

Curriculum Vitae

Shelley D. Minteer

Missouri University of Science and Technology
400 W 11th St.
Rolla, MO 65409
(573) 341-4433

I. Educational Background

Ph.D., Analytical Chemistry, University of Iowa, 2000
Thesis: Magnetic Field Effects on Electron Transfer Reactions
Thesis Advisor: Johna Leddy
B.S., Chemistry, Western Illinois University, 1995

II. Professional Experience

July 2025- present	Dr. Ken Robertson Memorial Professor of Chemistry, Missouri University of Science and Technology
October 2023 – present	Director of the Kummer Institute Center for Resource Sustainability, Missouri University of Science and Technology
October 2023 – present	Distinguished Professor of Chemistry, Missouri University of Science and Technology
July 2022-September 2023	Distinguished Professor of Chemistry, University of Utah
September 2020- present	Director of the NSF Center for Synthetic Organic Electrochemistry, University of Utah
July 2019-June 2024	Dale and Susan Poulter Endowed Chair of Biological Chemistry, University of Utah
July 2019-June 2023	Associate Chair of Chemistry, University of Utah
July 2011 – July 2019	USTAR Professor of Chemistry and Materials Science and Engineering, University of Utah
July 2008 – June 2011	College of Arts and Sciences Endowed Professor of Chemistry, Saint Louis University
May 2008 – June 2011	Professor of Chemistry, Saint Louis University
July 2006 – January 2007	Visiting Scholar, Hawaii Natural Energy Institute, University of Hawaii-Manoa
May 2005 – May 2008	Associate Professor of Chemistry, Saint Louis University
December 2004 – June 2011	Assistant Professor of Biomedical Engineering, Saint Louis University
August 2000 – May 2005	Assistant Professor of Chemistry, Saint Louis University

III. Professional Organizations

American Academy of Arts and Sciences
American Chemical Society
American Association for the Advancement of Science
Society of Electroanalytical Chemists
The Electrochemical Society
International Society of Electrochemistry
Bioelectrochemical Society
Materials Research Society

IV. Awards and Honors

2026 Heyrovsky Prize of the International Society of Electrochemistry
 2026 Galvani Medal of the Italian Chemical Society
 2026 Manuel M. Baizer Award of the Electrochemical Society
 2024 Fellow of the American Chemical Society
 2024 Elected Member of the American Academy of Arts and Sciences
 2023 University of Utah Parry Teaching Award
 2022 Fellow of the Royal Society of Chemistry
 2022 Bruno Breyer Medal of the Royal Australian Chemical Institute
 2021 The Analytical Scientist Power List of Top 100 Most Influential People in Analytical Science
 2020 Bioelectrochemistry Prize of the International Society of Electrochemistry
 2020 University of Utah Distinguished Research Award
 2020 Charles N. Reilley Award of the Society of Electroanalytical Chemistry
 2019 Fellow of the International Society of Electrochemistry
 2019 Grahame Award of the Electrochemical Society
 2018 Fellow of the American Association for the Advancement of Science
 2018 Utah Innovation Award for Early Stage Innovation in the Mechanical, Chemical, and Manufacturing Category
 2018 Celebrate U Top Researcher Honoree from the Utah College of Science
 2018 American Chemical Society Analytical Division Electrochemistry Award
 2018 Chinese Academy of Science President's International Distinguished Fellow
 2017 Celebrate U Top Researcher Honoree from the Utah College of Engineering
 2015 Luigi Galvani Prize of the Bioelectrochemical Society
 2015 Brazilian CNPq PVE Fellow
 2014 University of Iowa Alumni Fellow
 2013 Fellow of the Electrochemical Society
 2010-2011 Tajima Prize of the International Society of Electrochemistry
 2008 Kavli Fellow of the National Academy of Science
 2008 American Chemical Society St. Louis Award
 2008 Scientific American Top 50 Award
 2008 Society of Electroanalytical Chemists Young Investigator Award
 2007 St. Louis Section Sigma Xi Scientist of the Year
 2006 U.S. Department of Defense Okaloosa Award
 2006 Saint Louis University Award for Excellence in Research
 2006 Finalist for the Saint Louis Award for Excellence in Mentoring
 2006 Missouri Inventor of the Year Award
 2006 SLU Student Government Association Faculty Excellence Award
 2006 Saint Louis Business Journal Under 40 Award
 2005 Academy of Science of St. Louis Innovation Award
 2004 SLU Student Government Association Faculty Excellence Award
 2004 William V. Stauder, S.J. Award for Excellence in Teaching in the Natural Sciences
 2003 YWCA Leader in the Workplace
 2003 Saint Louis University Award for Excellence in Research
 University of Iowa Department of Chemistry Fellowship and Tuition Waiver
 Graduate Assistance in Areas of National Need (GAANN) Fellowship
 National Defense Science and Engineering Graduate Fellowship Honorable Mention
 Western Illinois University Department Scholar in Chemistry
 Western Illinois University Foundation Four-Year Scholar

V. Areas of Interest

Electrochemistry: Chemically Modified Electrodes, Bioelectrochemistry, Biosensors, Enzyme Immobilization Membranes, Bioelectrocatalysis, Biofuel Cells, Biobatteries, Biomimicking of Metabolism, Organic Electrosynthesis, Redox Flow Batteries; Biomanufacturing

VI. Publications

1. S.W. Li, T.S. Lin, S. Minter, and W.J. Burke, "3,4-Dihydroxyphenylacetaldehyde and hydrogen peroxide generate a hydroxyl radical: possible role in Parkinson's disease pathogenesis," *Molecular Brain Research*, 93, 2001, 1-7.
2. S. Brancato and S.D. Minter "Electrochemical Studies of Surface Modified Glass Bead/Nafion Composites," *Langmuir*, 17, 2001, 6304-6308.
3. M. Schrenk, R. Villigam, N. Torrence, S. Brancato, and S.D. Minter, "Effects of Mixture Casting Nafion with Quaternary Ammonium Bromide Salts on the Ion Exchange Capacity and Mass Transport in the Films," *Journal of Membrane Science*, 205, 2002, 3-10.
4. K.J. Oberbroeckling, D.C. Dunwoody, S.D. Minter, and J. Leddy, "Density of Nafion Exchanged with Transition Metal Complexes, Tetramethyl Ammonium, Ferrous, and Hydrogen Ions: Commercial and Recast Films," *Analytical Chemistry*, 74, 2002, 4794-4799.
5. N.J. Torrence, C.M. Moore, and S.D. Minter, "Electrochemical Effects of Surface Modified Glass Microspheres in Polyvinylpyridine and Polystyrene Sulfonate Composite Electrodes," *Langmuir*, 18, 2002, 6254-6258.
6. M.P. Gordito, D.H. Kotsis, S.D. Minter, and D.M. Spence, "Flow-Based Amperometric Detection of Dopamine in an Immobilized Cell Reactor," *Journal of Neuroscience Methods*, 124, 2003, 129-134.
7. T.J. Thomas, K.E. Ponnusamy, N.M. Chang, K. Galmore, and S.D. Minter, "Effects of Annealing on Mixture-Cast Membranes of Nafion and Quaternary Ammonium Bromide Salts," *Journal of Membrane Science*, 213, 2003, 55-66.
8. N.L. Akers, C.M. Moore, and S.D. Minter, "Development of Alcohol/O₂ Biofuel Cells Using Salt-Extracted Tetrabutylammonium Bromide/Nafion Membranes to Immobilize Dehydrogenase Enzymes," *Electrochimica Acta*, 50, 2005, 2521-2525.
9. T.J. Thomas and S.D. Minter, "Study of the Transport of Erythromycin through Tetrabutylammonium Doped Nafion/Surface Modified Glass Microsphere Composites," *Polymeric Materials: Science and Engineering*, 88, 2003, 207-208.
10. N.L. Akers and S.D. Minter, "Towards the Development of a Membrane Electrode Assembly (MEA) Style Biofuel Cell," *Proceedings of the ACS Fuel Chemistry Division*, 48(2), 2003, 895-896.
11. C.M. Moore, N.L. Akers, and S.D. Minter, "Improving the Environment for Immobilized Dehydrogenase Enzymes by Modifying Nafion with Tetraalkylammonium Bromides," *Biomacromolecules*, 5, 2004, 1241-1247.
12. C.M. Moore, S. Hackman, T. Brennan, and S.D. Minter, "Effect of Mixture Casting Phosphonium Salts with Nafion on the Proton Exchange Capacity and Mass Transport through the Membranes," *Journal of Membrane Science*, 254, 2005, 63-70.
13. N.L. Akers and S.D. Minter, "A Novel Approach to Designing Highly Efficient and Commercially Viable Biofuel Cell," *Proceedings of the 2nd International Fuel Cell Conference*, 2, 2004, 497-501. (invited)
14. M.D. Arning, B.L. Treu, and S.D. Minter, "Citric Acid Cycle Biomimic in an Ammonium Salt Modified Nafion Membrane for Fuel Cell Applications," *Polymeric Materials: Science & Engineering*, 90, 2004, 566-569.

15. C.M. Moore, N.L. Akers, A. Hill, Z. Johnson, and S.D. Minter, "Immobilizing Oxidoreductase Enzymes in Surfactant and Symmetrical Ammonium Treated Nafion," *Polymer Preprints*, 45(1), 2004, 15-16.
16. D.A. Capretto and S.D. Minter, "Improving Efficiency in Chlor-Alkali Systems Using Encapsulated High Field Magnetic Materials in Composite Modified Anodes," *Polymer Preprints*, 45(1), 2004, 13-14.
17. C.M. Moore, S. Hackman, T. Brennan, and S.D. Minter, "Effects of Surfactants on the Ability to Immobilize Enzymes in Nafion Membranes and the Transport Properties of Redox Species through Nafion Membranes," *Journal of Membrane Science*, 255, 2005, 233-238.
18. C.M. Moore, S.D. Minter, and R.S. Martin, "Microchip-based Ethanol/Oxygen Biofuel Cell," *Lab-on-a-Chip*, 5, 2005, 218-225.
19. M.D. Arning and S.D. Minter, "Electrode Potentials," invited chapter in *Handbook of Electrochemistry*, Elsevier: Amsterdam, 2007, 813-827.
20. S. Topcagic, B.L. Treu, and S.D. Minter, "Characterization/Optimization of Oxygen Biocathodes for Membraneless Biofuel Cells," *Proceedings of the Electrochemical Society*, 18, 2004, 230-242.
21. J.L. Smith, P.B. Patel, S.D. Minter, J. R. Lipsitz, and J.S. Fisher, "Possibility of autocrine beta-adrenergic signaling in C2C12 myotubes," *Experimental Biology and Medicine*, 230, 2005, 845-852.
22. Z. He, S. Minter, and L.T. Angenent, "Electricity Generation from Artificial Wastewater Using an Upflow Microbial Fuel Cell," *Environmental Science and Technology*, 39, 2005, 5262-5267.
23. S. Topcagic and S.D. Minter, "Development of a Membraneless Ethanol/Oxygen Biofuel Cell," *Electrochimica Acta*, 51, 2006, 2168-2172 (invited).
24. B.L. Treu and S.D. Minter, "Improving the Lifetime, Simplicity, and Power of an Ethanol Biofuel Cell by Employing Ammonium Treated Nafion Membranes to Immobilize PQQ-dependent Alcohol Dehydrogenase," *Polymeric Materials: Science & Engineering*, 92, 2005, 192-193.
25. Y.V. Ulyanova and S.D. Minter, "Molecularly Imprinted Poly(Methylene Green) Electrodes for the Determination of Theophylline," *Polymeric Materials: Science & Engineering*, 92, 2005, 48-49.
26. S. Topcagic, B.L. Treu, and S.D. Minter, "Characterization of Oxygen Biocathodes Employing Tetrabutylammonium Bromide Treated Nafion Immobilization Membranes," *Polymeric Materials: Science & Engineering*, 92, 2005, 201-203.
27. Y.A. Ansari and S.D. Minter, "Development of Fructose Biofuel Cell," *Polymer Preprints*, 46, 2005, 625-626.
28. J. Kerr and S.D. Minter, "Development of Enzyme Immobilization Polymers for a Soybean Oil Powered Fuel Cell," *Polymer Preprints*, 46, 2005, 623-624.
29. S. Minter, "Nanomaterials in Fuel Cells," *Sigma-Aldrich ChemFiles*, 5(3), 2005, 8.
30. Y.V. Ulyanova, A.E. Blackwell, and S.D. Minter, "Poly(methylene green) Employed as a Molecularly Imprinted Polymer Matrix for Electrochemical Sensing," *The Analyst*, 131, 2006, 257-261. (invited)
31. A. Kinsella, R.S. Martin, and S.D. Minter, "Microfluidic Ethanol Biofuel Cell," *Proceedings of the American Chemical Society Fuel Cell Division*, 50(2), 2005, 622.
32. S. D. Minter and C.M. Moore, "Microfluidic Ethanol Biobatteries on a Microchip," *Microfluidic Techniques*, Humana Press, 2006, 157-766.
33. S.D. Minter, "Alcohol and Carbohydrate-based Biofuel Cells," *Proceedings of the International Bioenergy Conference, ERL/ITRI*, 2006, 193-201.
34. Z. He, N. Wagner, S.D. Minter, and L.T. Angenent, "The Upflow Microbial Fuel Cell with an Interior Cathode: Assessment of the Internal Resistance by Impedance

- Spectroscopy," *Environmental Science and Technology*, 2006, 40, 5212-5217.
(invited)
35. A. Kinsella, R.S. Martin, and S.D. Minter, "Towards the Development of a Microchip-Based Biofuel Cell," *Polymer Preprints*, 47, 2006, 605-606.
 36. T. Zawodzinski, S. Minter, and G. Brissard, "Physical and Analytical Electrochemistry: The Fundamental Core of Electrochemistry," *Electrochemical Society Interface*, 15, 2006, 62-65.
 37. R.L. Arechederra and S.D. Minter, "Increasing the Effective Surface Area of Bioelectrodes with Carbon Black/Nafion Composites," *Polymeric Materials: Science & Engineering*, 94, 2006, 558-559.
 38. M.C. Beilke and S.D. Minter, "Immobilization of Glycolysis Enzymes in Hydrophobically Modified Nafion," *Polymeric Materials: Science & Engineering*, 94, 2006, 556-557.
 39. M.M. Watt and S.D. Minter, "Effects of Hydrophobic Modification of Nafion on Enzyme Immobilization," *Polymeric Materials: Science & Engineering*, 94, 2006, 601-602.
 40. T. L. Klotzbach and S.D. Minter, "Effects of Hydrophobic Modification of Chitosan on Transport Properties, Ion Exchange Capacities, and Enzyme Immobilization," *Polymeric Materials: Science & Engineering*, 94, 2006, 599-600.
 41. J. Kerr and S.D. Minter, "Development of Lipxygenase Bioanodes for Biofuel Cells," *Polymeric Materials: Science & Engineering*, 94, 2006, 594-595.
 42. Y.A. Ansari and S.D. Minter, "Development of Carbohydrate Bioanodes," *Polymeric Materials: Science & Engineering*, 94, 2006, 375-376.
 43. R. Duma and S.D. Minter, "Development of Bilirubin Oxidase Cathodes for Ethanol/Oxygen Biofuel Cells," *Polymeric Materials: Science & Engineering*, 94, 2006, 592-593.
 44. T.L. Klotzbach, M.M. Watt, Y.A. Ansari, and S. D. Minter, "Effect of Hydrophobic Modification of Chitosan and Nafion on Transport Properties, Ion Exchange Capacities, and Enzyme Immobilization," *Journal of Membrane Science*, 282, 2006, 276-283.
 45. J. Kerr and S.D. Minter, "Soybean oil biofuel cells," *Biomolecular Catalysis*, 2008, 986, 334-353.
 46. A. Kinsella and S.D. Minter, "Microchip Devices for Bioanalysis" in *Molecular Biomethods*, 2nd edition, Humana Press, 2008, 851-859.
 47. S.W. Buckner, M.J. Fischer, P.A. Jelliss, R. Luo, S.D. Minter, N.P. Rath, and A. Siemiarzuk, "Dual Fluorescence from an Isonido Re(III) Rhenacarborane Phosphine Complex, [7,10- μ -H-7-CO-7,7-(PPh₃)₂-isonide-7,8,9-ReC₂B₇H₉], *Inorganic Chemistry*, 2006, 45, 7339-7347.
 48. E.A. Duplessis, P.A. Jelliss, C.C. Kirkpatrick, S.D. Minter, and K.M. Wampler, "Electrocatalytic reductive dimerization of the 2,2'-bipyridyl tungsten alkylidyne complex [W($\equiv$ CC₆H₄NMe₂⁻⁴)(NCMe)(CO)₂{K²-2,2'-(NC₅H₄)₂}]⁺," *Journal of Organometallic Chemistry*, 2006, 691, 4660-4666.
 49. S.D. Minter, "Developing High Power Density and Long Lasting Enzymatic Biofuel Cells," *Small Fuel Cells*, 2006, 7, 403-418. (invited)
 50. P.B. Patil, S.D. Minter, A.A. Mielke, L.R. Lewis, C.A. Casmaer, E.J. Barrientos, J.S. Ju, J.L. Smith, and J.S. Fisher, "Malonyl coenzyme A affects insulin-stimulated glucose transport in myotubes," *Archives of Physiology and Biochemistry*, 2007, 113, 13-24.
 51. V.H. Grassian, G. Meyer, H. Abruna, L.E. Achenie, T. Allison, B. Brunschwig, G.W. Coates, J. Ferry, M. Garcia-Garibay, J. Gardea-Torresdey, C.P. Grey, J. Hutchinson, C.J. Li, C. Liotta, S. Minter, K. Mueller, A. Ragauskas, J. Roberts, O. Sadik, R.

