

KEVIN GLENN OWENS

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Education:

March 1989, Doctor of Philosophy in Chemistry, Indiana University, Bloomington, IN, 47405. Major: Analytical Chemistry Minor: Physical Chemistry
May 1982, Bachelor of Science in Chemistry, Magna Cum Laude, University of New Hampshire, Durham, NH, 03824.

Professional Experience:

9/95-present Associate Professor with tenure, Department of Chemistry, Drexel University, Philadelphia, PA, 19104
9/89-8/91, 9/94-8/95 Assistant Professor, Department of Chemistry, Drexel University, Philadelphia, PA, 19104
9/91-8/94 DuPont Assistant Professor, Department of Chemistry, Drexel University, Philadelphia, PA, 19104
8/87-8/89 Instructor, Department of Chemistry, Drexel University, Philadelphia, PA, 19104

Sabbatical Leaves:

6/98-8/98 Eastman Kodak Company, Rochester, NY. Worked in the Analytical Technology Division under the direction of Dr. Kenji Kawaoka upgrading a Cambridge Instruments Ltd. Laser Ionization Mass Analyzer (LIMA) model 2A for use in matrix-assisted laser desorption/ionization studies of synthetic polymer systems. Gained experience with: operation of the LIMA-2A; object oriented programming using the Hewlett-Packard VEE (Virtual Engineering Environment) programming language for data acquisition and control.
2/99-9/99 Merck Research Laboratories, West Point, PA. Worked in the Pre-Clinical Drug Metabolism Department under the direction of Dr. Timothy Olah learning quantitative mass spectrometry. Gained experience in: preparing biological samples using solid phase extraction techniques; analytical scale separations using reversed-phase high performance liquid chromatography; quantitative mass spectrometry assays using a Sciex API 3000 triple quadrupole mass spectrometer system and a Perkin Elmer Biosystems (Perseptive Biosystems) Mariner electrospray time-of-flight mass spectrometer system.

Refereed Publications:

Note: corresponding author is starred.

1. R.B. Opsal, K.G. Owens, J.P. Reilly*, "Resolution in the Time-of-Flight Mass Spectrometer", *Anal. Chem.*, 57, 1884-9, 1985. DOI: <http://dx.doi.org/10.1021/ac00286a020>.
2. K.G. Owens, J.P. Reilly*, "Probing Argon-Benzene van der Waals Molecules and Isotopically Substituted Benzene with Laser Ionization Mass Spectrometry", *J. Opt. Soc. Am. B*, 2, 1589-93, 1985. DOI: <http://dx.doi.org/10.1364/JOSAB.2.001589>
3. R.B. Opsal, K.G. Owens, J.P. Reilly*, "Chromatographic Effluent Detection with Laser Ionization Mass-Spectrometry", *Journal of the Optical Society of America A-Optics Image Science and Vision*, 2(13), P69, 1985.
4. E. Sekreta, K.G. Owens, J.P. Reilly*, "Intensity-Dependent Laser Ionization Experiments Involving the $^1B_{1u}$ State of Benzene", *Chem. Phys. Lett.*, 132, 450-5, 1986. DOI: [http://dx.doi.org/10.1016/0009-2614\(86\)80644-3](http://dx.doi.org/10.1016/0009-2614(86)80644-3)
5. K.G. Owens, C.F. Bauer*, C.L. Grant, "Effects of Analytical Calibration Models on Detection Limit Estimates", in L.A. Currie, ed., *Detection in Analytical Chemistry: Importance, Theory & Practice*, ACS Symposium Series #361, 1988.
6. E. Sekreta, K. Owens, A. Engel, J.P. Reilly*, "Applications of Laser Ionization Spectroscopy", *Spectrochim. Acta, Part B*, 43b, 679-86, 1988. DOI: [http://dx.doi.org/10.1016/0584-8547\(88\)80090-9](http://dx.doi.org/10.1016/0584-8547(88)80090-9).
7. K.G. Owens*, "Application of Correlation Analysis Techniques to Mass Spectral Data", *Applied Spectroscopy Reviews*, 27(1), 1-49, 1992. DOI: <http://dx.doi.org/10.1080/05704929208018268>.
8. Z.Q. Zhao, C.S. Parmenter, D.B. Moss, A.J. Bradley, A.E.W. Knight*, K.G. Owens, "p-Fluorotoluene 1. Methyl (CH_3 and CD_3) Internal Rotation in the S_1 and S_0 States", *J. Chemical Physics*, 96(9), 6362-77, 1992. DOI: <http://dx.doi.org/10.1063/1.462631>
9. A.B. Smith, III*, R.M. Strongin, L. Brard, G.T. Furst, W.J. Romanow, K.G. Owens, R.C. King, "1,2-Methanobuckminsterfullerene ($C_{61}H_2$), The Parent Fullerene Cyclopropane: Synthesis and Structure", *J. Amer. Chem. Soc.*, 115, 5829-30, 1993. DOI: <http://dx.doi.org/10.1021/ja00066a063>
10. Amos B. Smith, III*, Robert M. Strongin, Laurent Brard, George T. Furst, William J. Romanow, Kevin G. Owens, Robert J. Goldschmidt, " $C_{71}H_2$ Cyclopropanes and Annulenes: Synthesis and Characterization", *J. Chem. Soc., Chem. Commun*, 1994, 2187-8. DOI: <http://dx.doi.org/10.1039/c39940002187>
11. Shang J. Tsay, Kevin G. Owens*, Kenneth W. Aniolek, David L. Miller, Nicholas P. Cernansky, "Detection of CN using Degenerate Four-Wave Mixing", *Optics Letters*, 20(16), 1725-8, 1995. DOI: <http://dx.doi.org/10.1364/OL.20.001725>
12. Amos B. Smith, III*, Robert M. Strongin, Laurent Brard, George T. Furst, William J. Romanow, Kevin G. Owens*, Robert J. Goldschmidt, R.C. King, "Synthesis of Prototypical Fullerene Cyclopropanes and Annulenes. Isomer Differentiation via

