

PROFESSIONAL MEETINGS, COLLOQUIA, AND SEMINARS

Name Lectureships/Award Presentations

1. ***“Advances in Instrumentation and Methods for Plasma Spectrochemistry”***, Gary M. Hieftje, Steven J. Ray, Yan Cheung, Elise A. Dennis, Alexander W. Gundlach-Graham, Kevin P. Pfeuffer, Andrew J. Schwartz, Andrew P. Storey, Christie G. Enke, David W. Koppelaar and Charles J. Barinaga. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(2014 Winter Conference-Award in Plasma Spectrochemistry Award lecture presented by G.M. Hieftje)**
2. ***“Application of a High-Frequency Spark Discharge as an Ion Source for Ambient Mass Spectrometry”***, Allen R. White, Steven J. Ray, Kevin P. Pfeuffer and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Poster Presented by A. R. White) Poster Award Winner – Sponsor: Royal Society of Chemistry**
3. ***“The Distance-of-Flight Mass Spectrometer: A New Species of Mass Analyzer”***, Steven J. Ray, Elise Dennis, Alexander Graham, Christie Enke, Charles Barinaga, David Koppelaar, and Gary Hieftje. **2014 FACSS/SCIX Meeting**, Reno, NV, September 28-October 3, 2014. **(2014 Strock Award Lecture Presented by S.J. Ray-Awardee)**
4. ***“Towards a Highly Sensitive, Universal Method of Ion Detection: Removal of Multiplicative Noise in Replacement-Ion-Chromatography with Solution-Cathode Glow Discharge Photometric Detection”***, Andrew W. Schwartz, Steven J. Ray and Gary M. Hieftje, **FACSS/SCIX Meeting, September 28-October 3, 2014**, Reno, NV. **(Tomas Hirschfeld award lecture presented by A.W. Schwartz-Awardee)**

Invited papers or talks

1. ***“Plasma Source Time-of-Flight Mass Spectrometry”***, Steven J. Ray and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Invited Short Course Presented by S.J. Ray and G.M. Hieftje)**
2. ***“Presentation on Presentations”***, Department of Chemistry, Indiana University, Bloomington, IN. January 30, 2014 **(Invited Lecture (A800) presented by G.M. Hieftje)**
3. ***“Better Living Through Better Chemical Instrumentation”***, Department of Chemistry, Indiana University, Bloomington, IN, January 23, 2014. **(Invited Lecture (C107) presented by G.M. Hieftje)**
4. ***“New Tools for Chemical Measurement and Characterization”***, Department of Chemistry & Biochemistry, University of Mississippi, University, MS, March 27, 2013. **(Invited lecture presented by G. M. Hieftje)**
5. ***“New Instrumental Capabilities for Glow Discharge Spectroscopy”***, Steven J. Ray, Andrew J. Schwartz, Andrew P. Storey, Kevin P. Pfeuffer, Volker Hoffmann, Maxim Voronov, Carsten Englehard, Wolfgang Buscher and Gary M. Hieftje. **International Glow Discharge Spectroscopy Seminar (IGDSS 2014)**, Prague, Czech Republic, April 7-9, 2014. **(Invited lecture presented by S.J. Ray)**
6. ***“Novel Applications of a Glow-Discharge Plasma Source”***, J. Silberring, E. Reszke, T. Gotszalk, G. Schroeder, M. Kala and G.M. Hieftje. **32nd Informal Meeting on Mass Spectrometry**, Balatonszárszó, Hungary, May 11-14, 2014. **(Invited lecture presented by J. Silberring, AGH University of Science and Ceramics, Krakow, Poland)**
7. ***“New Ways to Recognize and Correct for Matrix Interferences in Plasma-Based Atomic Spectrometry”***, Gary M. Hieftje. **7th Nordic Plasma Conference**, Loen, Norway, June 1-4, 2014. **(Invited lecture presented by G.M. Hieftje)**