- Schmehl, W. Schneider, A. Selloni, P. Stair, J. Stewart, D. Thorn, J. Tyson, B. Voelker, J.M. White, and F. Wood-Black, "Chemistry for a Sustainable Future," *Environmental Science and Technology*, 2007, 41, 4840-4846.
52. S. Sankaran, R.L. Arechederra, and S.D. Minteer, "Formation of Micellar Structure in Alginate," *Polymeric Materials: Science and Engineering*, 2007, 96, 523-524.
 53. R. Duma and S.D. Minteer, "Chitosan Modified Electrodes for Ethanol/Oxygen Biofuel Cells," *Polymeric Materials: Science and Engineering*, 2007, 96, 617-618.
 54. R.L. Arechederra and S.D. Minteer, "Using Glycerol as Fuel in Biofuel Cells," *Fuel Chemistry Preprints* 2007, 52, 176-176.
 55. A.E. Blackwell and S.D. Minteer, "Dye Polymers as a Drug Release System and An Electrocatalyst for NADH Oxidation," *Polymer Preprints* 2007, 48, 972-973.
 56. T.L. Klotzbach and S.D. Minteer, "Towards the Development of an Azure C Mediated Chitosan Membrane Based Bioanode," *Polymer Preprints* 2007, 48, 1008-1009.
 57. R. Duma and S.D. Minteer, "Bilirubin Oxidase Biocathodes for Ethanol Biofuel Cells," *ECS Transactions* 2007, 5, 117-127.
 58. R. Arechederra and S.D. Minteer, "Nanomaterials for Biofuel Cells," in *Nanomaterials for Energy Storage Applications*, 2009, pages 287-299.
 59. S.D. Minteer, B.Y. Liaw, and M.J. Cooney, "Enzyme-based biofuel cells," *Current Opinions in Biotechnology*, 2007, 18, 228-234.
 60. M.J. Cooney, M. Windmeisser, B.Y. Liaw, C. Lau, T. Klotzbach, and S.D. Minteer, "Design of Chitosan Gel Pore Structure: Towards Enzyme Catalyzed Flow-Through Electrodes," *Journal of Materials Chemistry*, 2008, 18, 667-674.
 61. F. Dogan, D.J. Vidt, M. Mormile, and S.D. Minteer, "Biofuel Cells," *Encyclopedia of Chemical Processing*, 2009, 1:1, 1-7.
 62. P. Atanassov, C. Apblett, S. Banta, S. Brozik, S. Calabrese Barton, M. Cooney, B.Y. Liaw, S. Mukerjee, and S.D. Minteer, "Enzymatic Biofuel Cells," *Electrochemical Society Interface*, 16, 2007, 28-31.
 63. R. Arechederra, B.L. Treu, and S.D. Minteer, "Development of Glycerol/Oxygen Biofuel Cells," *Journal of Power Sources*, 173, 2007, 156-161.
 64. J.T. Steitz, J.R. Worsham, J.E. Anewalt, and S.D. Minteer, "Enzyme-based Biofuel Cells," *Encyclopedia of Energy*, in press.
 65. S.D. Minteer, "Three-Dimensional Electrodes," in *Encyclopedia of Micro- and Nano-fluidics*, Springer: New York, 2008, 2079-2083.
 66. T.L. Klotzbach, M. Watt, Y. Ansari, and S.D. Minteer, "Improving the microenvironment for enzyme immobilization at electrodes by hydrophobically modifying chitosan and Nafion polymers," *Journal of Membrane Science*, 2008, 311, 81-88.
 67. V. Svoboda, M. Cooney, B.Y. Liaw, S. Minteer, E. Piles, D. Lehnert, S.C. Barton, R. Rincon, and P. Atanassov, "Standardized characterization of biocatalytic electrodes," *Electroanalysis*, 2008, 20, 1099-1109.
 68. R. Arechederra and S.D. Minteer, "Organelle-Based Biofuel Cells: Immobilized Mitochondria at Carbon Paper Electrodes," *Electrochimica Acta*, 2008, 53, 6698-6703.
 69. B.L. Treu, R. Arechederra, and S.D. Minteer, "Bioelectrocatalysis of Ethanol via PQQ-Dependent Dehydrogenases Utilizing Carbon Nanomaterial Supports," *Journal of Nanoscience and Nanotechnology*, 2009, 9, 2374-2380.
 70. M. Moehlenbrock and S.D. Minteer, "Extended Lifetime Biofuel Cells," *Chemical Society Reviews*, 2008, 37, 1188-1196.
 71. P.A. Jelliss, S.D. Minteer, M. Patel, A. Siemiarczuk, M. Watt, and R.E.K. Winter, "Unique properties of a perfluoroalkyl-modified 2,2'-bipyridyl ruthenium complex in

- a Nafion membrane: attenuated leaching of a potential biofuel cell redox mediator,” *Journal of Materials Chemistry*, 2008, 18, 2104-2111.
72. D. Sokic-Lazic and S.D. Minteer, “Polymer-based Krebs’s Cycle Biomimic,” *Polymer Materials: Science & Engineering*, 2008, 98, 847-848.
 73. M. N. Germain, R.L. Arechederra, and S.D. Minteer, “Drug Delivery System Utilizing Molecularly Imprinted Electropolymers,” *Polymer Materials: Science & Engineering*, 2008, 98, 806-807.
 74. J.R. Worsham, A.E. Blackwell, and S.D. Minteer, “Conducting Dye Polymers as an Electrocatalyst for NADH Oxidation for Biosensors,” *Polymer Preprints*, 2008, 49, 1111-1112.
 75. C.E. Menius, M.C. Beilke, and S.D. Minteer, “Immobilization of Glycolysis Enzymes in Modified Chitosan,” *Polymer Materials: Science & Engineering*, 2008, 98, 528-529.
 76. Z. Zulic and S.D. Minteer, “Induction of PQQ-dependent Alcohol Dehydrogenase in *Gluconobacter Suboxydans* for Use as Bioelectrocatalysts,” *Proceedings of the ACS Fuel Division*, 2008, 53, 546-548.
 77. R. Arechederra and S.D. Minteer, “Development of a High Power Density Glycerol Bioanode Capable of Complete Oxidation via a 3 Enzyme Cascade,” *Proceedings of the ACS Fuel Division*, 2008, 53, 2-3.
 78. A.E. Blackwell, M.J. Moehlenbrock, J.R. Worsham, and S.D. Minteer, “Comparison of Electropolymerized Thiazine Dyes as an Electrocatalyst in Enzymatic Biofuel Cells and Self Powered Sensors,” *Journal of Nanoscience and Nanotechnology*, 2009, 9, 1719-1726.
 79. R. Arechederra and S.D. Minteer, “Complete Oxidation of Glycerol in an Enzymatic Biofuel Cell,” *Fuel Cells*, 2009, 9(1), 63-69.
 80. B.L. Treu and S.D. Minteer, “Isolation and Purification of PQQ-dependent Lactate Dehydrogenase from *Gluconobacter* and Use for Direct Electron Transfer at Carbon and Gold Electrodes,” *Bioelectrochemistry*, 2008, 74, 71-77.
 81. M.J. Cooney, G. Martin, C. Lau, V. Svoboda, and S.D. Minteer, “Enzyme catalyzed biofuel cells,” *Energy and Environmental Science*, 2008, 1, 320-337.
 82. D. Sokic-Lazic and S.D. Minteer, “Citric acid cycle biomimic on a carbon electrode,” *Biosensors and Bioelectronics*, 2008, 24, 945-950.
 83. M.J. Cooney, J. Petermann, C. Lau, S.D. Minteer, “Characterization and Evaluation of Hydrophobically Modified Chitosan Scaffolds: towards design of enzyme immobilized flow-through electrodes,” *Carbohydrate Polymers*, 2009, 75, 428-435.
 84. C. Spahn and S.D. Minteer, “Enzyme Immobilization in Biotechnology,” *Recent Patents on Engineering*, 2008, 2, 195-200.
 85. G. Martin, S. Minteer, and M.J. Cooney, “Spatial distribution of malate dehydrogenase in amphiphilic chitosan scaffolds,” *ACS Applied Materials and Interfaces*, 2009, 1(2) 367-372.
 86. A.K. Sarma, P. Goswami and S.D. Minteer, “Recent Advances in Materials Science for Developing Enzyme Electrodes,” *Biosensors and Bioelectronics*, 2009, 24, 2313-2322.
 87. M. Germain, R. Arechederra, and S.D. Minteer, “Nitroaromatic Actuation of Mitochondrial Bioelectrocatalysis for Self Powered Explosive Sensors,” *Journal of the American Chemical Society*, 2008, 130(46), 15272-15273.
 88. C. Hettige, S.D. Minteer, and S. Calabrese Barton, “Simulation of Multi-Step Enzyme Electrodes,” *ECS Transactions*, 2008, 13/21, 99-109.
 89. K. Sjöholm, M.J. Cooney, and S.D. Minteer, “Effects of Degree of Deacetylation on Enzyme Immobilization in Hydrophobically Modified Chitosan,” *Carbohydrate Polymers*, 2009, 77, 420-424.

90. G. Martin, S.D. Minter, and M.J. Cooney, "Fluorescence characterization of chemical microenvironments in hydrophobically modified chitosan," *Carbohydrate Polymers*, 2009, 77, 695-702.
91. K.M. Boehm, R.L. Arechederra, and S.D. Minter, "Use of Modified Nafion Membranes to Immobilize Whole and Lysed Mitochondria," *Polymeric Materials: Science & Engineering*, 2009, 100, 545-546.
92. M.N. Germain and S.D. Minter, "Structure Determination of Poly(methylene green)," *Polymeric Materials: Science & Engineering*, 2009, 100, 636-638.
93. C.E. Menius, R.L. Arechederra, and S.D. Minter, "Microscopic Characterization of Micellar Structures in Modified Nafion Films," *Polymer Materials: Science & Engineering*, 2009, 100, 625-626.
94. S. Besic and S.D. Minter, "Heat Press Modified Nafion Membrane for Enzyme Immobilization and Stabilization in Air-Breathable Biocathodes," *Polymeric Materials: Science & Engineering*, 2009, 100, 561-562.
95. Z. Zulic and S.D. Minter, "Optimization of PQQ-dependent Alcohol Dehydrogenase Activity in *Gluconobacter* sp. 33 for Use in Biofuel Cells," *Proceedings of the Fuel Chemistry Division*, 2009, 54, 186-187.
96. P.K. Addo and S.D. Minter, "Methanol Biofuel Cell Based on NAD-dependent Enzymes Immobilized at Electrodes by Hydrophobically Modified Nafion Polymer," *Proceedings of the Fuel Chemistry Division*, 2009, 54, 184-185.
97. C.E. Menius and S.D. Minter, "Immobilization of the First Five Glycolysis Enzymes for Biofuel Cell Applications," *Proceedings of the Fuel Chemistry Division*, 2009, 54, 182-183.
98. S. Besic and S.D. Minter, "Enzymatic Bioreactor for Butanol Production," *Proceedings of the Fuel Chemistry Division*, 2009, 54, 178-179.
99. R.L. Arechederra and S.D. Minter, "Development of Low Temperature Glycerol and Ethylene Glycol Fuel Cells Capable of High Energy Density and Complete Oxidation," *Proceedings of the Fuel Chemistry Division*, 2009, 54, 52-53.
100. J. Wildrick, P.A. Jelliss, and S.D. Minter, "Development of a one-pot hydrophobic modification of chitosan towards the development of a ferrocene-mediated laccase biocathode," *Polymer Preprints*, 2009, 50, 130-131.
101. D. Sokic-Lazic and S.D. Minter, "Pyruvate/air enzymatic biofuel cell capable of complete oxidation," *Electrochemical and Solid-State Letters*, 2009, 12(9), F26-F28.
102. M.C. Beilke, T.L. Klotzbach, B.L. Treu, D. Sokic-Lazic, J. Wildrick, E.R. Amend, L.M. Gebhart, R.L. Arechederra, M.N. Germain, M.J. Moehlenbrock, Sudhanshu, and S.D. Minter, "Enzymatic Biofuel Cells," in *Micro-Fuel Cells: Principles and Applications*, Elsevier, 2009, 179-241.
103. R. Arechederra, K. Boehm, and S.D. Minter, "Mitochondrial Bioelectrocatalysis for Biofuel Cell Applications," *Electrochimica Acta*, 2009, 54, 7268-7273.
104. S. Minter, "Biofuel Cells: Enzyme Catalysis of Oils," *Encyclopedia of Industrial Biotechnology*, 2010, 1, 637-641.
105. M. J. Moehlenbrock, R. L. Arechederra, K. H. Sjolholm, and S.D. Minter, "Analytical Techniques for Characterizing Enzymatic Biofuel Cells," *Analytical Chemistry*, 2009, 81(23), 9538-9545.
106. K. H. Sjolholm, M.J. Cooney, and S.D. Minter, "Biocompatible Micellar Environment for Enzyme Encapsulation for Bioelectrocatalysis Applications," *ECS Transactions*, 2009, 19(21), 1-7.
107. R. Arechederra and S.D. Minter, "Kinetics and transport analysis of immobilized oxidoreductases that oxidize glycerol and its oxidation products," *Electrochimica Acta*, 2010, 55, 7679-7682.

108. Z. Zulic and S.D. Minter, "Enzymatic Fuel Cells and Their Complementarities Relative to BES/MFC" in *Bioelectrochemical Systems*, IWA Publishing: London, 2009, 39-58.
109. P. Addo, R. Arechederra, and S. D. Minter, "Evaluating Enzyme Cascades for Methanol/Air Biofuel Cells Based on NAD-dependent Enzymes," *Electroanalysis*, 2010, 22(7-8), 807-812.
110. R. Rincoln, M. Germain, K. Artyushkova, M. Mojica, M. Germaine, P. Atanassov, and S.D. Minter, "Structure and Electrochemical Properties of Electrocatalysts for NADH Oxidation," *Electroanalysis*, 2010, 22(7-8), 799-806.
111. G. Martin, S.D. Minter, and M.J. Cooney, "Fluorescence analysis of chemical microenvironments and their correlation to performance of immobilized enzyme," *Analyst*, 2010, 135, 1131-1137.
112. W. Gellett, M. Kesmez, J. Schumacher, N. Akers, and S.D. Minter, "Biofuel Cells for Portable Power," *Electroanalysis*, 2010, 22(7-8), 727-731.
113. D. Sokic-Lazic, R.L. Arechederra, B.L. Treu, and S.D. Minter, "Oxidation of Biofuels: Fuel Diversity and Effectiveness of Fuel Oxidation through Multiple Enzyme Cascades," *Electroanalysis*, 2010, 22(7-8), 757-764.
114. C. Lau, G. Martin, S.D. Minter, and M.J. Cooney, "Development of a Chitosan Scaffold Electrode for Fuel Cell Applications," *Electroanalysis*, 2010, 22(7-8), 793-798.
115. W. Gellett, J. Schumacher, M. Kesmez, D. Le, and S.D. Minter, "High Current Density Air-Breathing Laccase Biocathode," *Journal of the Electrochemical Society*, 2010, 157(4), B557-B562.
116. C. Jenkins, M. Germain, R. Rincoln, K. Artyushkova, P. Atanassov, and S. Minter, "Chemical Synthesis of Poly(methylene blue) and Poly(methylene green) for NADH Electrocatalysis Applications," *Polymer Preprints*, 2010, 51(1), 809-810.
117. D.J. Wetzel, M.E. Moll, C.N. Fischer, M.N. Germain, and S.D. Minter, "Nitroaromatic Uncoupling of Mitochondrial Bioelectrocatalysis in Modified Nafion Membranes," *Polymer Preprints*, 2010, 51(1), 817-818.
118. B.L. Treu, D. Sokic-Lazic, and S.D. Minter, "Bioelectrocatalysis of Pyruvate with PQQ-dependent Pyruvate Dehydrogenase," *ECS Transactions*, 2010, 25 (28), 1-11.
119. S. Xu and S.D. Minter, "Design and Optimization of Sugar Powered Biofuel Cells Based on PQQ-dependent Enzymes," *Proceedings of the Fuel Division*, 2010, 55(1), 640-641.
120. S. Besic and S.D. Minter, "Clostridium Acetobutylicum NADH-dependent Butanol Dehydrogenase for Use in Butanol Bioproduction," *Proceedings of the Fuel Division*, 2010, 55(1), 634-635.
121. Z. Caban, S. Minter, A. Demchenko, A. Ramakrishnan, "Towards the Development of a Laccase Airbreathing Bioelectrode with Anthracene Modified Chitosan," *Proceedings of the Fuel Division*, 2010, 55(1), 620-621.
122. M.J. Moehlenbrock, T.K. Toby, A. Waheed, and S.D. Minter, "Metabolon Catalyzed Pyruvate/Air Biofuel Cell," *Journal of the American Chemical Society*, 2010, 132(18), 6288-6289.
123. M. Arechederra, C. Jenkins, R. Rincon, K. Artyushkova, P. Atanassov, and S.D. Minter, "Chemical Polymerization and Electrochemical Characterization of Thiazine for NADH Electrocatalysis Applications," *Electrochimica Acta*, 2010, 55, 6659-6664.
124. P. Addo, R. Arechederra, and S.D. Minter, "Towards a Rechargeable Alcohol Biobattery," *Journal of Power Sources*, 2011, 196, 3448-3451.