- NMR and UV Spectroscopy”, *Journal of the American Chemical Society*, **117**, 5492-5502, 1995. DOI: <http://dx.doi.org/10.1021/ja00125a009>
13. Timothy M. Laumakis, Joseph P. Martin, Sibel Pamucku, Kevin Owens, “Adsorption of Lead in Fly Ash Subgrades for Waste Disposal Facilities”, *Innovative Technologies for Site Remediation and Hazardous Waste Management, Proceedings of the National Conference*, Pittsburgh, July 23-26, 1995, p. 528-535, 1995.
 14. Amos B. Smith, III*, Robert M. Strongin, Laurent Brard, George T. Furst, Joshua H. Atkins, William J. Romanow, Martin Saunders*, Hugo A. Jiminez-Vazquez, Kevin G. Owens, Robert J. Goldschmidt, “Synthesis and Characterization of the First C₇₀O Epoxides. Utilization of ³He NMR in Analysis of Fullerene Derivatives”, *J. Organic Chem.*, **61**(6), 1904-5, 1996. DOI: <http://dx.doi.org/10.1021/jo960104l>
 15. Yansan Xiong, Kevin G. Owens, Dane E. Karr, Paul O. Danis* "A Novel Cationization Reagent for the Analysis of Hydrocarbon Polymers by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", *Rapid Commun. Mass Spectrom.*, **10**(7), 862-9, 1996. DOI: [http://dx.doi.org/10.1002/\(SICI\)1097-0231\(199605\)10:7%3C862::AID-RCM578%3E3.0.CO;2-X](http://dx.doi.org/10.1002/(SICI)1097-0231(199605)10:7%3C862::AID-RCM578%3E3.0.CO;2-X)
 16. Kenneth W. Aniolek, David L. Miller, Nicholas P. Cernansky, Kevin G. Owens*, “Generation of 1.30-1.55 μm Tunable Radiation from First Stokes Raman Shifting in Hydrogen”, *Applied Spectroscopy*, **51**(6), 820-6, 1997. DOI: <http://dx.doi.org/10.1366/0003702971941098>
 17. Russell R. Hensel, Richard C. King, Kevin G. Owens*, “Electrospray Sample Preparation for Improved Quantitation in Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry”, *Rapid Commun. Mass Spectrom.*, **11**(16), 1785-93, 1997. DOI: [http://dx.doi.org/10.1002/\(SICI\)1097-0231\(19971030\)11:16%3C1785::AID-RCM78%3E3.0.CO;2-Q](http://dx.doi.org/10.1002/(SICI)1097-0231(19971030)11:16%3C1785::AID-RCM78%3E3.0.CO;2-Q)
 18. Scott D. Hanton*, Paula A. Cornelio Clark, Kevin G. Owens, “Investigations of MALDI/I Sample Preparation by ToF-SIMS”, *J. Amer. Soc. Mass Spectrom.*, **10**(2), 104-111, 1999. DOI: [http://dx.doi.org/10.1016/S1044-0305\(98\)00135-4](http://dx.doi.org/10.1016/S1044-0305(98)00135-4)
 19. Carmen L. Fernandez-Metzler*, Thomas A. Baillie, Kevin G. Owens, Richard C. King, "Rapid LC-MS/MS Based Screening Procedures for Studies of the Biotransformation of Drug Candidates", *Drug Metabolism and Disposition*, **27**(1), 32-40, 1999.
 20. Stephen F. Macha, Patrick A. Limbauch*, Scott D. Hanton, Kevin G. Owens, “Matrix-Silver Cluster Interferences in the Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-MS) of Non-Polar Polymers”, *J. Amer. Soc. Mass Spectrom.*, **12**(6), 732-43, 2001. DOI: [http://dx.doi.org/10.1016/S1044-0305\(01\)00225-2](http://dx.doi.org/10.1016/S1044-0305(01)00225-2)
 21. M. Emig, D. L. Miller, R. I. Billmers*, N. P. Cernansky, K. G. Owens, “Cavity Enhanced Magneto-Optic Rotation: A Sensitive and Selective Technique for Detection of Paramagnetic Species”, *Chemical and Physical Processes in Combustion*, 428-431, 2001.
 22. Mary Emig, Richard I. Billmers*, Kevin G. Owens, Nicholas P. Cernansky, David L. Miller, “Sensitive and Selective Detection of Paramagnetic Species using Cavity

- Enhanced Magneto-Optic Rotation”, *Applied Spectroscopy*, 56(7), 863-8, 2002. DOI: <http://dx.doi.org/10.1366/000370202760171536>
23. Colin S. Creaser*, James C. Reynolds, Andrew J. Hoteling, William F. Nichols, Kevin G. Owens, “Atmospheric Pressure-Matrix Assisted Laser Desorption Ion Trap Mass Spectrometry of Synthetic Polymers: A Comparison with MADLI-TOF”, *European Journal of Mass Spectrometry*, 9(1), 33-44, 2003. DOI: <http://dx.doi.org/10.1255/ejms.528>
 24. Andrew J. Hoteling, Kenji Kawaoka, Mary C. Goodberlet, Wan-Mo Yu, Kevin G. Owens*, “Optimization of MALDI TOF CID – MS/MS of Poly(Ethylene Glycol)”, *Rapid Commun. Mass Spectrom.*, 17, 1671-6, 2003. DOI: <http://dx.doi.org/10.1002/rcm.1084>
 25. Scott D. Hanton*, Kevin G. Owens, William Blair*, Ingrid Z. Hyder, James R Stets, Charles M. Guttman, and Anthony Giuseppetti, “Investigations of Electrospray Sample Deposition for Polymer MALDI”, *J. Amer. Soc. Mass Spectrom.*, 15(2), 168-179, 2004. DOI: <http://doi.org/10.1016/j.jasms.2003.09.012>
 26. Andrew J. Hoteling and Kevin G. Owens*, “Improved PSD and CID on a MALDI/TOFMS”, *J. Amer. Soc. Mass Spectrom.*, 15(4), 523-35, 2004. DOI: <http://dx.doi.org/10.1016/j.jasms.2003.12.004>
 27. Andrew J. Hoteling, William J. Erb, Robert J. Tyson, III and Kevin G. Owens*, “Exploring the Importance of the Relative Solubility of Matrix and Analyte in MALDI Sample Preparation using HPLC”, *Analytical Chemistry*, 76(17), 5157-5164, 2004. DOI: <http://dx.doi.org/10.1021/ac049566m>
 28. Scott D. Hanton*, David A. Parees, Kevin G. Owens, “MALDI PSD of Low Molecular Weight Ethoxylated Polymers”, *Intl. J. Mass Spectrom.*, 238(3), 257-264, 2004. DOI: <http://dx.doi.org/10.1016/j.ijms.2004.09.028>
 29. Andrew J. Hoteling, Thomas H. Mourey, Kevin G. Owens*, “The Importance of Solubility in the Sample Preparation of Poly(Ethylene Terephthalate) for MALDI TOFMS”, *Analytical Chemistry*, 77(3), 750-756, 2005. DOI: <http://dx.doi.org/10.1021/ac048525n>
 30. Thomas H. Mourey*, Andrew J. Hoteling, Stephen T. Balke, Kevin G. Owens, “Molar Mass Distributions of Polymers from SEC and MALDI-TOF MS: Methods for Comparison”, *Journal of Applied Polymer Science*, 97, 627-639, 2005. DOI: <http://dx.doi.org/10.1002/app.21803>
 31. Scott D. Hanton*, Kevin G. Owens, Cynthia Chavez-Eng, Anne-Mette Hoberg, and Peter J. Derrick, “Updating Evidence for Cationization of Polymers in the Gas Phase during Matrix-Assisted Laser Desorption/Ionization”, *European Journal of Mass Spectrometry*, 11(1), 23-29, 2005. DOI: <http://dx.doi.org/10.1255/ejms.715>
 32. Scott D. Hanton* and Kevin G. Owens, “Using MESIMS to Analyze Polymer MALDI Matrix Solubility”, *J. Amer. Soc. Mass Spectrom.*, 16, 1172-1180, 2005. DOI: <http://dx.doi.org/10.1016/j.jasms.2005.03.013>

