u> , Virginia M. Maxwell, Brooke W. Kammrath, University of New Haven
	<i>Detecting Opioids and their Metabolites in Wastewater</i> , <u>Madison E. Pursell</u> , Alison E. Holliday, Moravian College
	<i>Building a Method to Analyze Drugs and Metabolites in Wastewater Effluent</i> , <u>Julie A. Palkendo</u> , Megan A. O'Neill, Kutztown University
	<i>Evaluation of Luminol Chemiluminescence Enhanced by Silver Nanoparticles with Possible Application to Determination of Cobalt in Natural Water Samples</i> , <u>Mary Lynn Grayeski</u> , Caitlin Kurey, Marywood University
	<i>Analyzing Nitrosamines in Drinking Water by Solid Phase Extraction Followed by Ultra-High-Performance Liquid Chromatography-Tandem Mass Spectrometry</i> , <u>Trevor D. McBrine</u> , Julia M. Lineweber, James D. Stuart, Anthony A. Provas, Christopher R. Perkins, University of Connecticut
	<i>Shpol'skii Spectroscopy of Polar Fluorophores in Polar Solvents</i> , <u>Mohammadreza Chehelamirani</u> , Andres Campiglia, University of Central Florida

2018 EAS ELECTRONIC POSTER SESSIONS *continued*

Wednesday, November 14: E-Poster Session: 12:30pm – 1:15pm	
	<i>UPLC-MS-MS Analysis of Cortisol in Hair and Saliva Collected from Human Subjects</i> , Jake E. Cortigiano, Sarah Anderson, Patrick Kaplita, James D. Stuart, Anthony A. Provatas, Christopher R. Perkins, University of Connecticut
	<i>Structural Characterization of a Galactoglucomannan from the Eremurus Hisaricus Roots Grown in Tajikistan</i> , <u>Gary D. Strahan</u> , Hoa K. Chau, Arland T. Hotchkiss, LinShu D. Liu, United States Drug Administration, Jamshed T. Bobokalonov, Ikrom B. Ismoilov, Zayniddin K. Muhidinov, Chemistry Institute of the Academy of Sciences of the Tajikistan Republic
	<i>Comparative Metabolic Analysis of Embryonic (frog) Cells by CE and HPLC MS</i> , <u>Aleena J. Andrews</u> , Erika P. Portero, Jie Li, Peter Nemes, University of Maryland
	<i>Cannabinoid Monitoring in Dried Cannabis Flower and Edibles by HPLC-PDA</i> , <u>Wilhad Reuter</u> , PerkinElmer
	<i>Direct Thermal Extraction Analysis of Food Packaging Using the GERSTEL MPS Robotic Sampler</i> , <u>Laurel A. Vernarelli</u> , John Stuff, Jackie Whitecavage, GERSTEL, Inc.
	<i>Surface-Enhanced Raman Spectroscopic Surveillance of Bacteria within Row Crops In-Situ</i> , <u>Michael E. Hickey</u> , Lili He, University of Massachusetts
	<i>A Rapid and Sensitive Method for the Determination of Acrylamide and Related Compounds in Food and Beverages</i> , <u>Carl M. Zimmerman</u> , Geoffrey M. Faden, Edward A. Faden, MAC-MOD Analytical, Alan Mckeown, Hichrom Limited
	<i>Analysis of Lactose in Lactose-Free Labelled Products by HPAEC-PAD</i> , <u>Nicholas Santiago</u> , Antec Scientific
	<i>Utilizing the Andrew Alliance for Automated Liquid Handling during Early Development</i> , <u>Alexandra Andrews</u> , Edward Mularz, Erin Hein, Merck & Co.
	<i>New Generation CTC PAL 3 Walk-UP Automated Forced Degradation Workflows to Accelerate Drug Development</i> , <u>Lina Liu</u> , Timothy Rhodes, Robert Hartman, David Schenk, Merck & Co.
	<i>Protein Mobility at a Food Emulsion Interface by Confocal Laser Scanning Microscopy and Fluorescence Recovery after Photobleaching</i> , <u>Matthew Sillick</u> , Will Borchert, Ingredion Inc.
	<i>Application of USP Apparatus 5 and USP Apparatus 7 to In-Vitro Drug Release for Nicotine Transdermal System</i> , <u>Ming Li</u> , Logan Instruments
	<i>Improvement of Separation of Monoclonal Antibodies Using Core-Shell Column</i> , <u>Norikazu Nagae</u> , Tomoyasu Tsukamoto, Makoto Sato, ChromaNik Technologies Inc.
	<i>A Green Triton X-114 Extraction Protocol for the Separation of Virus-Like Particles from Lipid-Based Preparations</i> , <u>Douglas B. Vieira</u> , Andrea Penwell, Arthvan Sharma, Annie Tanguay, IMV, Amy Noe, Leidos, David Whitacre, VLP Biotech
	<i>Analytical Method Exploration in Transmetalation of MnCl₂ with Grignard</i> , <u>Weidong Tong</u> , George Zhou, Merck & Co.
	<i>XPS of Copper-Organic Interactions Related to Cultural Heritage Collections</i> , <u>Emma Heath</u> , Marcie Wiggins, Thomas P. Beebe Jr., Karl S. Booksh, Jocelyn Alcántara-García, University of Delaware
	<i>Microdevice Based on Centrifugal Effect and Bifurcation Law for Separation of Plasma from Whole Blood</i> , <u>María del Pilar Cañizares-Macías</u> , Kenia Chávez-Ramos, National Autonomous University of México
	<i>Selectivity Manipulation for LC-MS Analysis of Intact Protein Variants</i> , <u>Geoffrey M. Faden</u> , MAC-MOD Analytical, Ben Libert, Stephanie Schuster, Brian Wagner, William Miles, Barry Boyes, Advanced Materials Technology