2014 Hieftje Group Presentations

8. *“New Approaches and Applications in Glow Discharge Spectroscopy”*, Steven J. Ray, Andrew J. Schwartz, Elise A. Dennis, Andrew P. Storey and Gary M. Hieftje. **7th Nordic Plasma Conference**, Loen, Norway, June 1-4, 2014. (Plenary lecture presented by S.J. Ray)
9. *“The Atmospheric Pressure Glow Discharge: Fundamentals and Applications”*, Steven J. Ray. **7th Nordic Plasma Conference**, Loen, Norway, June 1-4, 2014. (Invited short course presented by S.J. Ray) **SJR ONLY**
10. *“LC and EC-FAPA – Novel Applications”*, Marek Smoluch¹, Michał Babij, Przemyslaw Mielczarek, Gary Hieftje and Jerzy Silberring. **XXVII Symposium on Chromatographic Methods of Investigating the Organic Compounds**, Katowice – Szczyrk, Poland, June 11-13, 2014. (Invited lecture presented by Prof. Jerzy Silberring , AGH University of Science and Technology, Krakow, Poland)
11. *“Evaluation of Nanopipette Emitters with Orifice Diameters Less Than 100 Nanometers for Use in Electrospray Ionization Mass Spectrometry”*, Steven J. Ray, Elizabeth Yuill, Alicia K. Friedman, Anumita Saha, Christie G. Enke, Gary M. Hieftje , and Lane A. Baker. **62nd ASMS Conference on Mass Spectrometry and Allied Topics**, Baltimore, MD, June 15-19, 2014. (Invited lecture presented by S.J. Ray)
12. *“Methods in Flagging and Correcting Matrix Interference in Organic-Solvent-Based Axial Viewing Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)”*, Phillips 66 Research Center, Bartlesville, OK, August 7, 2014. (Invited lectures presented by Yan Cheung)
13. *“Toward a New Generation of Analytical Mass Spectrometers”*, Gary M. Hieftje, Steven J. Ray, Christie G. Enke, Elise A. Dennis, Alex W.G. Graham, David W. Koppenaal and Charles J. Barinaga. **2nd International Conference on Analytical Chemistry (RO-ICAC’2014)**, Valahia University of Targoviste, ROMANIA, September 17-21, 2014. (Plenary lecture presented by G.M. Hieftje)
14. *“How We Solved the Problem of Simultaneous Measurement in Mass Spectrometry”*, Gary M. Hieftje. **KOSMOS Summer University 2014**, September 15-24, 2014, Berlin, Germany. (Invited lecture presented by G.M. Hieftje)
15. *“Research and Teaching: Symbiosis or Conflict?”*, Gary M. Hieftje. **KOSMOS Summer University 2014 (BAM-Dahlem)**, September 15-24, 2014, Berlin, Germany. (Invited lecture presented by G.M. Hieftje)
16. *“Methods to Flag and Conquer Matrix and Spectral Interferences in ICP-AES”*, Gary M. Hieftje, George Chan, Yan Cheung and Andrew J. Schwartz. **FACSS/SCIX Meeting**, September 28-October 3, 2014, Reno, NV. (Invited lecture presented by G.M. Hieftje)
17. *“Collaboration with Dave Koppenaal: Dutchmen Gone Wild”* Gary M. Hieftje. **FACSS/SCIX Meeting**, September 28-October 3, 2014, Reno, NV. (Invited lecture presented by G.M. Hieftje)
18. *“Paper Title to be Announced”* Gary M. Hieftje. **FACSS/SCIX Meeting**, September 28-October 3, 2014, Reno, NV. (Invited lecture presented by G.M. Hieftje)
19. *“Steve Ray’s Contribution to High-Speed, High-Resolution Mass Spectrometry”*, Gary M. Hieftje. **FACSS/SCIX Meeting**, September 28-October 3, 2014, Reno, NV. (Invited lecture presented by G.M. Hieftje)
20. *“Use of Constant-Momentum Acceleration in Velocity-Based Mass Separations: Distance-of-Flight and ZOOM – Time-of-Flight Mass Spectrometries”*, Elise A. Dennis, Steven J. Ray, Christie G. Enke, Alexander Gundlach-Graham, Allen R. White, Charles Barinaga, David W. Koppenaal and Gary M. Hieftje. **2014 FACSS/SCIX Meeting**, Reno, NV, September 28-October 3, 2014 (Invited lecture presented by E.A. Dennis)
21. *“Mechanisms of Nitric-Oxide Formation in a High-Frequency Spark Discharge Ion Source for Ambient Mass Spectrometry”*, Allen R. White, Steve J. Ray, Kevin P. Pfeuffer and Gary M. Hieftje. **2014 FACSS/SCIX Meeting**, Reno, NV, September 28-October 3, 2014. (Invited lecture presented by Allen R. White-Rose Hulman Institute of Technology, Terre Haute, IN)