33. William J. Erb, Kevin G. Owens*, Scott D. Hanton, “A Study of Gas Phase Cationization in Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry”, *Rapid Commun. Mass Spectrom.*, 20(14), 2165-9, 2006. DOI: <http://dx.doi.org/10.1002/rcm.2568>
34. William J. Erb and Kevin G. Owens*, “Development of a Dual-Spray Electrospray Deposition System”, *Rapid Commun. Mass Spectrom.*, 22, (8), 1168-1174, 2008. DOI: <http://dx.doi.org/10.1002/rcm.2568>
35. Jean-Claude Bradley*, Khalid Baig Mirza, Tom Osborne, Antony Williams, Kevin Owens, “Optimization of the Ugi Reaction Using Parallel Synthesis and Automated Liquid Handling”, *Journal of Visualized Experiments (JOVE)*, (21), 2008. DOI: <http://dx.doi.org/10.3791/942>
36. David B. Lenhert, David L. Miller, Nicholas P. Cernansky, Kevin G. Owens, “The Oxidation of a Gasoline Surrogate in the Negative Temperature Coefficient Region”, *Combustion and Flame*, 156(3), 549-564, 2009. DOI: <http://dx.doi.org/10.1016/j.combustflame.2008.11.022>
37. April Holcomb and Kevin G. Owens*, “Optimization of a Modified Aerospray Deposition Device for the Preparation of Samples for Quantitative Analysis by MALDI TOFMS”, *Analytical Chimica Acta*, 658, 49-55, 2010. DOI: <http://dx.doi.org/10.1016/j.aca.2009.10.060>
38. Renata Szyszka, Scott D. Hanton, Diane M. Henning, Kevin G. Owens*, “Quantitation of PEG Contaminants in Ethoxylated Surfactant Samples by MALDI TOFMS using Standard Additions and Internal Standards Methods”, *J. Amer. Soc. Mass Spectrom.*, 22(4), 633-40, 2011. DOI: <http://dx.doi.org/10.1016/j.aca.2009.10.060>
39. Elsa Gorre, Kevin G. Owens*, “Microscale Solubility Measurements of MALDI Matrices Using ATR FT-IR Absorption Spectroscopy Coupled with PLS Analysis”, *Applied Spectroscopy*, 70(11), 1831–1841, 2016, <http://dx.doi.org/10.1177/0003702816647730>.
40. Brian Malys, Kevin G. Owens*, “Improving the Analyte Ion Signal in Matrix Assisted Laser Desorption Ionization Imaging Mass Spectrometry via Electrospray Deposition by Enhancing Incorporation of the Analyte in the Matrix”, *Rapid Commun. Mass Spectrom.*, 31(9) 804-12, 2017, <http://dx.doi.org/10.1002/rcm.7848>
41. Brian Malys, Michelle Piotrowski, Kevin G. Owens*, “Diagnosing and Correcting Mass Accuracy and Signal Intensity Error Due to Initial Ion Position Variations in a MALDI TOFMS”, *J. Amer. Soc. Mass Spectrom.*, 29(2), 422–434, 2018, <http://dx.doi.org/10.1007/s13361-017-1845-2>.
42. Elsa Gorre, Cathy Muste, Kevin G. Owens*, “Introducing a Cell-Free Approach for the Identification of Brewing Yeast *Saccharomyces Cerevisiae* Strains using MALDI TOF MS”, *J. Amer. Soc. Mass Spectrom.*, 29(11), 2248-59, 2018, <http://dx.doi.org/10.1007/s13361-018-2031-x>.

43. Cathy Muste, Kevin G. Owens*, "Cell-Free Identification of *S. Cerevisiae* Strains by Analysis of Supernatant using LC/MS", *J. Amer. Soc. Mass Spectrom.*, 29(11), 2260-7, 2018, <http://dx.doi.org/10.1007/s13361-018-2046-3>.
44. Michelle Piotrowski, Brian Malys, Kevin G. Owens*, "A Method for Defining Initial Ion Position in a MALDI TOFMS by Analysis of the Laser Image on the Sample Surface", *J. Amer. Soc. Mass Spectrom.*, 30(3), 489-500, 2019, <http://dx.doi.org/10.1007/s13361-018-2107-7>.
45. Andrew J. Hoteling, Michelle Piotrowski, Kevin G. Owens*, "The Cationization of Synthetic Polymers in MALDI TOFMS: Investigations of the Salt-to-Analyte Ratio", *Rapid Commun. Mass Spectrom.*, 34, (S2), e8630, 2020, <http://dx.doi.org/10.1002/rcm.8630>

Manuscripts in Preparation:

1. Ashley Phetsanthad, Elsa Gorre, Kevin G. Owens*, "Improved Absolute Peptide Signal Intensity and Reproducibility through use of a Binary MALDI Matrix System, to be submitted to *Rapid Comm. Mass Spectrom.*, 8/22.
2. Bryan Fulmer, Anh Duong, Hannah Palmer, Kevin G. Owens*, "TOFSim: A LabView Time-of-Flight Mass Spectrometer Simulation", to be submitted to *J. Chem Ed*, 8/22.