125. M. Arechederra, D. Wetzel, C. Fischer, and S.D. Minter, "Evaluation of the Electron Transport Chain Inhibition and Uncoupling of Mitochondria Bioelectrocatalysis with Antibiotics and Nitro-Based Compounds," *Electrochimica Acta*, 2010, 56, 938-944.
126. S. Higgins, S.D. Minter, and M.J. Cooney, "Characterization of Flow-Through Microbial Fuel Cells," *Proceedings of the ACS Fuel Division*, 2010, 55(2), 298-299.
127. S. Xu and S.D. Minter, "Developing a complete oxidation direct electron transfer glucose biofuel cell," *Proceedings of the ACS Fuel Division*, 2010, 55(2), 346-347.
128. R.L. Arechederra and S.D. Minter, "Fuel cells that use mitochondria as energy conversion matrices to generate electricity from biofuels," *Proceedings of the ACS Fuel Division*, 2010, 55(2), 348-349.
129. R.L. Arechederra, K. Artyushkova, P. Atanassov, and S.D. Minter, "Growth of Phthalocyanine Doped and Undoped Nanotubes Using Mild Synthesis Conditions for Development of Oxygen Reduction Catalysts," *ACS Applied Materials & Interfaces*, 2010, 2(11), 3295-3302.
130. C. Fischer, S. Xu, R. Arechederra, and S.D. Minter, "Mitochondrial Biofuel Cells: Expanding Fuel Diversity to Amino Acids," *Physical Chemistry Chemical Physics*, 2011, 13, 86-92.
131. M. Arechederra, P. Addo, and S.D. Minter, "Poly(Neutral Red) as a NAD Reduction Catalyst and a NADH Oxidation Catalyst: Towards Development of a Rechargeable Biobattery," *Electrochimica Acta*, 2011, 56, 1585-1590.
132. G. Martin, S.D. Minter, and M. Cooney, "Fluorescence characterization of immobilization induced enzyme aggregation," *Chemical Communications*, 2011, 47, 2083-2085.
133. M. Moehlenbrock, T. Toby, L. Pelster, and S.D. Minter, "Metabolon catalysts: an efficient model for multi-enzyme cascades at electrode surfaces," *ChemCatChem*, 2011, 3(3), 561-570.
134. P. Addo, R. Arechederra, Abdul Waheed, William Sly, James Shoemaker, and S.D. Minter, "Methanol Production via Bioelectrocatalytic Reduction of Carbon Dioxide: Role of Carbonic Anhydrase in Improving Electrode Performance," *Electrochemical and Solid State Letters*, 2011, 14(4), E9-E13.
135. D. Sokic-Lazic, A. de Andrade, and S.D. Minter, "Utilization of Enzyme Cascades for Complete Oxidation of Lactate in an Enzymatic Biofuel Cell," *Electrochimica Acta*, 2011, 56, 10772-10775.
136. Z. Zulic and S.D. Minter, "Induced evolution of PQQ-dependent alcohol dehydrogenase activity in *Gluconobacter* sp.33 for use in enzymatic biofuel cells," *Journal of Biobased Materials and Bioenergy*, 2011, 5(1), 63-69.
137. R. Arechederra and S.D. Minter, "Self-Powered Sensors," *Analytical and Bioanalytical Chemistry*, 2011, 400(6), 1605-1611.
138. P. Kar, S.D. Minter, and S. Calabrese-Barton, "Simulation of Multi-step Enzyme-catalyzed Methanol Oxidation in Biofuel Cells," *Journal of the Electrochemical Society*, 2011, 158, B580-B586.
139. S. Higgins, C. Lau, O. Bretschger, K. Nealson, S.D. Minter, P. Atanassov, and M. Cooney, "Fabrication of Macroporous Chitosan Scaffolds Doped with Carbon Nanotubes and Their Characterization in Microbial Fuel Cell Operation," *Enzyme and Microbial Technology*, 2011, 48, 458-465.
140. Z. Zhu, Y. Wang, S. Minter, and Y.H.P. Zhang, "Maltodextrin-powered enzymatic fuel cell through a non-natural enzymatic pathway," *Journal of Power Sources*, 2011, 196, 7505-7509.

141. M. Meredith and S.D. Minter, "Inhibition and Activation of Glucose Oxidase Bioanodes for Use in a Self-Powered EDTA Sensor," *Analytical Chemistry*, 2011, 93(13),5436-5441.
142. R. Arechederra, A. Waheed, and S.D. Minter, "Electrically Wired Mitochondrial Electrodes for Measuring Mitochondrial Function for Drug Screening," *Analyst*, 2011, 136, 3747-3752.
143. S. Higgins, C. Lau, S.D. Minter, P. Atanassov, and M. Cooney, "Standardized Characterization of a Flow Through Microbial Fuel Cell", *Electroanalysis*, 2011, 23(9), 2174-2181.
144. S. Higgins, C. Lau, S.D. Minter, P. Atanassov, and M. Cooney, "Hybrid Biofuel Cell: Microbial Fuel Cell with an Enzymatic Air-Breathing Cathode", *ACS Catalysis*, 2011, 1(9), 994-997.
145. K. Sjöholm and S.D. Minter, "Development of conductive mesoporous structures from chitosan," *ECS Transactions*, 2011, 35(26), 45-51.
146. M. Moehlenbrock, M. Meredith, and S.D. Minter, "Bi-functional Polyamines for the Aqueous Dispersion of Carbon Nanotubes and Formation of CNT-Impregnated Hydrogel Composites," *MRS Communications*, 2011, 1(1), 37-40.
147. M. Zhang, S. Xu, S.D. Minter, and D. Baum, "Investigation of a deoxyribozyme as a biofuel cell catalyst," *Journal of the American Chemical Society*, 2011, 133, 15890-15893.
148. S. Meredith, M. Meredith, and S.D. Minter, "Hydrophobic Salt Modified Nafion for Enzyme Immobilization and Stabilization," *Journal of Visualized Experiments*, 2012, 65, e3949.
149. M. Meredith, M. Minson, D. Hickey, K. Artyushkova, D. Glatzhofer, and S.D. Minter, "Anthracene-Modified Multi-Walled Carbon Nanotubes as Direct Electron Transfer Scaffolds for Enzymatic Oxygen Reduction," *ACS Catalysis*, 2011,1(12), 1683-1690.
150. M. Moehlenbrock, M. Meredith, S.D. Minter, "Bioelectrocatalytic oxidation of glucose in CNT impregnated hydrogels: Advantages of synthetic enzymatic metabolon formation," *ACS Catalysis*, 2012, 2, 17-25.
151. L. Pelster and S.D. Minter, "Ubiquinol-Cytochrome c Reductase (Complex III) Electrochemistry at Multi-Walled Carbon Nanotube/Nafion Modified Glassy Carbon Electrodes," *Electrochimica Acta*, 2012, 82, 214-217.
152. E. Campbell, M. Meredith, S.D. Minter, and S. Banta, "An enzymatic biofuel cell utilizing a biomimetic cofactor," *ChemComm*, 2012, 48, 1898-1900.
153. S. Xu and S.D. Minter, "Enzymatic Biofuel Cell for Oxidation of Glucose to CO₂," *ACS Catalysis*, 2012,2, 91-94.
154. S. Tuurala, C. Lau, P. Atanassov, M. Smolander, and S.D. Minter, "Characterization and Stability Study of Immobilized PQQ-Dependent Aldose Dehydrogenase Bioanodes," *Electroanalysis*, 2012, 24, 229-238.
155. L. Pelster, M. Meredith, and S.D. Minter, "Nicotinamide Adenine Dinucleotide Oxidation Studies at Multiwalled Carbon Nanotube/Polymer Composite Modified Glassy Carbon Electrodes," *Electroanalysis*, 2012, 24, 1011-1018.
156. S. Maltzman and S.D. Minter, "Mitochondria-based Voltammetric Sensor for Pesticides," *Analytical Methods*, 2012, 4, 1202-1206.
157. M. Meredith and S.D. Minter, "Biofuel Cells: Enhanced Enzymatic Bioelectrocatalysis," *Annual Reviews in Analytical Chemistry*, 2012, 5, 157-179.
158. S. Sattayasamitsathit, A.M. O'Mahony, X. Xiao, S.M. Brozik, C.M. Washburn, D.R. Wheeler, W. Gao, S.D. Minter, J. Cha, D.B. Burckel, R. Polsky, and J. Wang, "Highly Ordered Tailored Three-Dimensional Hierarchical Nano/Microporous Gold/Carbon Architectures," *Journal of Materials Chemistry*, 2012, 22, 11950-11956.

159. S.D. Minter, P. Atanassov, H.R. Luckarift, and G.R. Johnson, "New Materials for Biological Fuel Cells," *Materials Today*, 2012, 15, 166-173.
160. M. Meredith, F. Giroud, and S.D. Minter, "Azine/hydrogel/nanotube composite-modified electrodes for NADH catalysis and enzyme immobilization," *Electrochimica Acta*, 2012, 72, 207-214.
161. R. Arechederra, A. Waheed, W. Sly, C. Supuran, and S.D. Minter, "Effect of Sulfonamides as Carbonic Anhydrase VA and VB Inhibitors on Mitochondrial Metabolic Energy Conversion," *Bioorganic & Medicinal Chemistry*, 2013, 21, 1544-1548.
162. M. Rasmussen, K. Sjöholm, and S.D. Minter, "Bio-solar Cells Incorporating Catalase for Stabilization of Thylakoid Bioelectrodes During Direct Photoelectrocatalysis," *ECS Electrochemistry Letters*, 2012, 1, G7-G9.
163. M. A. Arugula, K.S. Brastad, S.D. Minter, and Z. He, "Enzyme Catalyzed Electricity-Driver Water Softening System," *Enzyme and Microbial Technology*, 2012, 51, 396-401.
164. S. Aquino Neto, E. Suda, S. Xu, M. Meredith, A. de Andrade, and S.D. Minter, "Direct electron transfer-based bioanodes for ethanol biofuel cells using PQQ-dependent alcohol and aldehyde dehydrogenase," *Electrochimica Acta*, 2013, 87, 323-329.
165. G.G.W. Lee, J. Leddy, and S.D. Minter, "Enhancing Alcohol Electrocatalysis with the Introduction of Magnetic Composites to Nickel Electrocatalysts," *Chem Communications*, 2012, 48, 11972-11974.
166. D. Chen, G.G.W. Lee, and S.D. Minter, "Utilizing DNA for Electrocatalysis: DNA-Nickel Aggregates as Anodic Electrocatalysts for Methanol, Ethanol, Glycerol, and Glucose," *ECS Electrochemistry Letters*, 2013, 2(2), F9-F13.
167. S. Sattayasamitsathit, Y. Gu, K. Kaufmann, W. Jia, X. Xiao, S. Minter, J. Cha, D. B. Burckel, C. Wang, R. Polsky, J. Wang, "Highly-Ordered Multilayered 3D Graphene Decorated with Metal Nanoparticles," *Journal of Materials Chemistry A*, 2013, 1, 1639-1645.
168. Y.H. Kim, E. Campbell, J. Yu, S.D. Minter, and S. Banta, "Complete Oxidation of Methanol in Biobattery Devices Using a Hydrogel Created from Three Modified Dehydrogenases," *Angewandte Chemie*, 2013, 52, 1437-1440.
169. S.D. Minter, "Nanobioelectrocatalysis and Its Application in Biosensors, Biofuel Cells, and Bioprocessing," *Topics in Catalysis*, 2012, 55, 1157-1161.
170. M. Minson, M.T. Meredith, A. Shrier, F. Giroud, D. Hickey, D.T. Glatzhofer, and S.D. Minter, "High performance glucose/O₂ biofuel cell: effect of utilizing purified laccase with anthracene-modified multi-walled carbon nanotubes," *Journal of the Electrochemical Society*, 2012, 159(12), G166-G170.
171. P.A. Jelliss, S.S. Graham, A. Josipovic, S. Boyko, S.D. Minter, and V. Svoboda, "Synthesis and characterization of ferracarborane-chitosan and ferracarborane-multiwalled carbon nanotube redox mediator conjugates for bioanode applications," *Polyhedron*, 2013, 50(1), 36-44.
172. N. Hausman, M. Meredith, and S.D. Minter, "Towards the Design of an Acetone Breath Biosensors," *ECS Transactions*, 2013, 45(16), 1-17.
173. M. Rasmussen and S.D. Minter, "Self-Powered Herbicide Biosensor Utilizing Thylakoid Membranes," *Analytical Methods*, 2013, 5, 1140-1144.
174. G.G.W. Lee and S.D. Minter, "Greener Method to a Manganese Oxygen Reduction Reaction (ORR) Electrocatalyst-Anion Electrolyte Effects on Electrocatalytic Performance," *ACS Sustainable Chemistry & Engineering*, 2013, 1(3), 359-363.

175. J. Yu, M. Rasmussen, and S.D. Minteer, "Effects of Carbon Nanotube Paper Properties on Enzymatic Bioanodes," *Electroanalysis*, 2013, 25(5), 1130-1134.
176. F. Giroud, T. Nicolo, S. Koepke, and S.D. Minteer, "Understanding the Mechanism of Direct Electrochemistry of Mitochondria-Modified Electrodes from Yeast, Potato, and Bovine Sources at Carbon Paper Electrodes," *Electrochimica Acta*, 2013, 110, 111-119.
177. M. Jose Gonzalez, D. Sanchez, F. Giroud, and S. D. Minteer, "Rapid Prototyping of a Membraneless Glucose/O₂ Microfluidic Enzymatic Biofuel Cell with Pyrolyzed Photoresist Film Electrodes," *Lab-on-a-Chip*, 2013, 13, 2972-2979.
178. M. Rasmussen, A. Shrier, and S.D. Minteer, "High Performance Thylakoid Bio-Solar Cell Using Laccase Enzymatic Biocathodes," *Physical Chemistry Chemical Physics*, 2013, 15(23) 9062-9065.
179. V. Ganesan, M. Meredith, and S.D. Minteer, "Ion Exchange Voltammetry at Branched Polyethylenimine Cross-linked with Ethylene Glycol Diglycidyl Ether and Sensitive Determination of Ascorbic Acid," *Electrochimica Acta*, 2013, 105, 31-39.
180. G.G.W. Lee and S.D. Minteer, "Nickel-DNA Complexes: Bioelectrocatalysis or Not?," *Journal of the Electrochemical Society*, 2013, 160(8) H463-H468.
181. F. Giroud and S.D. Minteer, "Anthracene-Modified Pyrenes Immobilized on Carbon Nanotubes for Direct Electroreduction of O₂ by Laccase," *Electrochemistry Communications*, 2013, 34, 157-160.
182. M. Rasmussen and S.D. Minteer, "Investigating the mechanism of thylakoid direct electron transfer for photocurrent generation," *Electrochimica Acta*, 2014, 126, 68-73.
183. S. Sattayasamitsathit, Y. Gu, K. Kaufmann, S.D. Minteer, R. Polsky, and J. Wang, "Tunable Hierarchical Macro/Mesoporous Gold Microwires Fabricated by Dual-Templating and Dealloying Processes," *Nanoscale*, 2013, 5(17), 7849-7854.
184. R. Reid, F. Giroud, S.D. Minteer, and B. Gale, "Enzymatic Biofuel Cell with a Flow-Through Toray Paper Bioanode for Improved Fuel Utilization," *Journal of the Electrochemical Society*, 2013, 160(9), H612-H619.
185. F. Wu and S.D. Minteer, "Fluorescent Characterization of Co-Immobilization Induced Multi-Enzyme Aggregation in a Polymer Matrix Using Förster Resonance Energy Transfer (FRET) : Towards the Metabolon Biomimic," *Biomacromolecules*, 2013, 14(8), 2739-2749.
186. A. Walcarius, S.D. Minteer, J. Wang, Y. Lin, and A. Merkoci, "Nanomaterials for Bio-Functionalized Electrodes: Recent Trends," *Journal of Materials Chemistry B*, 2013, 1(38), 4878-4908.
187. S. Aquito-Neto, M. Meredith, S.D. Minteer, and A. de Andrade, "Employing Methylene Green Coated Carbon Nanotube Electrodes to Enhance NADH Electrocatalysis for Use in an Ethanol Biofuel Cell," *Electroanalysis*, 2013, 25(10), 2394-2402.
188. R. Milton, F. Giroud, A. Thumser, S.D. Minteer, and R. Slade, "Hydrogen peroxide produced by glucose oxidase affects the performance of laccase cathodes in glucose/oxygen fuel cells: FAD-dependent glucose dehydrogenase as a replacement," *Physical Chemistry Chemical Physics*, 2013, 15(44), 19371-19379.
189. V. Paul, B. Treu, S.D. Minteer, and M. Mormile, "Ability of Haloalkaliphilic Bacterium Isolated from Soap Lake, Washington to Generate Electricity at pH 11 and 7% Salinity," *Environmental Technology*, 2014, 35(8), 1003-1011.
190. D. Hickey, F. Giroud, D. Schmidke, D. Glatzhofer, and S.D. Minteer, "Enzyme Cascade for Catalyzing Sucrose Oxidation," *ACS Catalysis*, 2013, 3(12), 2729-2737.

191. R. Milton, F. Giroud, A. Thumser, S.D. Minter, and R. Slade, "Bilirubin oxidase bioelectrocatalytic cathodes: the impact of hydrogen peroxide," *ChemComm*, 2014, 50(1), 94-96
192. S. Xu and S.D. Minter, "Investigating the Impact of Multi-Heme Pyrroloquinoline Quinone-Aldehyde Dehydrogenase Orientation on Direct Bioelectrocatalysis via Site Specific Enzyme Immobilization," *ACS Catalysis*, 2013, 3, 1756-1763.
193. M. Rasmussen, A. Wingersky, and S.D. Minter, "Improved Performance of a Thylakoid Bio-Solar Cell by Incorporation of Carbon Quantum Dots," *ECS Electrochemistry Letters*, 2014, 3(2), H1-H3.
194. A. Shrier, F. Giroud, M. Rasmussen, and S.D. Minter, "Operational Stability Assays for Bioelectrodes for Biofuel Cells: Effect of Immobilization Matrix on Laccase Biocathode Stability," *Journal of the Electrochemical Society*, 2014, 161(4), H244-H248.
195. S. Aquino Neto, T.S. Almeida, L.M. Palma, S.D. Minter, A. de Andrade, "Hybrid Nanocatalysts Containing Enzymes and Metallic Nanoparticles for Ethanol/O₂ Biofuel Cell," *Journal of Power Sources*, 2014, 259, 25-32.
196. M. Rasmussen and S.D. Minter, "Comparative study of thylakoids from higher plants for solar energy conversion and herbicide detection," *Electrochimica Acta*, 2014, 140, 304-308.
197. R.D. Milton, F. Giroud, A.E. Thumser, S.D. Minter, and R.C.T. Slade, "Glucose oxidase progressively lowers bilirubin oxidase bioelectrocatalytic cathode performance in single-compartment glucose/oxygen biological fuel cells," *Electrochimica Acta*, 2014, 140, 59-64.
198. A. Khabibullin, S.D. Minter, and I. Zharov, "Effect of sulfonic acid group content in pore-filled silica colloidal membranes on their proton conductivity and direct methanol fuel cell performance," *Journal of Materials Chemistry A*, 2014, 2(32), 12761-12769.
199. S. Xu and S.D. Minter, "Pyrroloquinoline Quinone (PQQ)-Dependent Enzymatic Bioanode: Incorporation of Substituted Polyaniline Conducting Polymer as Mediator," *ACS Catalysis*, 2014, 4, 2241-2248.
200. D. Chen, F. Giroud, and S.D. Minter, "Nickel Cysteine Complexes as Anodic Electrocatalysts for Fuel Cells," *Journal of the Electrochemical Society*, 2014, 161, F933-F939.
201. S. Xu and S.D. Minter, "Characterizing Efficiency of Multi-Enzyme Cascade-based Biofuel Cells by Product Analysis," *ECS Electrochemistry Letters*, 2014, 3, H24-H27.
202. F. Giroud, D. Hickey, D. Schmidke, D. Glatzhofer, and S.D. Minter, "Monosaccharide-based Coin Cell Biobattery," *ChemElectroChem*, 2014, 1, 1880-1885.
203. M. Rasmussen and S.D. Minter, "Thylakoid direct photobioelectrocatalysis: utilizing stroma thylakoids to improve bio-solar cell performance," *Physical Chemistry Chemical Physics*, 2014, 16(32), 17327-17331.
204. M. Rasmussen and S.D. Minter, "Photobioelectrochemistry: solar energy conversion and biofuel production with photosynthetic catalysts," *Journal of the Electrochemical Society*, 2014, 161 (10), H647-H655.
205. N. Hausman, S.D. Minter, and D. Baum, "Controlled Placement of Enzymes on Carbon Nanotubes using Comb-Branched DNA," *Journal of the Electrochemical Society*, 2014, 161(13), H3001-H3004.

