#### **2018 Hieftje Group Presentations**

### PROFESSIONAL MEETINGS, COLLOQUIA, AND SEMINARS

### **Invited papers or talks**

- 1. "And Now What?", Gary M. Hieftje. 2018 Winter Conference on Plasma Spectrochemistry. January 5-13, 2018, Amelia Island, FL. (Plenary lecture presented by G.M. Hieftje)
- 2. "A800 Workshop Series", Gary M. Hieftje. Indiana University, Department of Chemistry, Jan 23, 2018, Bloomington, IN. (Workshop presented by G.M. Hieftje)
- 3. "Advice from a Hiring Perspective", Gary M. Hieftje. Conference on Preparing Future Faculty, Indiana University, Bloomington, IN, Feb 9, 2017. (Invited lecture presented by G.M. Hieftje)
- 4. "Are There No New Tools for Metallomic Analysis?", Gary M. Hieftje. 2018 Pittsburgh Conference and Exposition, Feb 25-Mar 1, 2018, Orlando, FL. (Invited lecture presented by G.M. Hieftje)
- 5. "Atmospheric-Pressure Glow Discharges as Ionization Sources for Fieldable and Portable Mass-Spectrometric Detection of Elemental Species", Jacob T. Shelley, Garett M. MacLean, Ifeoluwa Ayodeji, Theresa Evans-Nguyen, George C.-Y. Chan, and Gary M. Hieftje. 2018 Pittsburgh Conference and Exposition, Feb 25-Mar 1, 2018, Orlando, FL. (Collaborative research with Rensselaer Polytechnic Institute, Troy, NY, University of South Florida, Tampa, FL, and Lawrence Berkeley National Laboratory, Berkeley, CA). (Invited lecture presented by J.T. Shelley of Rensselaer Polytechnic Institute, Troy, NY)
- 6. "Pushing the Boundaries of Plasma-Based Chemical Analysis: Alternatives to the ICP that Extend Beyond the Realm of Atomic Spectroscopy" Andrew J. Schwartz, Jacob T. Shelley, Steven J. Ray, Courtney Walton, Kelsey. L. Williams, Jovan Jevtic, Ashok Menon, Velibor Pikelja and Gary M. Hieftje. 2018 Pittsburgh Conference and Exposition, Feb 25-Mar 1, 2018, Orlando, FL. (Collaborative research with SUNY-Buffalo, NY, Rensselaer Polytechnic Institute, Troy, NY and RADOM Corporation, Hales, WI). (Invited lecture presented by A.J. Schwartz of State University of New York, Buffalo, NY)
- 7. "Distance-of-Flight Mass Spectrometry Using Solid-State Ion Detector Arrays", Steven J. Ray, Gene, Atlas, Christopher A. Brais, Jaime Orejas-Ibanez, Andrew J. Schwartz, and Kelsey L. Williams. 2018 Pittsburgh Conference and Exposition, Feb 25-Mar 1, 2018, Orlando, FL. (Collaborative research with SUNY-Buffalo, NY, Imager Laboratories, University of Arizona, Tucson, AZ). (Invited lecture presented by S.J. Ray of State University of New York, Buffalo, NY)
- 8. "Is there no Better Analytical Plasma Source than the ICP?", Gary M. Hieftje. 25th ACS National Meeting, Mar 18-22, 2018, New Orleans, LA. (Invited lecture presented by G.M. Hieftje)
- 9. "Novel Plasma-Based Tools for Real-Time Mass-Spectral Analysis of Atomic, Molecular and Polymeric Species", Jacob T. Shelley, Andrew J. Schwartz, Courtney L. Walton, Sunil P. Badal, Garett M. MacLean, Michaela J. Burnley, Judy Wu, Jessica R. Hellinger and Gary M. Hieftje.

  255th ACS National Meeting, Mar 18-22, 2018, New Orleans, LA. (Collaborative research with Rensselaer Polytechnic Institute, Troy, NY and SUNY-Buffalo, NY). (Invited lecture presented by Jacob T. Shelley of Rensselaer Polytechnic Institute, Troy, NY)