Book Chapters:

1. Scott D. Hanton* and Kevin G. Owens, "MALDI MS Applications for Industrial Polymers", in Liang Li, ed., MALDI Mass Spectrometry for Synthetic Polymer Analysis, New York: John Wiley & Sons, Inc., 2010 (submitted 5/06, revised 6/08).
2. Kevin G. Owens* and Scott D. Hanton, "Conventional MALDI Sample Preparation", in Liang Li, ed., MALDI Mass Spectrometry for Synthetic Polymer Analysis, New York: John Wiley & Sons, Inc., 2010 (submitted 9/06, revised 7/08).
3. Scott D. Hanton* and Kevin G. Owens, "Polymer MALDI Sample Preparation", in Christopher Barner-Kowollik, Jana Falkenhagen, Till Gründling, Steffen Weidner, eds., Mass Spectrometry in Polymer Chemistry, Wiley-VCH Publishers, 2012 (submitted 1/6/11, in final form 2/2/11).

Other Publications (Symposium Proceedings, etc.):

Note: corresponding author is starred.

1. K. Balasanmugam, K.G. Owens*, K.F. Hsueh, P. Hoontrakul, Y.Wei*, M.A. Olsen, "Mass Spectrometric Characterization of Conductive Polymers", *Proceedings of the 39th Annual Meeting of the American Society of Mass Spectrometry*, p. 408-9, 1991.
2. Richard C. King, Robert Goldschmidt, and Kevin G. Owens*, "Theoretical Analysis of the Effect of Electric Field Inhomogeneities in the Area of Wire Mesh Grids on Resolution in the Time-of-Flight Mass Spectrometer", *Proceedings of the 39th Annual Meeting of the American Society of Mass Spectrometry*, p. 144-5, 1991.

3. Kevin G. Owens, "Correlation Analysis Techniques and Mass Spectrometry", Proceedings of the 39th Annual Meeting of the American Society of Mass Spectrometry, p. 518-9, 1991.
4. Richard C. King, Kevin G. Owens*, "A Novel Method of Performing MS/MS Experiments on a Laser Ionization Time-of-Flight Mass Spectrometer", Proceedings of the 40th Annual Meeting of the American Society of Mass Spectrometry, p. 1340-1, 1992.
5. R. Goldschmidt, R. King, K. Balasanmugam, J. Schnable, K.G. Owens*, "Evidence for Matrix Photochemistry Occuring during the Matrix-Assisted Laser Desorption Experiment", Proceedings of the 40th Annual Meeting of the American Society of Mass Spectrometry, p. 374-5, 1992.
6. R.C. King, D. Stewart, R. Goldschmidt, K.G. Owens*, "Characterization of the Desorption and Ionization behavior of Polyethylene Glycol by Matrix-Assisted Laser Desorption/Ionization", Proceedings of the 40th Annual Meeting of the American Society of Mass Spectrometry, p. 340-1, 1992.
7. Richard C. King, Kevin G. Owens*, "Ion Flight Time Calculations and Instrument Design", Proceedings of the 1992 Conference on Instrumentation for Time-of-Flight Mass Spectrometry, Chestnut Ridge, NY, November 11-12, 1992.
8. Richard C. King, Kevin G. Owens*, "Measurement of Neutral Velocities in the Matrix-Assisted Laser Desorption Experiment", Proceedings of the 41st Annual Meeting of the American Society of Mass Spectrometry, p. 778a-b, 1993.
9. Richard C. King, Kevin G. Owens*, "Ion Peak Shape Calculations and Time-of-Flight Mass Spectrometer Instrument Design", Proceedings of the 41st Annual Meeting of the American Society of Mass Spectrometry, p. 951a-b, 1993.
10. Yansan Xiong, Kevin G. Owens*, Dane Karr, Paul Danis, "Investigation of the Fundamental Parameters Concerning the Matrix-Assisted Laser Desorption/Ionization Analysis of Polymers", Proceedings of the 42nd Annual Meeting of the American Society of Mass Spectrometry, p. 980, 1994.
11. Richard C. King, Kevin G. Owens*, "Investigations of the UV Matrix-Assisted Laser Desorption Process", Proceedings of the 42nd Annual Meeting of the American Society of Mass Spectrometry, p. 977, 1994.
12. Richard C. King, Jelena Sepa, Kevin G. Owens*, "Protein and Polymer Analysis by Matrix-Assisted Laser Desorption/Ionization using 2,5-Dihydroxybenzoic Acid as a Matrix", Proceedings of the 42nd Annual Meeting of the American Society of Mass Spectrometry, p. 978, 1994.
13. Richard C. King, Kevin G. Owens*, "Investigation of the Polymer Cationization Mechanism Occuring during the UV Matrix-Assisted Laser Desorption Experiment", Proceedings of the 42nd Annual Meeting of the American Society of Mass Spectrometry, p. 955, 1994.
14. Richard C. King, Robert Goldschmidt, Yansan Xiong, Kevin G. Owens*, Scott D. Hanton, "The Role of Solubility in the Preparation of Synthetic Polymer Samples for Analysis by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 689, 1995.