2014 Hieftje Group Presentations

22. *"The Use of Adaptable Optics in Atomic Spectroscopy"*, Steven J. Ray, Elise A. Dennis and Gary M. Hieftje. **2014 FACSS/SCIX Meeting**, Reno, NV, September 28-October 3, 2014. **Invited lecture presented by E.A. Dennis)**
23. *"Models, Measurements, Methods, and Machines"*, Gary M. Hieftje. **Indiana State University, Terre Haute, IN**, October 28, 2014. **(Invited Lecture presented by G.M. Hieftje)**
24. *"New Sources for Ambient Desorption/Ionization Mass Spectrometry"*, Gary M. Hieftje, Jacob T. Shelley, Steven J. Ray, Kevin P. Pfeuffer and Gregory D. Schilling. **Eastern Analytical Symposium**, Somerset, NJ, November 17-19, 2014. **(Invited Lecture - Outstanding Achievements in the Fields of Analytical Chemistry Award Symposium-Joseph A. Caruso Awardee - presented by G.M. Hieftje)**

Contributed or competitive papers

1. *"Developments in Zoom-TOF Atomic Mass Spectrometry"*, Elise A. Dennis, Alexander W. Gundlach-Graham, Steven J. Ray, Christie G. Enke, Charles J. Barinaga, David W. Koppenaal and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Lecture Presented by E.A. Dennis)**
2. *"Ambient-Atmosphere Effects on Formation of Reagent Ions within the Flowing Atmospheric Pressure Afterglow (FAPA) Source for Ambient Mass Spectrometry"*, Kevin P. Pfeuffer, Jaime Orejas, Steven J. Ray, Jorge Pisonero, Alfredo Sanz-Medel and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Lecture Presented by K.P. Pfeuffer)**
3. *"The Use of Adaptable Optics in Atomic Spectroscopy"*, Steven J. Ray and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Lecture Presented by S.J. Ray)**
4. *"Analytical Aspects of an Atmospheric-Pressure Solution-Cathode Glow Discharge (SCGD) with an Interference Filter Spectral Sorter"*, Andrew J. Schwartz, Steven J. Ray and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Lecture Presented by A. J. Schwartz)**
5. *"Inkjet Printing of Standards for Glow Discharge Imaging Spectrometry"*, Andrew P. Storey, Steven J. Ray, Volker Hoffmann, Maxim Voronov, Carsten Engelhard, Wolfgang Buscher, Tobias Steingrobe and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Lecture Presented by A. P. Storey)**
6. *"Use of Gradient Dilution to Flag and Overcome Non-Spectral Matrix Interferences in Inductively Coupled Plasma-Atomic Emission Spectrometry"*, Yan Cheung, Andrew J. Schwartz and Gary M. Hieftje. **2014 Winter Conference on Plasma Spectrochemistry**, Amelia Island, FL, January 6-11, 2014. **(Poster Presented by Y. Cheung)**
7. *"Studies On The Reagent Ions And Ionization Processes Of Flowing Atmospheric Pressure Afterglow (FAPA)-APGD"*. Jaime Orejas, Kevin P. Pfeuffer, Steven J. Ray, Jorge Pisonero, Nerea Bordel, Gary M. Hieftje, Alfredo Sanz-Medel. **International Glow Discharge Spectroscopy Seminar (IGDSS 2014)**, Prague, Czech Republic, April 7-9, 2014. **(Lecture presented by Jaime Orejas)**
8. *"Fundamental Studies in Plasma Sources for Elemental and Molecular Analysis"*, G. M. Hieftje. **Department of Energy, Separations and Analysis Meeting**, Gaithersburg, MD, April 27-29, 2014. **(Lecture presented by G.M. Hieftje)**
9. *"Transient Sample Introduction with Laser Ablation Coupled to an Inductively-Coupled Plasma Distance-of-Flight Mass Spectrometer (ICP-DOFMS)*, Elise A. Dennis, Alexander G. Graham, Christie G. Enke, Steven J. Ray, Charles J. Barinaga, David W. Koppenaal and Gary M. Hieftje. **2014 American Society for Mass Spectrometry Annual Meeting**, Baltimore, MD, June 15-19, 2014. **(Lecture presented by E.A. Dennis)**