206. R. Milton and S.D. Minteer, "Investigating the Reversible Inhibition Model of Laccase by Hydrogen Peroxide for Bioelectrocatalytic Applications," *Journal of the Electrochemical Society*, 2014, 161(13), H3011-H3014.
207. S. Aquito de Neto, T.S. Almeida, D. Belnap, S.D. Minteer, and A. de Andrade, "Enhanced NADH Electrocatalysis onto MWCNTs-decorated Gold Nanoparticles and their Use in Hybrid Biofuel Cell," *Journal of Power Sources*, 2015, 273, 1065-1072.
208. K. Nguyen, F. Giroud, and S.D. Minteer, "Improved bioelectrocatalytic oxidation of sucrose in a biofuel cell with an enzyme cascade assembled on a DNA scaffold," *Journal of the Electrochemical Society*, 2014, 161(14), H930-H933.
209. Y. Ulyanova, M. Arugula, M. Rasmussen, S. Singhal, and S.D. Minteer, "Bioelectrocatalytic Oxidation of Alkanes in a JP-8 Enzymatic Biofuel Cell," *ACS Catalysis*, 2014, 4, 4289-4294.
210. D. Hickey, M. McCammett, F. Giroud, M. Sigman, and S.D. Minteer, "Hybrid Enzymatic and Organic Electrocatalytic Cascade for the Complete Oxidation of Glycerol," *Journal of the American Chemical Society*, 2014, 136(45), 15917-15920.
211. F. Wu and S.D. Minteer, "Krebs Cycle Metabolon: Structural Evidence of Substrate Channeling," *Angewandte Chemie*, 2015, 54(6), 1851-1854.
212. F. Wu, L. Pelster, and S.D. Minteer, "Krebs Cycle Metabolon Formation: Metabolite Concentration Gradient Enhanced Compartmentation of Sequential Enzymes," *Chemical Communications*, 2015, 51, 1244-1247.
213. B. Tan, D. Hickey, R. Milton, and S.D. Minteer, "Regeneration of the NADH Cofactor by a Rhodium Complex Immobilized on Multi-Walled Carbon Nanotubes," *Journal of the Electrochemical Society*, 2015, 162(3), H102-H107.
214. R. Reid, S.D. Minteer, and B. Gale, "Contact Lens Biofuel Cell Tested in a Synthetic Tear Solution," *Biosensors & Bioelectronics*, 2015, 68, 142-148.
215. M. Rasmussen, R.P. Milton, D.P. Hickey, R. Reid, and S.D. Minteer, "From PEM Fuel Cell Design to Biological Fuel Cells: The Status of Systems Development for Biological Fuel Cells," *ECS Transactions*, 2014, 64(3), 881-895.
216. S. Xu, L. Pelster, M. Rasmussen, and S.D. Minteer, "Anodic bioelectrocatalysis: from metabolic pathways to metabolons," in *Enzymatic Fuel Cells*, 2014, Wiley, 53-79.
217. S.D. Minteer, H. Luckarift, and P. Atanassov, "Electrochemical evaluation of enzymatic biofuel cells and figures of merit," in *Enzymatic Fuel Cells*, 2014, Wiley, 4-11.
218. F. Giroud, R.D. Milton, B. Tan, and S.D. Minteer, "Simplifying Enzymatic Biofuel Cells: Immobilized Naphthoquinone as a Biocathodic Orientational Moiety and Bioanodic Electron Mediator," *ACS Catalysis*, 2015, 5, 1240-1244.
219. K. Nguyen and S.D. Minteer, "DNA-Functionalized Pt nanoparticles as catalyst for chemically powered micromotor: Toward signal-on motion-based DNA biosensor," *ChemComm*, 2015, 51, 4792-4784.
220. D. Chen and S.D. Minteer, "Mechanistic study of nickel based catalysts for oxygen evolution and methanol oxidation in alkaline medium," *Journal of Power Sources*, 2015, 284, 27-37.
221. S. Aquino Neto, R.D. Milton, L. Crepaldi, D.P. Hickey, A. de Andrade, and S.D. Minteer, "Co-immobilization of Gold Nanoparticles with Glucose Oxidase to Improve Bioelectrocatalytic Glucose Oxidation," *Journal of Power Sources*, 2015, 285, 493-498.
222. M. Rasmussen and S.D. Minteer, "Long-Term Arsenic Monitoring with an *Enterobacter cloacae* Microbial Fuel Cell," *Bioelectrochemistry*, 2015, 106, 207-212.

223. R. Milton, K. Lim, D.P. Hickey, and S.D. Minteer, "Employing FAD-Dependent Glucose Dehydrogenase within a Glucose/Oxygen Enzymatic Fuel Cell Operating in Human Serum," *Bioelectrochemistry*, 2015, 106, 56-63.
224. S. Aquino Neto, R.D. Milton, D.P. Hickey A. de Andrade, and S.D. Minteer, "High Current Density PQQ-dependent Alcohol and Aldehyde Dehydrogenase Bioanodes," *Biosensors & Bioelectronics*, 2015, 72, 247-254.
225. R.D. Milton, D.P. Hickey, S. Abdellaoui, K. Lim, F. Wu, and S.D. Minteer, "Rational design of quinones for high power density biofuel cells," *Chemical Science*, 2015, 6, 4867-4875.
226. M. Rasmussen, S. Abdellaoui, and S.D. Minteer, "Enzymatic Biofuel Cells: 30 Years of Critical Advancements," *Biosensors & Bioelectronics*, 2016, 76, 91-102.
227. K. Van Nguyen and S.D. Minteer, "Investigating DNA hydrogels as a new biomaterial for enzyme immobilization in biobatteries," *ChemComm*, 2015, 51, 13071-13073.
228. N.K. Kirchofer, M. Rasmussen, F. Dahlquist, S.D. Minteer, and G.C. Bazan, "The Photobioelectrochemical Activity of Thylakoid Bioanodes is Increased via Photocurrent Generation and Improved Contacts by Membrane-Intercalating Conjugated Oligoelectrolytes," *Energy & Environmental Science*, 2015, 8, 2698-2706.
229. S. Abdellaoui, D. Hickey, A. Stephens, and S.D. Minteer, "Recombinant oxalate decarboxylase: Enhancement of a hybrid catalytic cascade for the complete electro-oxidation of glycerol," *ChemComm*, 2015, 51, 14330-14333.
230. C. Lau, M.J. Moehlenbrock, R. L. Arechederra, A. Falase, K. Garcia, R. Rincon, S.D. Minteer, S. Banta, G. Gupta, S. Babanova, and P. Atanassov, "Paper based biofuel cells: Incorporating enzymatic cascades for ethanol and methanol oxidation," *International Journal of Hydrogen Energy*, 2015, 40, 14661-14666.
231. D.P. Hickey, R. D. Milton, D. Chen, M. Sigman, and S.D. Minteer, "TEMPO-Modified Linear Poly(ethylenimine) for Immobilization-Enhanced Electrocatalytic Oxidation of Alcohols," *ACS Catalysis*, 2015, 5, 5519-5524.
232. T. Wang, R. Reid, and S.D. Minteer, "A Paper-Based Mitochondrial Electrochemical Biosensor for Pesticide Detection," *Electroanalysis*, 2016, 28, 854-859.
233. S.D. Minteer, "Oxidative Bioelectrocatalysis: From Natural Metabolic Pathways to Synthetic Metabolons and Minimal Enzyme Cascades," *Biochimica et Biophysica Acta – Bioenergetics*, 2016, 1857, 621-624.
234. D.P. Hickey, R.Reid, R.D. Milton, and S.D. Minteer, "A Self-Powered Amperometric Lactate Biosensor Based on Lactate Oxidase Immobilized in Dimethylferrocene-Modified LPEI," *Biosensors and Bioelectronics*, 2016, 77, 26-31.
235. S. Aquino Neto, A. Zimbardi, F. Cardoso, L. Crepaldi, S. D. Minteer, and A. de Andrade, "Potential application of laccase from *Pycnoporus sanguineus* in methanol/O₂ biofuel cells," *Journal of Electroanalytical Chemistry*, 2016, 765, 2-7.
236. S. Abdellaoui, K. Knoche, K. Lim, D. Hickey, and S.D. Minteer, "TEMPO as a promising electrocatalyst for the electrochemical oxidation of hydrogen peroxide in bioelectronic applications," *Journal of the Electrochemical Society*, 2016, 163, H3001-H3005.
237. R.D. Milton, F. Wu, K. Lim, S. Abdellaoui, D. Hickey, and S.D. Minteer, "A promiscuous glucose oxidase: electrical energy conversion of multiple (poly)saccharides spanning starch and dairy milk," *ACS Catalysis*, 2015, 5, 7218-7225.
238. S. Holmberg, M. Rodriguez-Delgado, R.D. Milton, N. Ornelas-Soto, S. D. Minteer, R. Parra-Saldivar, and M. J. Madou, "Bioelectrochemical study of

- thermostable *Pycnoporus sanguineus* CS43 laccase bioelectrodes based on pyrolytic carbon nanofiber for bioelectrocatalytic O₂ reduction,” *ACS Catalysis*, 2015, 5, 7507-7518.
239. S. Abdellaoui, R.D. Milton, T. Quah, and S.D. Minter, “NAD-dependent dehydrogenase bioelectrocatalysis: the ability of a naphthoquinone redox polymer to regenerate NAD⁺,” *Chem Comm*, 2016, 52, 1147-1150.
 240. D. P. Hickey, R. D. Milton, M. Rasmussen, S. Abdellaoui, K. Nguyen and S. D. Minter, “Fundamentals and applications of bioelectrocatalysis,” *Electrochemistry (RSC)*, 2016, 13, 97-132.
 241. D.P. Hickey, D. Schiedler, I. Matanovic, P. Doan, P. Atanassov, S.D. Minter, and M. Sigman, “Predicting Electrocatalytic Properties: Modeling Structure-Activity Relationships of Nitroxyl Radicals,” *Journal of the American Chemical Society*, 2015, 137, 16179-16186.
 242. I. Wheeldon, S.D. Minter, S. Banta, S. Calabrese Barton, P. Atanassov, and M. Sigman, “Substrate channeling as an approach to cascade reactions,” *Nature Chemistry*, 2016, 8, 299-309.
 243. A. Khabibullin, J.J. Smith, S.D. Minter, and I. Zharov, “Preparation and properties of DMFC membranes from polymer-brush nanoparticles,” *Solid State Ionics*, 2016, 288, 154-159.
 244. S. Koepke, J.J. Watkins, and S.D. Minter, “Understanding the Role of Mitochondrial Health in the Mechanism of Mitochondrial Bioelectrocatalysis,” *Journal of the Electrochemical Society*, 2016, 163(5), H292-H298.
 245. S.D. Minter, “Cell-free biotechnologies,” *Biotechnology for Biofuel Production and Optimization*, Elsevier, 2016, 433-448.
 246. H. Rana, P. Moussatche, L. S. Rocha, S. Abdellaoui, S. D Minter, and E. Moomaw, “Isothermal Titration Calorimetry Uncovers Substrate Promiscuity of Bicipin Oxalate Oxidase from *Ceriporiopsis subvermispota*,” *Biochemistry & Biophysics Report*, 2016, 5 , 396-400.
 247. T. Wang, R.D. Milton, S. Adellaoui, D.P. Hickey, and S.D. Minter, “Laccase Inhibition by As³⁺/As⁵⁺: Determination of Inhibition Mechanism and Preliminary Application to a Self-Powered Biosensor,” *Analytical Chemistry*, 2016, 88, 3243-3248.
 248. R.D. Milton, T. Wang, K. Knoche, and S.D. Minter, “Tailoring Biointerfaces for Electrocatalysis,” *Langmuir*, 2016, 32, 2291-2301.
 249. Y. Zhang, M.A. Arugula, S. Williams, S.D. Minter, and A.L. Simonian, “Layer-by-layer Assembly of Carbon Nanotubes Modified with Invertase/Glucose Dehydrogenase Cascade for Sucrose/O₂ Biofuel Cell,” *Journal of the Electrochemical Society*, 2016, 163, F449-F454.
 250. K. Van Nguyen, Y. Holade, and S.D. Minter, “DNA redox hydrogels: Improving mediated enzymatic bioelectrocatalysis,” *ACS Catalysis*, 2016, 6, 2603-2607.
 251. J. Renner and S.D. Minter, “The use of engineered protein materials in electrochemical devices,” *Experimental Biology and Medicine*, 2016, 9, 980-985.
 252. R. Reid, D. Hickey, S.D. Minter, and B. Gale, “Modeling Carbon Nanotube Connectivity and Surface Activity in a Contact Lens Biofuel Cell,” *Electrochimica Acta*, 2016, 203, 30-40.
 253. K. Knoche, J. Renner, W. Gellett, K. Ayers, and S.D. Minter, “A self-sufficient nitrate groundwater remediation system: *Geobacter sulfurreducens* microbial fuel cell fed by hydrogen from a water electrolyzer,” *Journal of the Electrochemical Society*, 2016, 163, F651-F656.

254. S. Aquino Neto, R.D. Milton, D.P. Hickey, A. de Andrade, and S.D. Minteer, "Membraneless Enzymatic Ethanol/O₂ Fuel Cell: Transitioning from an Air-Breathing Pt-based Cathode to a Bilirubin Oxidase-Based Biocathode," *Journal of Power Sources*, 2016, 324, 208-214.
255. R.D. Milton, S. Abdellaoui, D. Dean, L. Seefeldt, D. Leech, and S.D. Minteer, "Nitrogenase bioelectrocatalysis: heterogeneous ammonia and hydrogen production by MoFe protein," *Energy and Environmental Science*, 2016, 9, 2550-2554.
256. L. Pelster and S.D. Minteer, "Mitochondrial Inner Membrane Biomimic for the Investigation of Electron Transport Chain Supercomplex Bioelectrocatalysis," *ACS Catalysis*, 2016, 6, 4995-4999.
257. M. Gonzalez-Guerrero, F.J. del Campo, J.P. Esquivel, F. Giroud, S.D. Minteer, and N. Sabate, "Paper-based Enzymatic Microfluidic Fuel Cell: From a two-stream flow device to a single-stream lateral flow strip," *Journal of Power Sources*, 2016, 326, 410-416.
258. K. Knoche, D.P. Hickey, R.D. Milton, C. Curchoe, and S.D. Minteer, "Hybrid Glucose/O₂ Biobattery and Supercapacitor Utilizing a Pseudocapacitive Dimethylferrocene Redox Polymer at the Bioanode," *ACS Energy Letters*, 2016, 1, 380-385.
259. B. Bulutoglu, K.E. Garcia, F. Wu, S.D. Minteer, and S. Banta, "Direct evidence for metabolon formation and substrate channeling in recombinant TCA cycle enzymes," *ACS Chemical Biology*, 2016, 11, 2847-2853.
260. T. Wang and S.D. Minteer, "Effect of Riboflavin Metabolites on Mitochondrial Electrochemistry," *Journal of the Electrochemical Society*, 2016, 163(13), H1047-1052.
261. Y. Holade, D.P. Hickey, and S.D. Minteer, "Halide-Regulated Growth of Electrocatalytic Metal Nanoparticles Directly on Carbon Paper Electrodes," *Journal of Materials Chemistry A*, 2016, 4, 17154-17162.
262. D.P. Hickey, K.L. Knoche, K. Albertson, C. Castro, R.D. Milton, and S.D. Minteer, "Improving O₂ Reduction at an Enzymatic Biocathode: Mimicking the Lungs," *ChemComm*, 2016, 52, 13299-13302.
263. D. Chen, L. dal Negro, and S.D. Minteer, "Gold nanofiber-based electrode for plasmon-enhanced electrocatalysis," *Journal of the Electrochemical Society*, 2016, 163(14), H1132-H1135.
264. C. Tapia, R.D. Milton, G. Pankratova, S.D. Minteer, H. Akerlund, D. Leech, A. De Lacey, M. Pita, and L. Gorton, "Wiring of Photosystem I and Hydrogenase on an Electrode for Photoelectrochemical H₂ Production using Redox Polymers for Relatively Positive Onset Potential," *ChemElectroChem*, 2017, 4, 90-95.
265. M. Grattieri, K. Hasan, and S.D. Minteer, "Bio-Electrochemical Systems as A Multipurpose Biosensing Tool: Present Perspective and Future Outlook," *ChemElectroChem*, 2017, 4, 834-842.
266. R.D. Milton and S.D. Minteer, "Enzymatic Bioelectrosynthetic Ammonia Production: Recent Electrochemistry of Nitrogenase, Nitrate Reductase and Nitrite Reductase," *ChemPlusChem*, 2017, 82, 513-521.
267. T. Quah, R.D. Milton, S. Abdellaoui, D.P. Hickey, and S.D. Minteer, "Cholesterol as a Promising Alternative Energy Source: Bioelectrocatalytic Oxidation using NAD-dependent Cholesterol Dehydrogenase in Human Serum," *Journal of the Electrochemical Society*, 2017, 164(3), H3024-H3029.
268. M. Grattieri, K. Hasan, M. Suvira, and S.D. Minteer, "Halotolerant Extremophile Bacteria from the Great Salt Lake for Recycling Pollutants in Microbial Fuel Cells," *Journal of Power Sources*, 2017, 356, 310-318.