15. Richard C. King, Kevin G. Owens*, Scott D. Hanton, "Separation of the Desorption and Ionization Events in the Matrix-Assisted Laser Desorption/Ionization Experiment", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 1238, 1995.
16. Richard C. King, Kevin G. Owens*, Scott D. Hanton, "Comparison of Ion Detectors for Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 136, 1995.
17. Scott D. Hanton*, David M. Parees, Robert Goldschmidt, Richard C. King, Kevin G. Owens*, "The use of Matrix-Assisted Laser Desorption Mass Spectrometry to Investigate Industrial Polymers", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 19, 1995.
18. Richard C. King, Kevin G. Owens*, Brian F. Hanley, David M. Parees, Scott D. Hanton*, "Analysis of Gel Permeation Chromatography Standards by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 952, 1995.
19. Russell R. Hensel, Richard C. King, Kevin G. Owens*, "Application of Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry for Quantitative Analysis", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 947, 1995.
20. Richard C. King, Robert Goldschmidt, Yansan Xiong, Kevin G. Owens*, "Mechanistic Studies of the Cationization of Synthetic Polymers by Alkali Metals in the Matrix-Assisted Laser Desorption/Ionization Experiment", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 1237, 1995.
21. Robert Goldschmidt, Kevin G. Owens*, "Wavelength Dependent Photoionization of Some Amines at Metal Surfaces", Proceedings of the 43rd Annual Meeting of the American Society of Mass Spectrometry, p. 956, 1995.
22. Timothy Laumakis, Joseph P. Martin*, Sibel Pamucku, Kevin G. Owens, "Absorption of Lead in Fly Ash Subgrades for Waste Disposal Facilities", Innovative Technol. Site Rem. Hazard. Waste Manage., Proc. Natl. Conf., 528-535, 1995.
23. Shang J. Tsay, Kevin G. Owens*, Kenneth W. Aniolek, David L. Miller*, Nicholas P. Cernansky, "Tilted Backward Pump Degenerate Four-Wave Mixing: Detection of CN in an Atmospheric Pressure Flame", Proceedings of the Central States/ Western States/Mexican National Sections of the Combustion Institute and the American Flame Research Committee Meeting, San Antonio, TX, April 23-6, 1995, Paper # 95S-067.
24. Richard King, Carmen Fernandez, Thomas Baillie, Kevin G. Owens, "Rapid Screening Procedures for Metabolic Stability and Biotransformation of Biologically Active Compounds", Proceedings of the 44th Annual Meeting of the American Society of Mass Spectrometry, p. 393, 1996.
25. Russell Hensel, Robert Carlton, Cary Kennedy, Kevin G. Owens*, Rick S. Hock, "Quantitative Analysis using Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry with Electrospray Sample Preparation", Proceedings of the 44th Annual Meeting of the American Society of Mass Spectrometry, p. 1013, 1996.

26. Yansan Xiong, Robert Goldschmidt, Kevin G. Owens*, "Studies of the Cationization Behavior of Small Oligomers in the Matrix-Assisted Laser Desorption/Ionization Experiment", Proceedings of the 44th Annual Meeting of the American Society of Mass Spectrometry, p. 899, 1996.
27. Kevin G. Owens* and Scott D. Hanton, "Improved Software Tools for the Analysis of Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry Data", Proceedings of the 44th Annual Meeting of the American Society of Mass Spectrometry, p. 1195, 1996.
28. Robert Goldschmidt, Kevin G. Owens*, Scott D. Hanton*, David M. Parees, "Analysis of Low-Molecular Weight Polymer Blends by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", Proceedings of the 44th Annual Meeting of the American Society of Mass Spectrometry, p. 1097, 1996.
29. Scott D. Hanton*, Paula Cornelio-Clark, and Kevin G. Owens, "Investigation of MALD/I Sample Preparation by TOF-SIMS", Proceedings of the 45th Annual Meeting of the American Society of Mass Spectrometry, p. 411, 1997.
30. Robert Goldschmidt, Scott D. Hanton, and Kevin G. Owens*, "Analysis of Polymer Blends to Investigate Discrimination Effects in MALD/I", Proceedings of the 45th Annual Meeting of the American Society of Mass Spectrometry, p. 1106, 1997.
31. Yansan Xiong, Robert Goldschmidt, Glenn Mitchell, and Kevin G. Owens*, "Investigations of MALD/I TOFMS Analysis of Synthetic Polymers", Proceedings of the 45th Annual Meeting of the American Society of Mass Spectrometry, p. 1043, 1997.
32. Russell Hensel, Jennifer Dally, Rick S. Hock, and Kevin G. Owens* "Relationships Between Peptide Structure and Relative MALD/I Ion Signal Intensities", Proceedings of the 45th Annual Meeting of the American Society of Mass Spectrometry, p. 846, 1997.
33. Russell Hensel, Rick S. Hock, and Kevin G. Owens*, "Electrospray Sample Deposition for the Quantitative Analysis of Peptides using MALD/I", Proceedings of the 45th Annual Meeting of the American Society of Mass Spectrometry, p. 329, 1997.
34. Carmen L. Fernandez-Metzler, Joan D. Ellis, Richard C. King, Kara M. Merckle, Tomothy V. Olah, Kevin G. Owens, "Application of Correlation Analysis to the Identification of Drug Metabolites in Complex Biological Matrices", Proceedings of the 46th Annual Meeting of the American Society of Mass Spectrometry, p. 712, 1998.
35. Russell Hensel, Glenn Mitchell, Limin Zhu, Justine Ciruolo, and Kevin G. Owens*, "Electrospray Sample Preparation for Quantitative Analysis by MALD/I TOFMS", Proceedings of the 46th Annual Meeting of the American Society of Mass Spectrometry, p. 792, 1998.
36. Bruce LaPrade*, Raymond Cochran, Kevin G. Owens, Justine Ciruolo, and Glenn Mitchell, "High Mass Sensitivity Enhancements for Microchannel Plate-Based Detectors", Proceedings of the 46th Annual Meeting of the American Society of Mass Spectrometry, p.918, 1998.
37. Robert Goldschmidt, Kevin G. Owens*, and Scott D. Hanton, "Saturation of Polymer Response and Relative Responses of Blend Components in MALD/I", Proceedings of

- the 46th Annual Meeting of the American Society of Mass Spectrometry, p. 1055, 1998.
38. Scott D. Hanton*, and Kevin G. Owens, "The Investigation of Polymer and Matrix Solubility by MALD/I and MESIMS", Proceedings of the 46th Annual Meeting of the American Society of Mass Spectrometry, p. 1185, 1998.
 39. Kevin G. Owens*, "Extracting Information from Mass Spectral Data using Correlation Analysis ", Proceedings of the 47th Annual Meeting of the American Society of Mass Spectrometry, 1999
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Doctoral Thesis:

"Analytical Applications of Supersonic Jet Spectroscopy and the Application of Correlation Analysis Techniques in Mass Spectrometry"

Experiments focussed upon efforts made to improve the selectivity of both fluorescence and ionization detection (using a time-of-flight mass spectrometer) through the use of supersonic beam sampling techniques. A dramatic increase in mass resolution due to the geometric cooling effect was demonstrated. The excited state spectroscopy and dynamics of internally cold sample molecules and weakly bound van der Waals clusters produced in expansions of both rare gases and supercritical fluids was studied. In order to perform these experiments a supercritical fluid chromatograph time-of-flight mass spectrometer system utilizing a supersonic jet interface was designed and constructed. Simplex optimization techniques were applied for the improvement of instrument resolution. The application of correlation analysis techniques (from information theory) was examined as both a means of increasing the trace analysis sensitivity of the mass spectrometer and as an alternative tool in the automated identification of compounds from their mass spectra.

Bachelors Thesis:

"The Statistical Analysis and Use of Analytical Calibration Curves"

A comprehensive statistical background to the calibration problem is presented, emphasizing the practical use of statistics to extract useful chemical information from experimental data.

Patents & Applications:

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Note: presenting author is underlined, corresponding author is starred.

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2. Kevin G. Owens* and James P. Reilly, "Application of Correlation Analysis Techniques in Mass Spectrometry", paper #499, Federation of Analytical Chemistry and Spectroscopy Societies Meeting XVI, Chicago, IL, October 2-5, 1989.
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21. Richard C. King, Kevin G. Owens*, "Ion Peak Shape Modeling and Grid Effects in the Linear Time-of-Flight Mass Spectrometer", invited poster, 10th Asilomar Conference on Mass Spectrometry, Estes Park, CO, October 3-7, 1993.
22. Robert Goldschmidt, Kevin G. Owens*, "Photoionization of Molecules Near Surfaces", invited presentation, Federation of Analytical Chemistry and Spectroscopy Societies Meeting XVII, Detroit, MI, October 18-22, 1993.
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59. Russell Hensel, Glenn Mitchell, and Kevin G. Owens*, "Quantitative Analysis by MALD/I TOFMS: The Importance of Sample Preparation", Federation of Analytical Chemistry & Society of Applied Spectroscopy (FACSS) Meeting, Austin, TX, October 12-16, 1998.
60. Kevin G. Owens*, "Extracting Information from Mass Spectral Data using Correlation Analysis", American Society of Mass Spectrometry Meeting, Dallas, TX, June 13-17, 1999.
61. Scott D. Hanton*, Ingrid Hyder, and Kevin G. Owens, "Investigation of Electrosprayed Samples for Polymer MALDI", American Society of Mass Spectrometry Meeting, Dallas, TX, June 13-17, 1999.
62. Bruce LaPrade*, George Grubner, Kevin G. Owens, and Dennis Kosakowski, "Development of an Advanced Performance High Mass Detector for Time-of-Flight Mass Spectrometry Applications", American Society of Mass Spectrometry Meeting, Dallas, TX, June 13-17, 1999.
63. Kevin G. Owens*, "Sample Preparation Issues in the Analysis of Synthetic Polymers by MALDI TOFMS", American Chemical Society Meeting, San Francisco, CA, March 26-30, 2000.
64. Scott D. Hanton* and Kevin G. Owens, "MALDI-PSD Mass Spectra of Low Molecular Weight Ethoxylated Polymers", American Society of Mass Spectrometry Meeting, Long Beach, CA, June 11-15, 2000.
65. Stephen F. Macha, Chad Robbins, Patrick A. Limbaugh*, Scott D. Hanton, and Kevin G. Owens, "Crude Oil and Hydrocarbon Polymer Analysis Using Matrix-Assisted Laser Desorption Ionization Mass Spectrometry (MALDI-MS) with Nonpolar Matrices", American Society of Mass Spectrometry Meeting, Long Beach, CA, June 11-15, 2000.
66. Kevin G. Owens*, "Application of Correlation Analysis to Mass Spectral Data: Tips and Techniques", 13th Sanibel Conference on Mass Spectrometry (Informatics and Mass Spectrometry), January 20-22, 2001.
67. Andrew J. Hoteling, Kenji Kawaoka, Kevin G. Owens*, "MALD/I TOF CID MS/MS of Polyethylene Glycol", American Society of Mass Spectrometry Meeting, Chicago, IL, May 27-31, 2001.