2014 Hieftje Group Presentations

10. ***“FTIR Analysis Of Flowing Afterglow From A High-Frequency Spark Discharge”***, Allen R. White, Gary M. Hieftje, Steven J. Ray and Kevin P. Pfeuffer. **69th International Symposium on Molecular Spectroscopy**, Champagne/Urbana, IL, June 6-20, 2014. (Lecture presented by **A.R. White**)
11. ***“Halo-shaped Flowing Atmospheric Pressure Afterglow for Ambient Desorption/Ionization Mass Spectrometry”***, Kevin P. Pfeuffer, J. Niklas Schaper, Steven J. Ray and Gary M. Hieftje. **20th International Mass Spectrometry Conference (IMSC 2014)**, Geneva, Switzerland, August 24-29. (Lecture presented by **K.P. Pfeuffer**)
12. ***“Flagging Matrix Interferences with Spatial Emission Profiles and Correcting Interferences with Gradient Dilution in Inductively Coupled Plasma-Atomic Emission Spectrometry”***, Yan Cheung, Andrew J. Schwartz, George Y-C. Chan and Gary M. Hieftje. **2014 FACSS/SCIX Meeting**, Reno, NV, September 28-October 3, 2014. (Lecture presented by **Yan Cheung**)
13. ***“FAPA-APGD Desorption/Ionization Source: Influence of Temperature and Humidity on the Reagent Ion Production and Ionization Processes”***, Jaime Orejas, Jorge Pisenero, Nera Bordel, Kevin P. Pfeuffer, Steven J. Ray, Gary M. Hieftje and Alfredo Sanz-Medel. **2014 FACSS/SCIX Meeting**, Reno, NV, September 28-October 3, 2014. (Lecture presented by **Jaime Orejas, Department of Physics, University of Oviedo, SPAIN**)
14. ***“How Does an ICP Respond to the Introduction of a Single Micro-Droplet?”*** George Chan and Gary Hieftje. **2014 FACSS/SCIX Meeting**, Reno, NV, September 28-October 3, 2014. (lecture presented by **George Chan, Lawrence Berkeley National Laboratory, Berkeley, CA**)
15. ***“Distance of Flight Mass Spectrometry: A Work in Progress”***, Steven J. Ray. **Midwest Universities Analytical Chemistry Conference (MUACC) 2014, Iowa State University, Ames, IA**. October 23-25, 2014. (lecture presented by **S.J. Ray**)
16. ***“Reducing Helium Consumption in the Flowing Atmospheric Pressure Afterglow Ion Source”***, Andrew P. Storey, Offer M. Zeiri, Steven J. Ray and Gary M. Hieftje. **2014 Turkey Run Analytical Chemistry Conference**, Marshall, IN, November 14-15, 2014. (lecture presented by **A.P. Storey**)