269. Y. Holade, M. Yuan, R.D. Milton, D. P. Hickey, A. Sugarwara, C. Peterbauer, D. Haltrich, and S.D. Minteer, "Rational Combination of Promiscuous Enzymes Yields a Versatile Enzymatic Fuel Cell with Improved Coulombic Efficiency," *Journal of the Electrochemical Society*, 2017, 164(3), H3073-H3082.
270. R. Escalona-Villalpando, R. Reid, R.D. Milton, L.J. Arriaga, S.D. Minteer, and J. Ledesma-Garcia, "Improving the performance of lactate/oxygen biofuel cells using a microfluidic design," *Journal of Power Sources*, 2017, 342, 546-552.
271. A. Ahmadian Yazdi, R. Priete, R.D. Milton, D. P. Hickey, S.D. Minteer, and J. Xu, "Rechargeable membraneless glucose biobattery: Towards solid-state cathodes for implantable enzymatic devices," *Journal of Power Sources*, 2017, 343, 103-108.
272. R.D. Milton, R. Cai, S. Abdellaoui, D. Leech, A.L. De Lacey, M. Pita, and S.D. Minteer, "Bioelectrochemical Haber-Bosch Process: An Ammonia-Producing H₂/N₂ Fuel Cell," *Angewandte Chemie*, 2017, 56(10), 2680-2683.
273. C. Serov, D.P. Hickey, M. Cook, S. Robinson, S. Barnett, S.D. Minteer, M.S. Sigman, and M. Sanford, "A Physical Organic Approach to Persistent, Cyclable, Low-Potential Electrolytes for Flow Battery Applications," *Journal of the American Chemical Society*, 2017, 139, 2924-2927.
274. K. Hasan, R. Milton, M. Grattieri, T. Wang, M. Stephanz, and S.D. Minteer, "Photobioelectrocatalysis of Intact Chloroplasts for Solar Energy Conversion," *ACS Catalysis*, 2017, 7, 2257-2265.
275. J. Kitt, D. Bryce, S.D. Minteer, and J.M. Harris, "Raman Spectroscopy Reveals Selective Interactions of Cytochrome c with Cardiolipin that Correlate with Membrane Permeability," *Journal of the American Chemical Society*, 2017, 139(10), 3851-3860.
276. K. Knoche, K. Hasan, E. Aoyama, and S.D. Minteer, "Role of Nitrogenase and Ferredoxin in the Mechanism of Bioelectrocatalytic Nitrogen Fixation by the Cyanobacteria *Anabaena variabilis* SA-1 Mutant Immobilized on Indium Tin Oxide (ITO) Electrodes," *Electrochimica Acta*, 2017, 232, 396-403.
277. M. Grattieri, N.D. Shivel, I. Sifat, M. Bestetti, and S.D. Minteer, "Sustainable Hypersaline Microbial Fuel Cells: Inexpensive Recyclable Polymer Supports for Carbon Nanotube Conductive Paint Anodes," *ChemSusChem*, 2017, 10, 2053-2058.
278. Y. Liu, D.P. Hickey, J.Y. Guo, E. Earl, S. Abdellaoui, R. Milton, M.S. Sigman, S.D. Minteer, and S. Calabrese Barton, "Substrate Channeling in an Artificial Metabolon: A Molecular Dynamics Blueprint for an Experimental Peptide Bridge," *ACS Catalysis*, 2017, 7, 2486-93.
279. S. Abdellaoui, M. Snow, I. Matanovic, A. Stephens, P. Atanassov, and S.D. Minteer, "Hybrid Molecular/Enzymatic Catalytic Cascade for Complete Electro-oxidation of Glycerol Using a Promiscuous NAD-dependent Formate Dehydrogenase from *Candida boidinii*," *ChemComm*, 2017, 53, 5368 - 5371.
280. L. Xia, K. Nguyen, Y. Holade, H. Han, K. Dooley, P. Atanassov, S. Banta, and S.D. Minteer, "Improving the Performance of Methanol Biofuel Cells Utilizing an Enzyme Cascade Bioanode with DNA Bridged Substrate Channeling," *ACS Energy Letters*, 2017, 2, 1435-1438.
281. R.D. Milton and S.D. Minteer, "Direct Enzymatic Bioelectrocatalysis: Differentiating Between Myth and Reality," *Journal of the Royal Society Interface*, 2017, 14, 20170253.
282. R.D. Milton, R. Cai, S. Sahin, S. Abdellaoui, B. Alkotaini, D. Leech, and S.D. Minteer, "The In Vivo Potential-Regulated Protective Protein of Nitrogenase in *Azotobacter vinelandii* Supports Aerobic Bioelectrochemical Dinitro-gen Reduction In Vitro," *Journal of the American Chemical Society*, 2017, 139, 9044-9052.

283. R.D. Milton, T. Quah, S. Abdellaoui, and S.D. Minter, "Bioelectrocatalytic NAD⁺/NADH Inter-Conversion: Transformation of an Enzymatic Fuel Cell into an Enzymatic Redox Flow Battery," *ChemComm*, 2017, 53, 8411-8414.
284. M. Grattieri, R.D. Milton, S. Abdellaoui, K. Hasan, M. Suvira, B. Alkotaini, and S.D. Minter, "Investigating Extracellular Electron Transfer of *Rikenella microfus*: a Recurring Bacterium in Mixed-Species Biofilms," *Sustainable Energy & Fuels*, 2017, 1, 1568-1572.
285. F. Macazo and S.D. Minter, "Enzyme Cascades in Biofuel Cells," *Current Opinion in Electrochemistry*, 2017, 5, 114-120.
286. K. Hasan, M. Grattieri, T. Wang, R.D. Milton, and S.D. Minter, "Enhanced Bioelectrocatalysis of *Shewanella oneidensis* MR-1 by a Naphthoquinone Redox Polymer," *ACS Energy Letters*, 2017, 2, 1947-1951.
287. S. Aquino Neto, R.D. Milton, S.D. Minter, and A. de Andrade, "Hybrid Bioelectrocatalytic Reduction of Oxygen at Anthracene-modified Multi-walled Carbon Nanotubes Decorated with Ni₉₀Pd₁₀ Nanoparticles," *Electrochimica Acta*, 2017, 251, 195-202.
288. F. Macazo, D.P. Hickey, S. Abdellaoui, M.S. Sigman, and S.D. Minter, "Polymer-Immobilized, Hybrid Multi-Catalyst Architecture for Enhanced Electrochemical Oxidation of Glycerol," *ChemComm*, 2017, 53, 10310-10313.
289. N. Khadka, R.D. Milton, S. Shaw, D. Lukoyanov, D. Dean, S.D. Minter, S. Raugei, B. Hoffman, and L. Seefeldt, "The Mechanism of Nitrogenase H₂ Formation by Metal-Hydride Protonation Probed by Mediated Electrocatalysis and H/D Isotope Effects," *Journal of the American Chemical Society*, 2017, 129(38), 13518-13524.
290. S. Aquino Neto, A. de Andrade, and S.D. Minter, "Developing Ethanol Bioanodes using a Hydrophobically Modified Linear Polyethylenimine Hydrogel for Immobilizing an Enzyme Cascade," *Journal of Electroanalytical Chemistry*, 2018, 812, 153-158.
291. Y.M. Huang, G. Huber, N. Wang, S.D. Minter, and J.A. McCammon, "Brownian dynamic study of an enzyme metabolon in the TCA cycle: Substrate kinetics and channeling," *Protein Science*, 2018, 27(2), 463-471.
292. R. Cai, S. Abdellaoui, J. Kitt, C. Irvine, J.M. Harris, S.D. Minter, and C. Korzeniewski, "Confocal Raman Microscopy for the Determination of Protein and Quaternary Ammonium Ion Loadings in Biocatalytic Membranes for Electrochemical Energy Conversion and Storage," *Analytical Chemistry*, 2017, 89, 13290-13298.
293. S.D. Minter, "Methods in Biological Fuel Cells," *Springer Handbook of Electrochemical Energy*, 2017, 743-755.
294. M. Grattieri and S.D. Minter, "Self-powered biosensors," *ACS Sensors*, 2018, 3(1), 44-53.
295. M. Grattieri and S.D. Minter, "Microbial Fuel Cells in Saline and Hypersaline Environments: Advancements, Challenges and Future Perspectives," *Bioelectrochemistry*, 2018, 120, 127-137.
296. L. Lancaster, D.H. Hickey, M.S. Sigman, S.D. Minter, and I. Wheeldon, "Bioinspired design of a hybrid bifunctional enzymatic/organic electrocatalyst for site selective alcohol oxidation," *ChemComm*, 2018, 54, 491-494.
297. K. Hendriks, S. Robinson, M. Braten, C. Sevov, B. Helms, M. Sigman, S. Minter, and M. Sanford, "High-Performance Oligomeric Catholytes for Effective Macromolecular Separation in Nonaqueous Redox Flow Batteries," *ACS Central Science*, 2018, 4(2), 189-196.

298. S. Abdellaoui, F. Macazo, R. Cai, A. de Lacey, M. Pita, and S.D. Minteer, "Enzymatic Electrosynthesis of Alkanes via Bioelectrocatalytic Decarbonylation of Fatty Aldehydes," *Angewandte Chemie*, 2018, 57, 2404-2408.
299. S.D. Minteer, "Catalytic materials for Biofuel Conversion," *International Materials Reviews*, 2018, 63(4), 241-256.
300. M. Grattieri and S.D. Minteer, "Decoupling energy and power," *Nature Energy*, 2018, 3, 8-9.
301. Y. Huang, X. Lee, F. Macazo, M. Grattieri, R. Cai, and S.D. Minteer, "Fast and Efficient Removal of Chromium (VI) Anionic Species by a Reusable Chitosan-Modified Multi-Walled Carbon Nanotube Composite," *Chemical Engineering Journal*, 2018, 339, 259-267.
302. S.D. Minteer, "Advances in Electroanalytical Chemistry," *Journal of the American Chemical Society*, 2018, 140, 2701-2703.
303. S. Sahin, R. Cai, R.D. Milton, S. Abdellaoui, F. Macazo, and S.D. Minteer, "Molybdenum-Dependent Formate Dehydrogenase for Formate Bioelectrocatalysis in a Formate/O₂ Enzymatic Fuel Cell," *Journal of the Electrochemical Society*, 2018, 165(3), H109-H113.
304. B. Alkotaini, S. Abdellaoui, K. Hasan, M. Grattieri, T. Quah, R. Cai, M. Yuan, and S.D. Minteer, "Sustainable Bioelectrosynthesis of the Bioplastic Polyhydroxybutyrate: Overcoming Substrate Requirement for NADH Regeneration," *ACS Sustainable Chemistry & Engineering*, 2018, 6, 4909-4915.
305. B. Alkotaini, S. Tinucci, S. Robertson, K. Hasan, S.D. Minteer, and M. Grattieri, "Alginate-encapsulated bacteria for hypersaline solutions treatment in microbial fuel cell," *ChemBioChem*, 2018, 19, 1162-1169.
306. M. Grattieri, D.P. Hickey, B. Alkotaini, S.J. Robertson, and S.D. Minteer, "Hypersaline microbial self-powered biosensor with increased sensitivity," *Journal of the Electrochemical Society*, 2018, 165(5), H251-H254.
307. R. Cai, R. Milton, S. Abdellaoui, T. Park, J. Patel, B. Alkotaini, and S.D. Minteer, "Electroenzymatic C-C bond formation from CO₂," *Journal of the American Chemical Society*, 2018, 140, 5041-5044.
308. M. Yuan, S. Sahin, R. Cai, S. Abdellaoui, D.P. Hickey, S.D. Minteer, and R.D. Milton, "Creating a low-potential redox polymer for efficient electroenzymatic CO₂ reduction," *Angewandte Chemie*, 2018, 130, 6692-6696.
309. S.L. Foster, S.I. Perez Bakovic, R. Duda, S. Maheshwari, R.D. Minteer, S.D. Minteer, M.J. Janik, J.N. Renner, and L.F. Greenlee, "Catalysts for Nitrogen Reduction to Ammonia," *Nature Catalysis*, 2018, 1, 490-500.
310. D.P. Hickey, K. Lim, R. Cai, A. Patterson, M. Yuan, S. Sahin, S. Abdellaoui, and S.D. Minteer, "Pyrene Hydrogel for Promoting Direct Bioelectrochemistry: ATP-Independent Electroenzymatic Reduction of N₂," *Chemical Science*, 2018, 9, 5172-5177.
311. J. Kitt, D. Bryce, S.D. Minteer, and J. Harris, "Confocal Raman Microscopy for In-situ Measurement of Phospholipid-Water Partitioning into Model Phospholipid Bilayers within Individual Chromatographic Particles," *Analytical Chemistry*, 2018, 90, 7048-7055.
312. L. Torno de Roman, M. Navarro, G. Hughes, J.P. Esquivel, R.D. Milton, S.D. Minteer, and N. Sabate, "Improved performance of a paper-based glucose fuel cell by capillary induced flow," *Electrochimica Acta*, 2018, 282, 336-342.
313. Y. Huang, X. Lee, F. Macazo, M. Grattieri, R. Cai, and S.D. Minteer, "A sustainable adsorbent for phosphate removal: modifying multi-walled carbon nanotubes with chitosan," *Journal of Materials Science*, 2018, 53, 12641-12649.

314. D.K. Martin, P. Cinquin, P. Vadgama, S. Minteer, Z. Abdelkader, J.P. Alcaez, F. Boucher, and S. Shleev, "Challenges for successful implantation of biofuel cells," *Bioelectrochemistry*, 2018, 124, 57-72.
315. J. Franco, S.D. Minteer, and A. de Andrade, "Product analysis of operating an ethanol / O₂ biofuel cell shows the synergy between enzymes within an enzymatic cascade," *Journal of the Electrochemical Society*, 2018, 165, H575-H579.
316. M. Rasmussen, A. Serov, D. Chen, T. Rose, K. Artyushkova, P. Atanassov, J. Harris, and S.D. Minteer, "Enhancement of Electrocatalytic Oxidation of Glycerol by Plasmonics," *ChemElectroChem*, 2019, 6, 241-245.
317. Y. Liu, I. Matanovic, D. Hickey, S. Minteer, P. Atanassov, and S. Calabrese Barton, "Cascade Kinetics of an Artificial Metabolon by Molecular Dynamics and Kinetic Monte Carlo," *ACS Catalysis*, 2018, 8, 7719-7726.
318. N. Andersen, K. Artyushkova, I. Matanovic, D. Hickey, S.D. Minteer, and P. Atanassov, "Spectro-Electrochemical Microfluidic Platform for Monitoring Multi-step Cascade Reactions," *ChemElectroChem*, 2019, 6, 246-251.
319. Y. Montes Cebrián, L. del Torno de Román, A. Álvarez Carulla, J. Colomer Farrarons, S. D. Minteer, N. Sabaté, P. Ll. Miribel Català, and J.P. Esquivel, "'Plug-and-Power' Point-of-Care Diagnostics: a novel approach for self-powered electronic reader-based portable analytical devices," *Biosensors & Bioelectronics*, 2018, 118, 88-96.
320. J. Peters, D. Beratan, B. Bothner, C. Harwood, B. Dyer, A. Jones, P. King, L. Seedfeldt, S.D. Minteer, and M. Adams, "A New Era for Electron Bifurcation," *Current Opinion in Chemical Biology*, 2018, 47, 32-38.
321. R. Escalona-Villalpando, L. Arriaga, S.D. Minteer, and J. Ledesma-Garcia, "Preparation of conductive carbon paper based on carbon nanofibers and polypyrrole for biofuel cell application," *Journal of Physics*, 2018, 1052, 012066.
322. E. Ortiz-Ortega, R. Escalona-Villalpando, J. Ledesma-Garcia, S.D. Minteer, and L. Arriaga, "Sweat as energy source using an enzymatic microfluidic fuel cell," *Journal of Physics*, 2018, 1052, 012142.
323. J. Peters, B. Bothner, B. Hoffman, S.D. Minteer, D. Beratan, S. Raugei, and L. Seefeldt, "Control of Electron Transfer in Nitrogenase," *Current Opinion in Chemical Biology*, 2018, 47, 54-59.
324. J. Franco, D.P. Hickey, S.D. Minteer, and A. de Andrade, "Hybrid catalyst cascade architecture enhancement for complete ethanol electrochemical oxidation," *Biosensors and Bioelectronics*, 2018, 121, 281-286.
325. M. Grattieri, D.P. Hickey, H.S. Kim, V. Teijeiro Seijas, J.B. Kim, and S.D. Minteer, "A lag time spectrophotometric assay for studying transport limitation in immobilized enzymes," *ACS Omega*, 2018, 3, 11945-11949.
326. Y. Liang, R. Cai, D.P. Hickey, J. Kitt, J.M. Harris, S.D. Minteer, and C. Korzeniewski, "Infrared Microscopy as a Probe of Composition Within a Model Biofuel Cell Electrode Prepared from *Trametes versicolor* Laccase," *ChemElectroChem*, 2019, 6, 818-826.
327. R. Cai and S.D. Minteer, "Nitrogenase Bioelectrocatalysis: From Understanding Electron-Transfer Mechanisms to Energy Applications," *ACS Energy Letters*, 2018, 3, 2736-2742.
328. D. P. Hickey, E.M. Gaffney, and S.D. Minteer, "Electrometabolic Pathways: Recent Developments in Bioelectrocatalytic Cascades," *Topics in Current Chemistry*, 2018, 376, 43.
329. S.D. Minteer, P. Christopher, and S. Linic, "Recent Advances in Nitrogen Reduction Catalysts," *ACS Energy Letters*, 2019, 4, 163-166.