68. Scott D. Hanton* and Kevin G. Owens, "Monitoring Gas Phase Cationization in MALDI TOFMS", American Society of Mass Spectrometry Meeting, Chicago, IL, May 27-31, 2001.
69. Cynthia M. Chavez-Eng and Kevin G. Owens*, "Quantitative Aspects of MALDI using Electrospray Deposition", American Society of Mass Spectrometry Meeting, Chicago, IL, May 27-31, 2001.
70. Scott D. Hanton*, David M. Parees, Kevin G. Owens, "Improving Sample Preparation Methods for Polymer MALDI", invited talk at 14th Sanibel Conference on Mass Spectrometry titled "Front-End Sampling Techniques", sponsored by the American Society of Mass Spectrometry, January 25-29, 2002.
71. Colin S. Creaser*, James C. Reynolds, Andrew J. Hoteling, William F. Nichols, and Kevin G. Owens, "Atmospheric Pressure Matrix-Assisted Laser Desorption/Ionization Quadrupole Ion Trap Mass Spectrometry (AP-MALDI/QIT) of Polyethers", American Society of Mass Spectrometry Meeting, Orlando, FL, June 1-6, 2002.
72. Cynthia M. Chavez-Eng and Kevin G. Owens*, "Quantitative of Insulin using MALDI TOFMS", American Society of Mass Spectrometry Meeting, Orlando, FL, June 1-6, 2002.
73. Kevin G. Owens*, "Back-Bias Correction in a Time-of-Flight Mass Spectrometer", American Society of Mass Spectrometry Meeting, Orlando, FL, June 1-6, 2002.
74. Andrew J. Hoteling and Kevin G. Owens*, "Improved PSD and CID on a MALDI/TOFMS", American Society of Mass Spectrometry Meeting, Montreal, Quebec Canada, June 8-12, 2003.
75. Andrew J. Hoteling, William J. Erb, Kevin G. Owens*, "Importance of Relative Solubility of Matrix and Analyte in MALDI Sample Preparation, Explored Using HPLC", American Society of Mass Spectrometry Meeting, Nashville, TN, May 23-27, 2004.
76. William J. Erb, Kevin G. Owens*, Scott D. Hanton, "A Study of Gas Phase Cationization in MALDI TOFMS", American Society of Mass Spectrometry Meeting, Nashville, TN, May 23-27, 2004.
77. Kevin G. Owens*, Andrew J. Hoteling, Thomas H. Mourey, William J. Erb, Robert J. Tyson, "The Importance of Solubility in the Sample Preparation for MALDI TOF Mass Spectrometry", Northeast Regional Meeting of the American Chemical Society, Rochester, NY, October 31-November 3, 2004.
78. William J. Erb, Kevin G. Owens*, Scott D. Hanton, "A Study of Gas Phase Cationization in Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry", Northeast Regional Meeting of the American Chemical Society, Rochester, NY, October 31-November 3, 2004.
79. Andrew J. Hoteling, Kevin G. Owens*, "MALDI TOF PSD and CID: Understanding Precision, Resolution, and Mass Accuracy", Northeast Regional Meeting of the American Chemical Society, Rochester, NY, October 31-November 3, 2004.
80. Seksan Dheandhanoo*, Scott D. Hanton, Kevin G. Owens, William J. Erb, Rocco DeIConte "Comparison of Sample Deposition Techniques for MALDI Mass

Spectrometry: Dried-Droplet, Air-Spray and Electrospray”, American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2005.

81. William J. Erb, Kevin G. Owens*, Gordan T. Reeves, Anthony W. Addison, “From the Bench To Inside The Instrument: Utilizing MALD/I TOFMS To Explore Ruthenium Complex Reactions”, American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2005.
82. Scott D. Hanton* and Kevin G. Owens, “Investigating Quantitation of Multicomponent Polymer Blends by MALDI”, American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2005.
83. Andrew J. Hoteling, Kevin G. Owens*, “Cationization Of Polymers In MALD/I TOFMS – Investigations Of Salt-To-Analyte Ratio”, American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2005.
84. Kevin G. Owens*, “Liquid Phase Sample Preparation for the MALDI TOFMS Analysis of Synthetic Polymers”, American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2005.
85. Kevin G. Owens*, Andrew J. Hoteling, “The Effect of Matrix-to-Analyte Ratio on the Cationization of Polymers in MALD/I TOFMS”, American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2005.
86. Kevin G. Owens* (Invited speaker), “Liquid Phase Sample Preparation for MALDI TOFMS Analysis”, Federation of Analytical Chemistry & Society of Applied Spectroscopy (FACSS) Meeting, Quebec City, Quebec, Canada, October 9-13, 2005.
87. William J. Erb, Andrew J. Hoteling, Kevin G. Owens*, “The Study of Salt/Analyte Ratios for Four Matrices in MALDI TOFMS”, American Society of Mass Spectrometry Meeting, Seattle, WA, May 29-June 2, 2006.
88. Rocco DelConte, William J. Erb, Kevin G. Owens*, “Optimization of the Electrospray Deposition Technique to Produce Better Quantitative MALDI Samples”, American Society of Mass Spectrometry Meeting, Seattle, WA, May 29-June 2, 2006.
89. William J. Erb, Kevin G. Owens*, Andrew J. Hoteling, “The Study of Salt/Analyte Ratios for Four Matrices in MALDI TOFMS”, presented at the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, Feb. 25- March 1, 2007.
90. Bruce N. Laprade*, Kevin Owens, Sharon Mrotek, William Erb, April Holcomb, “The Development of a Novel Micro-Well MALDI Target”, presented at the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Chicago, IL, Feb. 25- March 1, 2007.
91. Bruce N. Laprade*, Kevin Owens, Sharon Mrotek, William Erb, April Holcomb, “MALDI Target Plates Utilizing Micro-Well Technology”, presented at the American Society of Mass Spectrometry Meeting, Indianapolis, IN, June 3-7, 2007.
92. William J. Erb, Wolfgang Nadler, Kevin G. Owens*, “Two Needles, One Sample: Demonstration of a Dual-Spray Electrospray Deposition System”, presented at the American Society of Mass Spectrometry Meeting, Indianapolis, IN, June 3-7, 2007.