### **2018 Hieftje Group Presentations**

- **10.** "ICP-AES: Is the End Near?", Gary M. Hieftje, Andrew J. Schwartz, Cera E. Cissna and Klemens M. Thaler. **GDCh analytica Conference 2018**, April 10-13, 2018, Munich, Germany. (Collaborative research with SUNY-Buffalo, NY and Technische Universität München, Germany). (Invited lecture presented by G.M. Hieftje)
- 11. "Plasma Spectrochemistry and Its Relatives", Gary M. Hieftje, A. J. Schwartz, J. T. Shelley, Y. Cheung, K. M. Thaler, C. E. Cissna, and G. C. Roesch. 2018 Nordic Plasma Conference, June 10-13, Loen, Norway. (Plenary lecture presented by G.M. Hieftje)
- **12.** "Fundamentals of Laser Operation", Gary M. Hieftje. **2018 Nordic Plasma Conference**, June 10-13, Loen, Norway. (Invited short course presented by G.M. Hieftje)
- 13. "Is There No Better Analytical Plasma Source than the ICP?", Gary M. Hieftje Andrew Schwartz and Jacob T. Shelley. (Collaborative research with Rensselaer Polytechnic Institute, Troy, NY). Analitika 2018, Mookgophong, Limpopo, South Africa, July 22-25, 2018. (Plenary lecture presented by G.M. Hieftje)
- 14. "Time-of-Flight and Distance-of-Flight Mass Spectrometry", Gary M. Hieftje. Analitika 2018 Post Conference, Pretoria, South Africa, July 26, 2018. (Invited Short Course presented by Gary M. Hieftje)
- 15. "New Ion Sources for Metallomic Analysis and Isotope-Ratio Mass Spectrometry", Gary M. Hieftje. XXII International Mass Spectrometry Conference, Florence, Italy, August 26-31. (Invited lecture presented by G.M. Hieftje)
- 16. "And Now What? Past, Present, and Future in Atomic Spectroscopy", Gary M. Hieftje. SAS Speaker Tour Maryville University, St. Louis, MO, October 11, 2018. (Invited lecture presented by G.M. Hieftje)
- 17. "Perspectives in Analytical Plasma and Atomic Spectrometry", Gary M. Hieftje. Special Symposium: 60<sup>th</sup> Anniversary of the Society of Applies Spectroscopy held at the 2018 SciX Conference, October 21-26, 2018, Atlanta, GA. (Invited lecture presented by G.M. Hieftje)
- 18. "Ted Rains: Setting the Standard", Gary M. Hieftje. Special Symposium: Tribute to the Life and Work of Theodore Rains held at the 2018 SciX Conference, October 21-26, 2018, Atlanta, GA. (Invited lecture presented by G.M. Hieftje)
- 19. "Plasma as Ionization and Fragmentation Tools for Small Molecule and Biopolymer Detection, Identification", Jacob T. Shelley, Andrew Schwartz, Courtney Walton, Judy Wu, Michaela Burnley and Gary M. Hieftje. (Collaborative research with Rensselaer Polytechnic Institute, Troy, NY and SUNY-Buffalo, NY). 2018 SciX Conference, October 21-26, 2018, Atlanta, GA. (Invited lecture presented by Jacob T. Shelley of Rensselaer Polytechnic Institute, Troy, NY)

## **Contributed Papers/Poster**

 "Improvement in Ambient Mass Spectrometry Sensitivity via Computational Fluid Dynamics Modeling", Allen R. White, Jin Young Song, Brian T. Molnar, Sunil P. Badal, Jacob T. Shelley, and Gary M. Hieftje. (Collaborative research with Rose-Hulman Institute of Technology). 2018 SciX Conference, October 21-26, 2018, Atlanta, GA. (Poster presented by Prof. Allen R. White of Rose-Hulman Institute of Technology, Terre Haute, IN)

### **2018 Hieftje Group Presentations**

2. "Next Generation ICP: The Microwave-Sustained, Inductively Coupled Atmospheric-Pressure Plasma", Andrew Schwartz, Yan Cheung, Steven Ray, Jovan Jevtic, Ashok Menon, Velibor Pikelia and Gary M. Hieftje. 2018 SciX Conference, October 21-26, 2018, Atlanta, GA. (Paper presented by Prof. Steven J. Ray of SUNY, Buffalo, NY)

# Session Chair/Organizer

- 1. 2018 Winter Conference on Plasma Spectrochemistry, Amelia Island, FL, Jan 9, 2017. "Laser Assisted Plasma Spectrochemistry" Session Chair
- 2. 2018 Winter Conference on Plasma Spectrochemistry, Amelia Island, FL, Jan 10, 2017. "Heritage Lecture-D.W. Koppenaal" Session Chair
- 2018 Pittsburgh Conference and Exposition, Atlanta, GA, Feb 25-Mar 1, 2018. "Metallomics: Does Analytical Science Still Have a Role?" – Session Organizer (co-chair with R. Kenneth Marcus, Clemson University, Clemson, SC)
- 4. **255th American Chemical Society-National Meeting,** New Orleans, LA, Mar 18-22, 2018. "Biomolecular, Molecular & Elemental Spectrometry with Plasma Sources"— Session Organizer (co-chair with Jacob T. Shelley, Rensselaer Polytechnic Institute, Troy, NY)
- 5. Analitika 2018, Mookgophong, Limpopo, South Africa, July 22-26, 2018. Lasers Session Chair