330. R.A.Escalona-Villalpando, E.Ortiz-Ortega, J.P.Bocanegra-Ugalde, S.D.Minteer, J.Ledesma-García, and L.G.Arriaga, "Clean energy from human sweat using an enzymatic patch," *Journal of Power Sources*, 2019, 412, 496-504.
331. C. Korzeniewski, J. Kitt, S. Bukola, S. Creager, S.D. Minteer, and J.M. Harris, "Single layer graphene for estimation of axial spatial resolution in confocal Raman microscopy depth profiling," *Analytical Chemistry*, 2019, 91, 1049-1055.
332. M. Grattieri, Z. Rhodes, D. Hickey, K. Beaver, and S.D. Minteer, "Understanding Biophotocurrent Generation in Photosynthetic Purple Bacteria," *ACS Catalysis*, 2019, 9, 867-873.
333. R.A. Escalona-Villalpando, A. Moreno-Zuria, R.D. Milton, K. Hasan, S.D. Minteer, L.G. Arriaga, and J. Ledesma-Garcia, "Performance Comparison of Different Configurations of Glucose/O₂ Microfluidic Biofuel Cell Stack," *Journal of Power Sources*, 2019, 414, 150-157.
334. D.P. Hickey, C. Sandford, Z. Rhodes, T. Gensch, L. Fries, M.S. Sigman, and S.D. Minteer, "Investigating the Role of Ligand Electronics on Stabilizing Electrocatalytically Relevant Low Valent Co(I) Intermediates," *Journal of the American Chemical Society*, 2019, 141, 1382-1392.
335. M. Grattieri, E. Gaffney, and S.D. Minteer, "Tuning purple bacteria salt-tolerance for photobioelectrochemical systems in saline environments," *Faraday Discussions*, 2019, 2015, 15-25.
336. B.K. Peters, K.X. Rodriguez, S.H. Reisberg, S.B. Beil, D.P. Hickey, Y. Kawamata, M. Collins, J. Starr, L. Chen, S. Udyavara, K. Klunder, T. Gorey, S.L. Anderson, M. Neurock, S.D. Minteer, and P.S. Baran, "Scalable and safe synthetic organic electroreduction inspired by Li-ion battery chemistry," *Science*, 2019, 363, 838-845.
337. M. Tucci, M. Grattieri, A. Shievana, P. Cristiani, and S.D. Minteer, "Microbial amperometric biosensor for online herbicide detection: photocurrent inhibition of *Anabaena variabilis*," *Electrochimica Acta*, 2019, 302, 102-109.
338. G. Pankratova, D. Pankratov, R.D. Milton, S.D. Minteer, and L. Gorton, "Following Nature: Bioinspired Mediation Strategy for Gram-positive Bacterial Cells," *Advanced Energy Materials*, 2019, 1900215.
339. F. Wu and S.D. Minteer, "Tri-carboxylic acid metabolon," *Methods in Enzymology*, 2019, 617, 29-43.
340. M. Yuan and S.D. Minteer, "Redox Polymers in Electrochemical Systems: From Methods of Mediation to Energy Storage," *Current Opinion in Electrochemistry*, 2019, 15, 1-6.
341. H. Chen, R. Cai, J. Patel, F. Dong, H. Chen, and S.D. Minteer, "Upgraded Bioelectrocatalytic N₂ Fixation to Chiral Amine Intermediates," *Journal of the American Chemical Society*, 2019, 141, 4963-4971.
342. Y. Kawamata, J.C. Vantourout, D.P. Hickey, P. Bai, L. Chen, Q. Hou, W. Qiao, K. Barman, M. Edwards, A. Garrido-Castro, J. deGruyter, H. Nakamura, K. Knouse, C. Qin, K. Clay, D. Bao, C. Li, J. Starr, C. Garcia-Irizarry, N. Sach, H. White, M. Neurock, S.D. Minteer, and P. Baran, "Electrochemically Driven, Ni-Catalyzed Aryl Amination: Scope, Mechanism, and Applications," *Journal of the American Chemical Society*, 2019, 141, 6392-6402.
343. K. Klunder, A. Cass, S. Anderson, and S.D. Minteer, "Carbon for Electrochemical Phthalocyanines as a pi-pi Adsorption Strategy to Immobilize Catalyst on Synthesis," *Synlett*, 2019, 30, 1187-1193.
344. D.P. Hickey and S.D. Minteer, "Coupling Theory to Electrode Design for Electrocatalysis," *ACS Central Science*, 2019, 5, 745-746.

345. N. Andersen, K. Artyushkova, I. Matanovic, M. Chavez, D.P. Hickey, S. Abdellaoui, S.D. Minter, and P. Atanassov, "Modular microfluidic paper-based devices for multi-modal cascade catalysis," *ChemElectroChem*, 2019, 6, 2448-2455.
346. M. Yuan, M. Kummer, R. Milton, T. Quah, and S.D. Minter, "Efficient NADH Regeneration by a Redox Polymer-Immobilized Enzymatic System," *ACS Catalysis*, 2019, 9, 5486-5495.
347. B. Bulutoglu, F. Macao, J. Bale, N. King, D. Baker, S.D. Minter, and S. Banta, "Multimerization of an Alcohol Dehydrogenase by Fusion to a Designed Self-Assembling Protein Results in Enhanced Bioelectrocatalytic Operational Stability," *ACS Applied Materials & Interfaces*, 2019, 11, 20022-20028.
348. J.P. Kitt, D.A. Bryce, S.D. Minter, and J.M. Harris, "Confocal Raman Microscopy Investigation of Self-Assembly of Hybrid Phospholipid Bilayers within Individual Porous Silica Chromatographic Particles," *Analytical Chemistry*, 2019, 91, 7790-7797.
349. Y. Liu, D. P. Hickey, S.D. Minter, A. Dickson, S. Calabrese Barton, "Markov-State Transition Path Analysis of Electrostatic Channeling," *Journal of Physical Chemistry C*, 2019, 123, 15284-15292.
350. C. Sandford, M. Edwards, K. Klunder, D.P. Hickey, M. Li, K. Barman, M.S. Sigman, H.S. White, and S.D. Minter, "A Synthetic Chemist's Guide to Electroanalytical Tools for Studying Reaction Mechanisms," *Chemical Science*, 2019, 10, 6404-6422.
351. S. Robertson, J. Behring, M. Bestetti, S.D. Minter, and M. Grattieri, "Transitioning from batch to flow hypersaline microbial fuel cells," *Electrochimica Acta*, 2019, 317, 494-501.
352. K. Klunder, S.D. Minter, and C. Henry, "Polycaprolactone-enabled sealing and carbon composite electrode integration into electrochemical microfluidics," *Lab-on-a-Chip*, 2019, 19, 2589-2597.
353. T. Asset, S. Garcia, S. Herrera, N. Andersen, Y. Chen, E. Peterson, I. Matanovic, K. Artyushkova, J. Lee, S. Minter, S. Dai, X. Pan, K. Chavan, S. Calabrese Barton, P. Atanassov, "Investigating the nature of the active sites for the CO₂ reduction reaction on carbon-based electrocatalysts," *ACS Catalysis*, 2019, 9, 7668-7678.
354. J. Franco, M. Polizeli, P. Almeida, S. Abdellaoui, D.P. Hickey, S.D. Minter, and A. de Andrade, "Bioinspired architecture of a hybrid bifunctional enzymatic/organic electrocatalyst for complete ethanol oxidation," *Bioelectrochemistry*, 2019, 130, 107331.
355. Y. Huang, X. Lee, M. Grattieri, M. Yuan, R. Cai, F. Macazo, and S.D. Minter, "Modified biochar for phosphate adsorption in environmentally relevant conditions," *Chemical Engineering Journal*, 2020, 380, 122375.
356. M. Yuan, M. Kummer, and S.D. Minter, "Strategies for Bioelectrochemical CO₂ Reduction," *Chemistry- A European Journal*, 2019, 25, 14258-14266.
357. D. Hickey, R. Cai, Z.Y. Yang, K. Grunau, O. Einsle, L. Seefeldt, and S.D. Minter, "Establishing a Thermodynamic Landscape for the Active Site of Mo-Dependent Nitrogenase," *Journal of the American Chemical Society*, 2019, 141, 17150-17157.
358. M. Grattieri, S. Patterson, J. Copeland, K. Klunder, and S.D. Minter, "Purple bacteria & 3-D redox hydrogels for bioinspired photo-bioelectrocatalysis," *ChemSusChem*, 2020, 13, 230-237.
359. D.P. Hickey and S.D. Minter, "From Biological to Biomimic: Immobilizing Electrocatalysts for H₂/O₂ Fuel Cells," *Joule*, 2019, 3(8), 1819-1821.

360. C. Sandford, L. Fries, T. Ball, S.D. Minter, and M.S. Sigman, "Mechanistic Studies into the Oxidative Addition of Co(I) Complexes: Combining Electroanalytical Techniques with Parameterization," *Journal of the American Chemical Society*, 2019, 141, 18877-18889.
361. J. Franco, K. Klunder, V. Russell, A. deAndrade, and S. D. Minter "Hybrid enzymatic and organic catalyst cascade for enhanced complete oxidation of ethanol in an electrochemical micro-reactor device," *Electrochimica Acta*, 2020, 331, 135254.
362. R. Milton and S.D. Minter, "Nitrogenase Bioelectrochemistry for Synthesis Applications," *Accounts of Chemical Research*, 2019, 52, 3351-3360.
363. H. Chen, F. Dong, and S.D. Minter, "The progress and outlook of bioelectrocatalysis for the production of chemicals, fuels, and materials," *Nature Catalysis*, 2020, 3, 225-244.
364. K. Lim, M. Sima, R. Stewart, and S.D. Minter, "Direct bioelectrocatalysis by redox enzymes immobilized in electrostatically condensed oppositely charged polyelectrolyte electrode coatings," *Analyst*, 2020, 145, 1250-1257.
365. J. Patel, R. Cai, R.D. Milton, and S.D. Minter, "Pyrene-based Noncovalent Immobilization of Nitrogenase on Carbon Surfaces," *ChemBioChem*, 2020, 21, 1729-1732.
366. E. Gaffney, M. Grattieri, K. Beaver, J. Pham, C. McCartney, and S.D. Minter, "Unveiling salinity effects on photo-bioelectrocatalysis through combination of bioinformatics and electrochemistry," *Electrochimica Acta*, 2020, 337, 135731.
367. J. Diaz-Gonzalez, R. A. Escalona-Villapando, L.G. Arriaga, S.D. Minter, and J.R. Casanova-Moreno, "Effects of the cross-linker on the performance and stability of enzymatic electrocatalytic films of dimethylferrocene-modified linear polyethylenimine," *Electrochimica Acta*, 2020, 337, 135782.
368. J. Franco, K. Klunder, J. Lee, V. Russell, A. de Andrade, and S.D. Minter, "Enhanced electrochemical oxidation of ethanol using a hybrid catalyst cascade architecture containing pyrene-TEMPO, oxalate decarboxylase and carboxylated multi-walled carbon nanotube," *Biosensors and Bioelectronics*, 2020, 154, 112077.
369. H. Chen, M. Prater, R. Cai, F. Dong, H. Chen, and S.D. Minter, "Bioelectrocatalytic Conversion from N₂ to Chiral Amino Acids in a H₂/α-keto Acid Enzymatic Fuel Cell," *Journal of the American Chemical Society*, 2020, 142, 4028-4036.
370. E. Gaffney, K. Lim, and S.D. Minter, "Using Electrochemical Enzymatic Sensors for Detection of Biomarkers in Human Breath," *Current Opinion in Electrochemistry*, 2020, 23, 26-30.
371. E. Macchia, S. Sailapu, I. Merino-Jimenez, J. Esquivel, L. Sarcina, G. Scamarcio, S.D. Minter, N. Sabaté, and L. Torsi, "Standalone operation of an EGO-FET for ultra-sensitive detection of HIV," *Biosensors and Bioelectronics*, 2020, 156, 112103.
372. M. Li, K. Klunder, E. Blumenthal, M. Prater, J. Lee, J. Mathieson, and S.D. Minter, "Ionic Liquid Stabilized TEMPO Catalysis for Alcohol Oxidation," *ACS Sustainable Chemistry & Engineering*, 2020, 8, 4489-4498.
373. R. Rubio-Govea, D.P. Hickey, R. Garcia-Morales, M. Rodriguez-Delgado, M. Dominguez Romira, S.D. Minter, N. Ornelas-Soto, and A. Garcia-Garcia, "MoS₂ nanostructured materials for electrode modification in the development of a laccase based amperometric biosensor for non-invasive dopamine detection," *Microchemical Journal*, 2020, 155, 104792.
374. K. Barman, M.A. Edward, D. P. Hickey, C. Sandford, Y. Qui, R. Gao, S.D. Minter, and H.S. White, "Electrochemical Reduction of [Ni(Meppy)₃]²⁺. Elucidation of the Redox Mechanism by Cyclic Voltammetry and Steady-State

- Voltammetry in Low Ionic Strength Solutions,” *ChemElectroChem*, 2020, 7, 1473-1479.
375. M. Yuan, S. Abdellaoui, H. Chen, M. Kummer, C.A. Malapit, C. You, and S.D. Minter, “Selective electroenzymatic oxyfunctionalization by alkane monooxygenase in a biofuel cell,” *Angewandte Chemie*, 2020, 59, 8969-8973.
376. M. Kummer and S.D. Minter, “Enzymatic bioelectrocatalysis for enzymology applications,” *ChemElectroChem*, 2020, 7, 2222-2226.
377. I. Lazzarini Behrmann, M. Grattieri, S.D. Minter, S.A. Ramirez, and D.L. Vullo, “Online self-powered Cr (VI) monitoring with autochthonous *Pseudomonas* and a bio-inspired redox polymer,” *Analytical and Bioanalytical Chemistry*, 2020, 412, 6449-6457.
378. S.D. Minter and P. Baran, “Electrifying Synthesis: Recent Advances in the Methods, Materials, and Techniques for Organic Electrosynthesis,” *Accounts of Chemical Research*, 2020, 53, 545-546.
379. A. Shrestha, K. Hendricks, M. Sigman, S.D. Minter, and M.S. Sanford, “Realization of an Asymmetric Non-Aqueous Redox Flow Battery Through Molecular Design to Minimize Active Species Crossover and Decomposition,” *Chemistry- A European Journal*, 2020, 26, 5369-5373.
380. E. Gaffney, Z. Rhodes, and S.D. Minter, “Exploration of computational approaches for understanding microbial electrochemical systems: opportunities and future directions,” *Journal of the Electrochemical Society*, 2020, 167, 065502.
381. Z. Schofield, G. N. Meloni, P. Tran, C. Zerfass, G. Sena, Y. Hayashi, M. Grant, S. A. Contera, S. D. Minter, M. Kim, A. Prindle, P. Rocha, M. B. A. Djamgoz, T. Pilizota, P. R. Unwin, M. Asally, and O. S. Soyer, “Bioelectrical understanding and engineering of cell biology,” *Journal of the Royal Society Interface*, 2020, 17, 20200013.
382. F. Bruschet, G. Crabtree, J. Moore, J. Rodriguez Lopez, N. Balsara, K. Perrson, K. Zavadil, B. Ingram, S.D. Minter, and L. Trahey, “Energy Storage Emerging: A perspective from the Joint Center for Energy Storage Research,” *Proceedings of the National Academy of Science*, 2020, 117(23), 12550-12557.
383. F. Dong, H. Chen, C. Malapit, M. Prater, M. Li, M. Yuan, K. Lim, and S.D. Minter, “Biphasic bioelectrocatalytic synthesis of chiral β -hydroxy nitriles,” *Journal of the American Chemical Society*, 2020, 142, 8374-8382.
384. K. Lim, F. Macazo, C. Scholes, H. Chen, K. Sumampong, and S.D. Minter, “Elucidating the mechanism behind the bionanomanufacturing of gold nanoparticles using *Bacillus subtilis*,” *ACS Applied Bio Materials*, 2020, 3, 3859-3867.
385. Y.S. Lee, M. Yuan, R. Cai, K. Lim, and S.D. Minter, “Nitrogenase Bioelectrocatalysis: ATP-Independent Ammonia Production using Redox Polymer/MoFe Protein System,” *ACS Catalysis*, 2020, 10, 6854-6861.
386. Y.S. Lee, A. Ruff, R. Cai, K. Lim, W. Schuhmann, and S.D. Minter, “Electroenzymatic Nitrogen Fixation Using an Organic Redox Polymer-Immobilized MoFe Protein System,” *Angewandte Chemie*, 2020, 59, 16511-16516.
387. Y. Liang, J. Kitt, S.D. Minter, J.M. Harris, and C. Korzeniewski, “Vibrational Spectroscopic Monitoring of the Gelation Transition in Nafion Ionomer Dispersions,” *Applied Spectroscopy*, 2021, 75, 376-384.
388. M. Grattieri, K. Beaver, E. Gaffney, F. Dong, and S.D. Minter, “Advancing the fundamental understanding and practical applications of photo-bioelectrocatalysis,” *Chemical Communications*, 2020, 56, 8553-8568.
389. R. M. Bullock, J.G. Chen, L. Gagliardi, P.J. Chirik, O.K. Farha, C.H. Hendon, C.W. Jones, J.A. Keith, J. Klosin, S.D. Minter, R.H. Morris, A.T. Radosevich, T.B. Rauchfuss, N.A. Strotman A. Vojvodic, T.R. Ward, J.Y. Yang, and Y. Surendranath,

- “Using nature’s blueprint to expand catalysis with Earth-abundant metals,” *Science*, 2020, 369, eabc3183.
390. X. Zhu, E. Aoyama, A. V. Birk, O. Onasanya, W. H. Carr, L. Mourokh, S. D. Minter, and M. Vittadello, “Cytochrome c Oxidase Oxygen Reduction Reaction induced by Cytochrome c on Nickel-Coordination Surfaces based on Graphene Oxide in Suspension,” *Biochimica et Biophysica Acta- Bioenergetics*, 2020, 1861, 14862.
 391. P. Morandi, N. Tuleushova, S. Tingry, J. Cambedouzou, S.D. Minter, D. Cornu, and Y. Holade, “Bromide-Regulated Anisotropic Growth of Desert Rose-like Nanostructured Gold onto Carbon Fiber Electrodes as Free-Standing Electrocatalysts,” *ACS Applied Energy Materials*, 2020, 3, 7560-7571.
 392. M. Li, Z. Rhodes, J. Cabrera-Pardo, and S.D. Minter, “Recent Advancements in Rational Design of Non-Aqueous Organic Redox Flow Batteries,” *Sustainable Energy & Fuels*, 2020, 4, 4370-4389.
 393. Z. Rhodes, M. Li, J. Cabrera-Pardo, and S.D. Minter, “Electrochemical Advances in Non-Aqueous Redox Flow Batteries,” *Isreal Journal of Chemistry*, 2021, 61, 101-112.
 394. M. Grattieri, H. Chen, and S.D. Minter, “Chloroplast biosolar cell & self-powered herbicide monitoring,” *ChemComm*, 2020, 56, 13161-13164.
 395. H. Chen, O. Simoska, K. Lim, M. Grattieri, M. Yuan, F. Dong, Y.S. Lee, K. Beaver, S. Weliwatte, E. Gaffney, and S.D. Minter, “Fundamentals, Applications, and Future Directions of Bioelectrocatalysis,” *Chemical Reviews*, 2020, 120, 23, 12903–12993.
 396. E. Gaffney, M. Grattieri, and S.D. Minter, “Genome sequence of *Salinivibrio* sp. EAGSL, a biotechnologically relevant halophilic microorganism,” *Microbiology Resource Announcements*, 2020, 9(43), e01020-20.
 397. Q. Guo, F. Hu, X. Yang, J. Yang, S. Yang, X. Chen, F. Wu, and S.D. Minter, “In-situ and controllable synthesis of graphene-gold nanoparticles/molecularly imprinted polymers composite modified electrode for sensitive and selective rutin detection,” *Microchemical Journal*, 2020, 158, 105254.
 398. Y. Lee, K. Lim, and S.D. Minter, “Cascaded Biocatalysis and Bioelectrocatalysis: Overview and Recent Advances,” *Annual Review of Physical Chemistry*, 2021, 72, 467-488.
 399. B. Jones, C. Korzeniewski, J. Franco, S. Minter, and I. Fritsch, “Spatially Directed Functionalization by Co-electropolymerization of Two 3,4-ethylenedioxythiophene Derivatives on Microelectrodes within an Array,” *Journal of the Electrochemical Society*, 2020, 167, 166511.
 400. P. Hu, B. Peters, C. Malapit, J. Vantourout, P. Wang, J. Li, L. Mele, P.G. Echeverria, S.D. Minter, and P. Baran, “Electroreductive Olefin-Ketone Coupling,” *Journal of the American Chemical Society*, 2020, 142, 50, 20979–20986.
 401. Y. Hui, X. Mao, R. Cai, and S.D. Minter, “Three-dimensional glucose/oxygen biofuel cells based on enzymes embedded in tetrabutylammonium modified Nafion,” *Journal of Electrochemical Energy Conversion and Storage*, 2021, 18(4), 041004.
 402. I. Merino-Jimenez, A. Llorella, M. Navarro-Segarra, J. Agramunt, A. Grandas, S.D. Minter, J.P. Esquivel, and N. Sabate, “A Self-Powered Minimalistic Glucometer: A Lean Approach to Sustainable Single-Use Point-of-Care Devices,” *Advanced Materials Technologies*, 2021, 6(5) 2001051.
 403. J. Honorio Franco, S.D. Minter, and A. De Andrade, “Ethanol Biofuel Cells: Hybrid Catalytic Cascades as a Tool for Biosensor Devices,” *Biosensors*, 2021, 11(2), 41.