93. William J. Erb, Kevin G. Owens*, “Looking at a Supersonic Reactor: A Study of Reactions Occurring in the MALDI Plume”, presented at the American Society of Mass Spectrometry Meeting, Denver, CO, June 1-5, 2008.
94. Andy Mahan, Kevin G. Owens*, “MALDI Sample Preparation - The Use of Biomap MS Imaging to Study Electrospray Sample Deposition”, presented at the American Society of Mass Spectrometry Meeting, Denver, CO, June 1-5, 2008.
95. Renata Szyszka, Scott D. Hanton*, Diane M. Henning, Kevin G. Owens*, “Quantitation of PEG Contaminants in Ethoxylated Surfactant Samples by MALDI TOFMS using Standard Additions and Internal Standards Methods”, presented at the American Society of Mass Spectrometry Meeting, Philadelphia, PA, May 31-June 4, 2009.
96. April Holcomb, Kevin G. Owens*, “Optimization of a Modified Aerospray Deposition Device for the Preparation of Samples for Quantitative Analysis by MALDI TOFMS”, presented at the American Society of Mass Spectrometry Meeting, Philadelphia, PA, May 31-June 4, 2009.
97. Andy Mahan, Jonathan Haulenbeek, April Holcomb, Richard Knochenmuss, Kevin G. Owens*, “Positive-to-Negative Ion Ratios of Peptides in MALDI TOFMS: The Role of Acid/Base Properties of Matrices and Analytes”, presented at the American Society of Mass Spectrometry Meeting, Salt Lake City, UT, May 23-27, 2010.
98. Jonathan Haulenbeek, Kevin G. Owens*, “High Intra- and Inter-Sample Precision Obtained for Electrospray Deposited MALDI Samples of Controlled Spot Size”, presented at the American Society of Mass Spectrometry Meeting, Salt Lake City, UT, May 23-27, 2010.
99. Renata Szyszka, James F. Elman, Kevin G. Owens*, “Measurement of Sample Thickness and Sample Profile of Electrospray Deposited Samples by MALDI TOFMS and Spectral Reflectance”, presented at the American Society of Mass Spectrometry Meeting, Denver, CO, June 5-9, 2011.
100. Jonathan Haulenbeek; Francisco Guevara; Kevin G. Owens*, “Probing the Effect of Wavelength on Matrix Compounds in the UV-MALDI-TOFMS Experiment”, presented at the American Society of Mass Spectrometry Meeting, Denver, CO, June 5-9, 2011.
101. April Holcomb, Jennifer Dally, Jonathan Haulenbeek, Francisco Guevara, Catherine Bentzley, Kevin G. Owens*, “Investigation of the Effect of Halide Salts on Analyte Signal Intensity in the MALDI Experiment”, presented at the American Society of Mass Spectrometry Meeting, Minneapolis, MN, June 9-13, 2013.
102. Brian Malys, April Holcomb, Kevin Owens*, “Effect of Sample Composition and Preparation Method on the Initial Velocity of Ions in MALDI TOFMS using a Gridless Instrument”, presented at the American Society of Mass Spectrometry Meeting, Minneapolis, MN, June 9-13, 2013.
103. Brian Malys, Elsa Gorre, Kevin Owens*, “Tuning the Selectivity of MALDI Imaging Mass Spectrometry through Control of the Sample Preparation Parameters of Alternative Matrix Deposition Techniques”, presented at the American Society of Mass Spectrometry Meeting, Baltimore, MD, June 15-19, 2014.

104. Brian Malys, Abdi Abdullahi, Christopher Schultz, Kevin Owens*, “Creating Reproducible Micropatterned Analyte Surfaces to Investigate the Effect of Sample Preparation Parameters in the MALDI Imaging Mass Spectrometry Process”, presented at the American Society of Mass Spectrometry Meeting, St. Louis, MO, May 31-June 4, 2015.
105. Brian Malys, Kevin Owens*, “Using MALDI Depth Profiles to Understand the Effect of ESD Sample Preparation Parameters on MALDI IMS Samples”, presented at the American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2016.
106. Elsa Gorre, Ashley Phetsanthad, Jon Soffer, Kevin Owens*, “Analysis of the Oligosaccharide and Protein Content of Beer Using Matrix-Assisted Laser Desorption Ionization Time-Of-Flight Mass Spectrometry (MALDI TOFMS)”, presented at the American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2016.
107. Christina Emeigh, Kevin Owens*, “Investigating the Effect of Electrospray Deposition Parameters on the Morphology of Samples and its Implications to MALDI MS Signal Intensity”, presented at the American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2016.
108. Michelle Piotrowski, Kevin Owens*, “Investigating the Effect of Sample Preparation Parameters on the Cationization of Synthetic Polymers Using Matrix-Assisted Laser Desorption Ionization”, presented at the American Society of Mass Spectrometry Meeting, San Antonio, TX, June 5-9, 2016.
109. Brian Malys, Kevin Owens*, “Using Micropatterned Analyte Surfaces to Understand the Effect of Varying Electrospray Deposition Matrix Application Parameters in MALDI Imaging Mass Spectrometry”, presented at the American Chemical Society Meeting, Philadelphia, PA, August 21-25, 2016.
110. Elsa Gorre, Cathy Muste, Kevin Owens*, “Analysis of the Protein Content of Yeast Strains Using Matrix-Assisted Laser Desorption Ionization (MALDI) Time-of-Flight Mass Spectrometry (TOFMS)”, presented at the American Chemical Society Meeting, Philadelphia, PA, August 21-25, 2016.
111. Brian Malys, Michelle Piotrowski, Kevin Owens*, “Diagnosing and Correcting Mass Accuracy and Signal Intensity Error Due to Initial Ion Position Variations in a MALDI TOFMS”, presented at the American Society of Mass Spectrometry Meeting, Indianapolis, IN, June 4-8, 2017.
112. Hannah Palmer, Brian Fulmer, Anh Duong, Kevin Owens*, “TOFSim: A Labview Simulation for Teaching the Principles of Time of Flight Mass Spectrometry”, presented at the American Society of Mass Spectrometry Meeting, Indianapolis, IN, June 4-8, 2017.
113. Elsa Gorre, Cathy Muste, Kevin Owens*, “Identification of the Yeast Strain used in the Production of Beer using MALDI TOFMS and HPLC ESI-TOFMS”, presented at the American Society of Mass Spectrometry Meeting, Indianapolis, IN, June 4-8, 2017.

114. Kevin G. Owens, (Invited Speaker), “Improving Quantitation through a Fundamental Understanding of the MALDI Sample Preparation Process”, in session titled “Applications Using Matrix Assisted Laser Desorption Ionization Mass Spectrometry”, Eastern Analytical Symposium, Somerset, NJ, 11/14/17.
115. Michelle Piotrowski, Brian Malys, Kevin Owens*, “A Method for Defining Initial Ion Position in a TOFMS by Analysis of the Laser Image on the Sample Surface”, presented at the American Society of Mass Spectrometry Meeting, San Diego, CA, June 3-7, 2018.
116. Ashley Phetsanthad, Elsa Gorre, Kevin Owens*, “Development of a Binary MALDI Matrix System to Improve Absolute Peptide Signal and Reproducibility”, presented at the American Society of Mass Spectrometry Meeting, San Diego, CA, June 3-7, 2018.
117. Cathy Muste, Kevin Owens*, “Cell Free Identification of *S. cerevisiae* Strains used in Beer Production using LC-MS”, presented at the American Society of Mass Spectrometry Meeting, Atlanta, GA, June 2-6, 2019.
118. Hannah Palmer, Kevin Owens*, “Simulating Accurate Time-of-Flight Mass Spectrometer Flight Times and Peak Widths using TOFSim, a LabVIEW-Based Simulation Program”, presented at the American Society of Mass Spectrometry Meeting, Philadelphia, PA, October 31-November 4, 2021.