404. E. Gaffney, O. Simoska, and S.D. Minter, "The use of electroactive halophila bacteria for improvements and advancements in environmental high saline biosensing," *Biosensors*, 2021, 11(2), 48.
405. O. Simoska, E. Gaffney, K. Beaver, K. Lim, and S.D. Minter, "Understanding the Properties of Phenazine Mediators that Promote Extracellular Electron Transfer in *Escherichia coli*," *Journal of the Electrochemical Society*, 2021, 168, 025503.
406. M. Li, J. Case, and S.D. Minter, "Bipolar Redox-Active Molecules in Non-Aqueous Organic Redox Flow Batteries," *ChemElectroChem*, 2021, 8, 1215-1232.
407. O. Simoska, Z. Rhodes, J. Cabrera-Pardo, E. Gaffney, K. Lim, and S.D. Minter, "Advances in Electrocatalytic Modification Strategies of 5-Hydroxymethylfurfural (HMF)," *ChemSusChem*, 2021, 14, 1674-1686.
408. T. Tang, C. Sandford, S.D. Minter, and M.S. Sigman, "Analyzing Mechanisms in Co(I) Redox Catalysis Using a Pattern Recognition Platform," *Chemical Science* 2021, 12, 4771-4778.
409. K. Lim, Y.S. Lee, O. Simoska, F. Dong, M. Sima, R. Stewart, and S.D. Minter, "Rapid Entrapment of Phenazine Ethosulfate within a Polyelectrolyte Complex on Electrodes for Efficient NAD⁺ regeneration in Mediated NAD⁺-dependent Bioelectrocatalysis," *ACS Applied Materials and Interfaces*, 2021, 13, 10942-10951.
410. J. Franco, M. Grattieri, A. de Andrade, and S.D. Minter, "Unveiling complete lactate oxidation through a hybrid catalytic cascade," *Electrochimica Acta*, 2021, 376, 138044.
411. C. Korzeniewski, E.M. Peterson, J.P. Kitt, S.D. Minter, and J.M. Harris, "Adapting confocal Raman microscopy for in situ studies of redox transformations at electrode-electrolyte interfaces," *Journal of Electroanalytical Chemistry*, 2021, 896, 115207.
412. M. Saito, Y. Kawamata, M. Meanwell, R. Navratil, D. Chiodi, E. Carlson, P. Hu, L. Chen, S. Udyavara, C. Kingston, M. Tanwar, S. Tyagi, B. McKillican, M. Gichinga, M. Schmidt, M. Eastgate, M. Lamberto, C. He, T. Tang, C. Malapit, M. Sigman, S. Minter, M. Neurock, and P. Baran, "N-Ammonium Ylide Mediators for Electrochemical C-H Oxidation," *Journal of the American Chemical Society*, 2021, 143, 7859-7867.
413. F. Dong, Y.S. Lee, E.M. Gaffney, M. Grattieri, H. Haddadin, S.D. Minter, and H. Chen, "Engineering nitrogen fixation activity to a non-diazotrophic cyanobacterium for ammonia synthesis in a bioelectrochemical N₂ fixation (e-BNF) system," *Cell Reports Physical Sciences*, 2021, 2, 100444.
414. O. Simoska, E. Gaffney, S.D. Minter, A. Franzetti, P. Cristiani, M. Grattieri, and C. Santoro, "Recent Trends and Advances in Microbial Electrochemical Sensing Technologies: An Overview," *Current Opinion in Electrochemistry*, 2021, 30, 100762.
415. J. McBrayer, C. Apblett, K. Fenton, S.D. Minter, and K. Harrison, "Mechanical Studies of the Solid Electrolyte Interphase on Anodes in Lithium and Lithium Ion Batteries," *Nanotechnology*, 2021, 32, 502005.
416. N.S. Waliwatte, M. Grattieri, O. Simoska, Z. Rhodes, and S.D. Minter, "Unbranched Hybrid Conducting-Redox Polymers for Intact Chloroplast-Based Photo-bioelectrocatalysis," *Langmuir*, 2021, 37, 7821-7833.
417. Y.S. Lee, R. Gerulskis, and S.D. Minter, "Advances in Electrochemical Cofactor Regeneration: Enzymatic and Non-Enzymatic Approaches," *Current Opinion in Biotechnology*, 2022, 73, 14-21.
418. M. Kummer, Y.S. Lee, M. Yuan, B. Alkotaini, J. Zhao, E. Blumenthal, and S.D. Minter, "Substrate Channeling by a Rational Designed Fusion Protein in a Biocatalytic Cascades," *JACS Au*, 2021, 1, 1187-1197.

419. J.D. McBrayer, M.T.F. Rodrigues, M.C. Schulze, D.P. Abraham, C.A. Appleby, I. Bloom, G.M. Carroll, A.M. Colclasure, C. Fang, K. L. Harrison, G. Liu, S.D. Minter, N.R. Neale, G.M. Veith, C.S. Johnson, J.T. Vaughey, A.K. Burrell, and B. Cunningham, "Calendar aging of silicon-containing batteries," *Nature Energy*, 2021, 6, 866-872.
420. H. Chen, Y. Lin, Y.T. Long, S.D. Minter, and Y.L. Ying, "Nanopore-based measurement of the interaction of P450cam monooxygenase and putidaredoxin at single-molecule level," *Faraday Discussions*, 2022, 233, 295-302.
421. N.S. Waliwatte and S.D. Minter, "Photo-bioelectrocatalytic CO₂ reduction for a circular energy landscape," *Joule*, 2021, 5(1), 2564-2592.
422. Z. Rhodes, O. Simoska, A. Dantanarayana, K. Stevenson, and S.D. Minter, "Using Structure-Function Relationships to Understand the Mechanism of Phenazine Mediated Extracellular Electron Transfer in *Escherichia coli*," *iScience*, 2021, 24(9), 103033.
423. N.S. Waliwatte, M. Grattieri, and S.D. Minter, "Rational design of artificial redox-mediating systems toward upgrading photobioelectrocatalysis," *Photochemical & Photobiological Sciences*, 2021, 20(10), 1333-1356.
424. E. Gaffney and S.D. Minter, "A silver assist for microbial fuel cell power," *Science*, 2021, 373, 1308-1309.
425. F. Dong, Y.S. Lee, E. Gaffney, W. Liou, and S.D. Minter, "Engineering cyanobacterium with transmembrane electron transfer ability for bioelectrochemical nitrogen fixation," *ACS Catalysis*, 2021, 11, 13169-13179.
426. J. Antonio, J. Franco, P. Almeida, T. Almeida, S.D. Minter, A. de Andrade, "Carbon nanotube PtSn nanoparticles for enhanced complete biocatalytic oxidation of ethylene glycol in biofuel cells," *ACS Materials Au*, 2022, 2, 94-102.
427. M. Li, S. Odom, A. Pancoast, L. Robertson, T. Vaid, G. Agarwal, H. Doan, Y. Wang, A. Ewolt, R. Assary, L. Zhang, M. Sigman, and S. D. Minter, "Experimental Protocols for Studying Organic Non-Aqueous Redox Flow Batteries," *ACS Energy Letters*, 2021, 6, 3932-3943.
428. M. Li, G. Agarwal, I. Shkrob, R.T. VanderLinden, J. Case, M. Prater, Z. Rhodes, R.S. Assary, and S.D. Minter, "Critical Role of Structural Order in Bipolar Redox-Active Molecules for Organic Redox Flow Batteries," *Journal of Materials Chemistry A*, 2021, 9, 23563-23573.
429. K. Beaver, A. Dantanarayana, and S. D. Minter, "Materials Approaches for Improving Electrochemical Sensor Performance," *Journal of Physical Chemistry B*, 2021, 125, 11820-11834.
430. O. Simoska, Y.S. Lee, and S.D. Minter, "Fundamentals and applications of enzymatic bioelectrocatalysis," *Comprehensive Inorganic Chemistry III*, 2023, 7, 456-491.
431. R.A. Escalona-Villalpando, A. Sandoval-Garcia, J.R. Espinosa Lumbreras, M.G. Miranda-Silva, L. G. Arriaga, S.D. Minter, and J. Ledesma-Garia, "A Self-Powered Glucose Biosensor Device Based On Microfluidics Using Human Blood," *Journal of Power Sources*, 2021, 515, 230631.
432. C. Malapit, M. Prater, J. Cabrera-Pardo, M. Li, T. Pham, T. McFadden, S. Blank, and S.D. Minter, "Advances on the Merger of Electrochemistry and Transition Metal Catalysis for Organic Synthesis," *Chemical Reviews*, 2022, 122, 3180-3218.
433. F. Dong, O. Simoska, E. Gaffney, and S.D. Minter, "Applying Synthetic Biology Strategies to Bioelectrochemical Systems," *Electrochemical Science Advances*, 2022, 2, e2100197.
434. H. Chen, T. Tang, C. Malapit, Y.S. Lee, M. Prater, N. Waliwatte, and S.D. Minter, "The one-pot bioelectrocatalytic conversion of chemically inert

- hydrocarbons to imines,” *Journal of the American Chemical Society*, 2022, 144, 4047-4056.
435. Y. Holade, Q. Wang, H. Guesmi, S. Tingry, D. Cornu, S.D. Minter, “Unveiling the Pitfalls of Comparing ORR Kinetic Data for Pd-based Electrocatalysts Without the Experimental Conditions of the Current-Potential Curves,” *ACS Energy Letters*, 2022, 7, 952-957.
 436. E. Gaffney, A. Dantanarayana, O. Simoska, and S.D. Minter, “Investigating the Electroactivity of *Salinivibrio* sp. EAGSL, through Electroanalytical Techniques and Genomic Insights,” *Journal of the Electrochemical Society*, 2022, 169, 025501.
 437. S.J. Balboa, L. Hicks, S.D. Minter, and A. Theberge, “Active Learning in Graduate Analytical Courses,” *Active Learning in the Analytical Chemistry Curriculum*, 2022, 1409, 65-82.
 438. S. Gnaim, A. Bauer, H.J. Zhang, L. Chen, C. Gannett, C. Malapit, D.E. Hill, D. Vogt, T. Tang, R.A. Daley, W. Hao, R. Zeng, M. Quertenmont, W.D. Beck, E. Kandahari, J.C. Vantourout, P. Echeverria, H.A. Abruna, D.G. Blackmond, S. Reisman, M. Sigman, S.D. Minter, and P. Baran, “Cobalt-Electrocatalytic HAT for Functionalization of Unsaturated C–C Bonds,” *Nature*, 2022, 605, 687-695.
 439. T. Tang, N. Friede, S.D. Minter, and M.S. Sigman, “Comparing Halogen Atom Abstraction Kinetics for Mn(I), Fe(I), Co(I), and Ni(I) Complexes by Combining Electroanalytical and Statistical Modeling,” *European Journal of Organic Chemistry*, 2022, 14, e202200064.
 440. K. Beaver, E. Gaffney, and S.D. Minter, “Understanding metabolic bioelectrocatalysis of the purple bacterium *Rhodobacter capsulatus* through substrate modulation,” *Electrochimica Acta*, 2022, 416, 140291.
 441. J. Burnett, H. Chen, J. Li, Y. Li, S. Huang, J. Shi, A. McCue, R. Howe, S.D. Minter, and X. Wang, “Supported Pt Enabled Proton-Driven NAD(P)⁺ Regeneration for Biocatalytic Oxidation,” *ACS Applied Materials and Interfaces*, 2022, 14, 20943-20952.
 442. D. Powell, Z. Rhodes, X. Zhang, E.J. Miller, M. Jonely, K.R. Hansen, C.I. Nwachukwu, A.G. Roberts, H. Wang, R. Noriega, S.D. Minter, and L. Whittaker-Brooks, “Photoactivation Properties of Self-n-Doped Perylene Diimides: Concentration-dependent Radical Anion and Dianion Formation,” *ACS Materials Au*, 2022, 2, 482-488.
 443. S. Blank, Z. Nguyen, D. Boucher, and S.D. Minter, “Electrochemical Cascade Reactions for Electro-Organic Synthesis,” *Current Opinion in Electrochemistry*, 2022, 35, 101049.
 444. Y. Xi, S.D. Minter, S. Banta, and S. Calabrese Barton, “Markov State Study of Electrostatic Channeling within the Tricarboxylic Acid Cycle Supercomplex,” *ACS Nanoscience Au*, 2022, 2, 414-421.
 445. R.G. Edwards, I. Krieger, M.P. Halling, S.D. Minter, T.D. Sparks, and D. Schurig, “Additive-Manufactured, Highly-Conductive Metasurfaces, with Application Enabling Secondary Properties, for Microwave Waveguide Components,” *IEEE Access*, 2022, 10, 58921-58929.
 446. M.C. Schulze, M.F. Rodriguez, J.D. McBrayer, D.P. Abraham, C.A. Appleby, I. Bloom, Z. Chen, A.M. Colclasure, A.R. Dunlop, C. Fang, K.L. Harrison, G. Liu, S.D. Minter, N.R. Neale, D. Robertson, A.P. Tornheim, S.E. Trask, G.M. Veith, A. Verma, Z. Yang, and C. Johnson, “Critical Evaluation of Potentiostatic Holds as Accelerated Predictors of Capacity Fade during Calendar Aging,” *Journal of the Electrochemical Society*, 2022, 169, 050531.

447. L. Ngashangva, B.A. Hemdan, M. El-Liethy, V. Bachu, S.D. Minteer, and P. Goswami, "Emerging Bioanalytical Devices and Platforms for Rapid Detection of Pathogens in Environmental Samples," *Micromachines*, 2022, 13, 1083.
448. N.S. Weliwatte, O. Simoska, M. Grattieri, D. Powell, M. Koh, Carol Korzeniewski, L. Whittaker-Brooks, and S.D. Minteer, "Deconvoluting Charge Transfer Mechanisms in Conducting Redox Polymer-Based Photobioelectrocatalytic Systems," *Journal of the Electrochemical Society*, 2022, 169, 085501.
449. J. Antonio, J. Franco, P. Z. Almeida, M.T. M. Polizeli, S. D. Minteer, and A. De Andrade, "Evaluation of TEMPO-NH₂ and Oxalate Oxidase Enzyme for Complete Ethylene Glycol Oxidation," *ChemElectroChem*, 2022, e202200181.
450. J. Franco, J. Rocha, S.D. Minteer, and A. de Andrade, "Assembly of an Improved Hybrid Cascade System for Complete Ethylene Glycol Oxidation: Enhanced Catalytic Performance for an Enzymatic Biofuel Cell," *Biosensors and Bioelectronics*, 2022, 216, 114649.
451. T. Vaid, M.E. Cook, J.D. Scot, M.B. Carazo, J. Ruchti, S.D. Minteer, M.S. Sigman, A.J. McNeil, and M.S. Sanford, "Theoretical and Experimental Investigation of Functionalized Cyanopyridines Yield an Extremely Low-Reduction-Potential Anolyte for Nonaqueous Redox Flow Batteries," *Chemistry- A European Journal*, 2022, e202202147.
452. Y. Holade, H. Guesmi, J.S. Filhol, Q. Wang, T. Pham, J. Rabah, E. Maisonhaute, V. Bonniol, K. Servat, S. Tingry, D. Cornu, K. Kokoh, T. Napporn, and S.D. Minteer, "Deciphering the Electrocatalytic Reactivity of Glucose Anomers at Bare Gold Electrocatalysts for Biomass-Fuelled Electrosynthesis," *ACS Catalysis*, 2022, 12, 12563-12571.
453. D. Boucher and S.D. Minteer, "Making molecules with microplastics," *Nature Synthesis*, 2022, 1, 751-752.
454. T. Tang, E. Jones, T. Wild, A. Hazra, S.D. Minteer, and M.S. Sigman, "Investigating Oxidative Addition Mechanisms of Allylic Electrophiles with Low-Valent Ni/Co Catalysts using Electroanalytical and Data Science Techniques," *Journal of the American Chemical Society*, 2022, 144, 20056-20066.
455. U. Ozuguzel, A. Aquino, R. Nieman, S.D. Minteer, and C. Korzeniewski, "Calculation of Resonance Raman Spectra and Excited State Properties for Blue Copper Protein Model Complexes," *ACS Sustainable Chemistry & Engineering*, 2022, 10, 14614-14623.
456. C. Peltier, Z. Rhodes, A. Macbeth, A. Milam, E. Carroll, G. Coates, and S.D. Minteer, "Suppressing Crossover in Non-Aqueous Redox Flow Batteries with Polyethylene-Based Anion Exchange Membranes," *ACS Energy Letters*, 2022, 7, 4118-4128.
457. M. Buckingham, X. Cao, S. Chang, H.Y. Chen, Q. Chen, S. Chinnathambi, M.A. Edwards, S. Fornasaro, J. Gooding, C. Hill, A. Hirano-Iwata, A. Kamali, F. Kanoufi, S. Krause, K. Kurihara, S. Lemay, S. Linfield, X. Liu, Y.T. Long, S.M. Lu, H. Ma, B.W. Mao, G. Meloni, S. Menkin, S. Minteer, S. O'Neill, P. Pandey, H. Ren, B. Slater, Z.Q. Tian, P. Unwin, D. Valavanis, A. Walcarius, K. Willets, Y. Wu, L. Xiao, W. Xu, W. Yang, Y.L. Ying, and Z. Zhang, "Emerging electrochemical methods at the nanointerface," *Faraday Discussions*, 2022, 233, 257-282.
458. P. Bohn, X. Cao, S. Chang, D. Chen, S. Confederat, D. Duleba, E. Peisan, M. Edwards, A. Ewing, L. Gundry, J. He, A. Kamali, F. Kanoufi, S.R. Dwon, N. Limani, S. Linfield, X. Lu, Y.T. Long, S.M. Lu, B.W. Mao, S. Minteer, P. Pandey, H. Ren, A. Ross, B. Slater, P. Unwin, S. Raghu, J. Venton, A. Walcarius, H. Wei, Y. Wu, L. Xiao, W. Xu, Y.L. Ying, P. Yu, and Z. Zhang, "Advanced nanoelectrochemistry

- implementation: from concept to application,” *Faraday Discussions*, 2022, 233, 354-373.
459. K. Rudman, B. Thapa, A. Tapash, M.S. Mubarak, K. Raghavachari, S. Hosseini, and S.D. Minter, “Mechanistic Studies of the Electrocatalytic Carbon–Bromine Cleavage and the Hydrogen Atom Incorporation from 1, 1, 1, 3, 3, 3-Hexafluoroisopropanol,” *Journal of the Electrochemical Society*, 2022, 169, 115502.
 460. R. Escalona-Villapando, K. Viveros-Palma, F. Espinosa-Lagunes, J.A. Roriguez-Morales, L.G. Arriaga, F. Macazo, S.D. Minter, and J. Ledesma-Garcia, “Comparative colorimetric sensor based on bi-phase γ - α -Fe₂O₃ and γ - α -Fe₂O₃/ZnO nanoparticles for lactate detection,” *Biosensors*, 2022, 12, 1025.
 461. N. S. Weliwatte, H. Chen, T. Tang, and S.D. Minter, “Three-stage conversion of chemically inert n-heptane to alpha-hydrazino aldehyde based on bioelectrocatalytic C-H bond oxyfunctionalization,” *ACS Catalysis*, 2023, 13, 56-572.
 462. B. Wang, S.D. Minter, and Y. Zhang, “Renewable electrons-driven bioinorganic nitrogen fixation: A superior route toward green ammonia?,” *Energy and Environmental Science*, 2023, 16, 404-420.
 463. J. Xu, M. Koh, S.D. Minter, and C. Korzeniewski, “In Situ Confocal Raman Microscopy of Redox Polymer Films on Bulk Electrode Supports,” *ACS Measurement Science Au*, 2023, 3, 127-133.
 464. O. Simoska, Z. Rhodes, E. Carroll, and S.D. Minter, “Biological Anolyte Regeneration System for Redox Flow Batteries,” *Chemical Communications*, 2023, 59, 2142-2145.
 465. K. Beaver, A. Dantanarayana, A. Zani, D. Lehto, and S.D. Minter, “Nitric oxide as a signaling molecule for biofilm formation and dispersal in mediated electron transfer microbial electrochemical systems,” *Journal of the Electrochemical Society*, 2023, 170, 045503.
 466. J. Franco, S.D. Minter, and A. de Andrade, “Development of an enhanced hybrid bi-catalytic electrode containing a bimetallic composite catalyst and immobilized enzyme for complete glucose electrooxidation,” *Biosensors and Bioelectronics X*, 2023, 100354.
 467. M. Herrera-Dominguez, K. Lim, I. Aguilar-Hernandez, A. Garcia-Garcia, S.D. Minter, N. Ornelas-Soto, and R. Garcia-Morales, “Detection of Acetaminophen in Groundwater by Laccase-Based Amperometric Biosensors Using MoS₂ Modified Carbon Paper Electrodes,” *Sensors*, 2023, 23, 4633.
 468. D. Boucher, Z.A. Nguyen, and S.D. Minter, “Exploring Electrolyte Effects on Metal-Alkyl Bond Stability: Impact and Implications for Electrosynthesis,” *Faraday Discussions*, 2023, 247, 143-154.
 469. I. Guynn, K. Beaver, E.M. Gaffney, A. Zani, A. Dantanarayana, and S.D. Minter, “*Salinivibrio* sp. EAGSL as a halophilic and ectoine producing bacteria for broad microbial electrochemistry applications,” *Cell Reports Physical Science*, 2023, 4, 101420.
 470. R. Gerulskis and S.D. Minter, “Reproducibly Defining Electrode Area of Carbon Paper Electrodes via Machine Cutting and High-Throughput Waxing,” *ECS Advances*, 2023, 2, 035501.
 471. M. Mazumder, R. Jadhav, and S.D. Minter, “Phenyl Acrylate Based Cross-Linked Anion Exchange Membranes For Non-aqueous Redox Flow Battery,” *ACS Materials Au*, 2023, 3, 557-568.
 472. D. Boucher, E. Carroll, Z. Nguyen, R. Jadhav, O. Simoska, K. Beaver, and S.D. Minter, “Bioelectrocatalytic Synthesis: Concepts and Applications,” *Angewandte Chemie*, 2023, 135, e202307780.

473. O. Simoska, D. Cummings, E. Gaffney, C. Langue, T. Primo, C. Weber, and C. Witt, and S.D. Minter, "Enhancing the Performance of Microbial Fuel Cells via Metabolic Engineering of *Escherichia coli* for Phenazine Production", *ACS Sustainable Chemistry and Engineering*, 2023, 11, 11855-11866.
474. D. Boucher, A. Pendergast, X. Wu, Z. Nguyen, R. Jadhav, S. Lin, H. White, and S.D. Minter, "Unraveling Hydrogen Atom Transfer Mechanisms with Voltammetry: Oxidative Formation and Reactivity of Cobalt Hydride," *Journal of the American Chemical Society*, 2023, 145, 17665-17677.
475. U. Ozuguzel, A. Aquino, R. Nieman, S.D. Minter, and C. Korzeniewski, "Resonance Raman Spectra and Excited State Properties of Methyl Viologen and Its Radical Cation from Time-Dependent Density Functional Theory," *Journal of Computational Chemistry*, 2023, 44, 2414-2423.
476. E. McKenzie, S. Hosseini, M. Tanwar, M. Neurock, S.D. Minter, and S. Jacobson, "Mechanistic Insights into Electrocatalytic Carbon–Bromine Bond Cleavage in Polybrominated Phenols," *Journal of Physical Chemistry*, 2023, 127, 17335-17344.
477. N. Kalita, S. Gogoi, S.D. Minter, and P. Goswami, "Advances in Bioelectrode Design for Developing Electrochemical Biosensors," *ACS Measurement Science Au*, 2023, 3, 404-433.
478. K. Beaver, A. Dantanayana, W. Loiu, M. Babst, and S.D. Minter, "Extracellular Poly(hydroxybutyrate) Bioplastic Production Using Surface Display Techniques," *ACS Materials Au*, 2024, 4, 174-178.
479. M. Brachi, W. El Housseini, K. Beaver, R. Jadhav, A. Dantanarayana, D. Boucher, and S.D. Minter, "Advanced Electroanalysis for Electrosynthesis," *ACS Organic & Inorganic Au*, 2023, in press.
480. M. Avanthay, B. Batanero, D. Boucher, C. Bondue, P. Broersen, R.C. Brown, R. Francke, T. Fuchigami, A. Kuhn, K. Lam, C.Y. Lin, T. Liu, L. Luo, S.D. Minter, K. Moeller, T. Nokami, R. Price, S. Rasul, and E. Sokalu, "Selective organic electrosynthesis," *Faraday Discussions*, 2023, 247, 70-78.
481. M. Avanthay, J. Beeler, B. Batanero, D. Boucher, R. Brown, V. Flexer, R. Francke, B. Frontana-Urbe, S. Hosseini, L. Luo, S.D. Minter, R. Price, N. Shida, J. Ramos-Villasenor, and T. Wirth, "New strategies in organic electrosynthesis," *Faraday Discussions*, 2023, 247, 125-131.
482. L. Ackermann, M. Avanthay, B. Batanero, D. Boucher, P. Broersen, E. Carroll, V. Flexer, R. Francke, T. Fuchigami, R. Gerulskis, D. Hickey, B. Hockin, A. Kuhn, M.J. Milner, S.D. Minter, K. Moeller, Z. Nguyen, T. Nokami, S. Rasul, N. Shida, E. Sokalu, K. Taniguchi, and N. von Wolff, "Interdisciplinary electrosynthesis," *Faraday Discussions*, 2023, 247, 168-178.
483. M. Avanthay, B. Batanero, C. Bondue, D. Boucher, P. Broersen, R. Brown, L. Chen, A. Choi, C. Fong, T. Fuchigami, D. Hickey, A. Kuhn, K. Lam, Y.J. Liao, T. Liu, S.D. Minter, K. Moeller, Z. Nguyen, and N. Shida, "Understanding and controlling organic electrosynthesis mechanisms," *Faraday Discussions*, 2023, 247, 206-215.
484. T. Ashraf, M. Avanthay, B. Batanero, C. Bondue, D. Boucher, R. Gerulskis, A. Kuhn, S.D. Minter, A. Mount, Z. Nguyen, R. Price, S. Rasul, N. Shida, E. Sokalu, and J.Z.Y. Tan, "Electrofuels," *Faraday Discussions*, 2023, 247, 246-253.
485. M. Avanthay, B. Batanero, P. Broersen, A. Choi, R. Francke, M.M. Menampambath, S.D. Minter, E. Sokalu, and J.Z.Y. Tan, "Materials for electrosynthesis," *Faraday Discussions*, 2023, 247, 291-296.

486. J. McBrayer, K. Fenton, and S.D. Minter, "Chemical contributions to silicon anode calendar aging dominate over mechanical contributions," *Frontiers in Batteries and Electrochemistry*, 2023, 2, 1308127.
487. K. McFadden, L.G. Kays, D.G. Bouchers, and S.D. Minter, "Bioelectrocatalysis for Synthetic Applications: Utilities and Challenges," *Current Opinion in Electrochemistry*, 2024, 44, 101458.
488. S. Khan, A. Ansari, D. Das, M. Brachi, W. El Housseini, S. Minter, and A. Miller, "Structure, dynamics and redox reactivity of an all-purpose flavodoxin," *Journal of Biological Chemistry*, 2024, 300, 107122.
489. Y. Gao, B. Jian, N.C. Friede, A.C. Hunter, D.G. Boucher, S.D. Minter, M.S. Sigman, S.E. Reisman, and P.S. Baran, "Electrocatalytic Asymmetric Nozaki-Hiyama-Kishi Decarboxylative Coupling: Scope, Applications, and Mechanisms," *Journal of the American Chemical Society*, 2024, 146, 4872-4882.
490. J. McBrayer, N. Schorr, M.N. Lam, M. Meyerson, K. Harrison, and S.D. Minter, "Scannign Electrochemical Microscopy Reveals that Model Silicon Anodes Demonstrate Global SEI Passivation Degradation during Calendar Aging," *ACS Applied Materials & Interfaces*, 2024, 16, 19663-19671.
491. W. El Housseini, E. Baiarashov, R. Gerulskis, A. Milam, and S.D. Minter, "Harnessing Redox Polymer Dynamics for Enhanced Glucose-Oxygen Coupling in Dual Biosensing and Therapeutic Applications," *ACS Sensors*, 2024, 9, 3357-3366.
492. E. Carroll, S. Parker, A. Fukushima, S. Downey, D. Miller, Z. Nguyen, D. Boucher, and S.D. Minter, "Improved Electrosynthesis of Biomass Derived Furanic Compounds via Nitroxyl Radical Redox Mediation," *ACS Chem & Bio Engineering*, 2024, 1, 427-438.
493. J. Tami, M. Mazumder, G. Cook, S.D. Minter, and A. McNeil, "Protocol for Evaluating Anion Exchange Membranes for Nonaqueous Redox Flow Batteries," *ACS Applied Materials and Interfaces*, 2024, 16, 53643-53651.
494. Z. Nguyen and S.D. Minter, "Utility of Immobilized Metal Salens as Electrocatalysts: Fuel Cells and Organic Electrosynthesis," *ChemElectroChem*, 2024, e202400445.
495. N. J. Ricks, M. Brachi, K. McFadden, R. G. Jadhav, S. D. Minter, and M. C. Hammond, "Development of a Malate Biosensor and Generation of Sensor-Containing Hydrogels and Living Cell-Based Sensors," *International Journal of Molecular Sciences*, 2024, 25, 11098.
496. A. Dantanarayana, W. El Hosseini, K. Beaver, M. Brachi, T. McFadden, and S.D. Minter, "Boosting the microbial electrosynthesis of formate by *Shewanella oneidensis* MR-1 with an ionic liquid co-solvent," *ACS Applied Bio Materials*, 2024, 7, 8434-8443.
497. M. Koh, A. Pendergast, J. Kitt, J. Harris, S.D. Minter, and C. Korzeniewski, "Confocal Raman Microscopy for Measuring In-Situ Temperature-Dependent Structural Changes in Poly(Ethylene Oxide) Thin Films," *Applied Spectroscopy*, 2025, <https://doi.org/10.1177/00037028241310>.
498. R. Gerulskis and S.D. Minter, "Terminator: A Software Package for Fast and Local Optimization of His-tag Placement for Protein Affinity Purification," *ACS Bio & Med Chem Au*, 2025, 5, 55-65.
499. M. Mazumder, H. Gerber, P.A. Kohl, and S.D. Minter, "Development and Evaluation of Butyl Norbornene Based Cross-Linked Anion Exchange Membranes for Enhanced Non-aqueous Redox Flow Battery Efficiency," *ACS Applied Materials & Interfaces*, 2025, 17, 4, 6315-6325.
500. S. Baek, S. Gutierrez-Portocarrero, R. Gerulskis, S.D. Minter, S.R. German, and H.S. White, "Detection of Carbon Dioxide Locally Generated by Formate

- Dehydrogenase Using Carbonate Ion-Selective Micropipette Electrodes,” *ACS Nano*, 2025, 19 (13), 13240-13249.
501. D. Das, W. El-Hosseini, M. Brachi, S.D. Minter, and A.F. Miller, “Electrochemical observation and pH dependence of all three expected redox-couples, in an extremophilic bifurcating electron transfer flavoprotein with fused subunits,” *JACS Au*, 2025, 5 (4), 1689-1706.
 502. R. Gerulskis, W. El Hosseini, E. Bayarashov, M. Karimi, and S.D. Minter, “Unveiling Pseudocapacitance: A Kinetic Treatment of the Pseudo-capacitive Biosensor,” *Chemical Communications*, 2025, 61(50), 9059-9062
 503. A. Milam, R. Gerulskis, J.J. Intano, and S.D. Minter, “Tri-catalytic organocatalyst-enzyme hybrid cascade for improving complete oxidation of glucose to carbon dioxide,” *ACS Catalysis*, 2025, 15, 11013-11021.
 504. A. Dantanarayana, K. Beaver, B. van Devener, N.B. Chandler, and S.D. Minter, “Understanding palladium ion induced bioelectrocatalysis in *Shewanella oneidensis* MR-1 through electrochemical and genetic interrogations,” *ACS Electrochemistry*, 2025, 1 (10), 2198-2208.
 505. L. Faria, S. Nascimento, F. Lima, G. Sedenho, T. Bertaglia, R. Iost, J. de Souza, S. Lanceros-Mendez, S. Minter, S. Cosnier, A. Furst, and F. Crespilho, “Bioelectrochemical systems: prioritizing energy density, long-term stability and validation,” *ACS Energy Letters*, 2025, 10, 4470-4490.
 506. R. Chen, S. Dakhili, R. Gerulskis, Y.Y. Zhao, S. Lockhart, L. T Tonoyan, A. Siraki, G. Huang, A. Kinnaird, D.H. Freed, S. Minter, E. Michelakis, J.R. Ussher, and G. Sutendra, “Cysteine Oxidation of a Redox Hub within Complex I can Facilitate Electron Transport Chain Supercomplex Formation,” *Journal of Biological Chemistry*, 2025, 301(9), 110555.
 507. J. Franco, J. Bonaldo, S.D. Minter, A. de Andrade, “Enhanced Biofuel Cells Based on a Hybrid Enzymatic/Bimetallic Composite for Complete Lactate Catalytic Electrooxidation,” *ACS Materials Au*, 2025, 5, 4, 732–742.
 508. M. Koh, J. Kitt, A. Pendergast, J. Harris, S.D. Minter, and C. Korzeniewski, “Unraveling Hydration- and Temperature-Induced Structural Transformations of Linear Poly(Ethylenimine) Using Raman Microscopy and Numerical Unmixing,” *Journal of Physical Chemistry C*, 2025, 129 (46), 20777-20786.
 509. J Li, S Robertshaw, S Huang, S Minter, X Wang, “Heterogeneous Catalysis of Large Biomolecules: Insights from Platinum Particle Size in NAD⁺ Regeneration,” *Physical Chemistry Chemical Physics*, 2026, 28, 2446-2453.
 510. X. Zhu, M.J. Kummer, C. Lubner, V. Kurashov, W. Carr, J.H. Golbeck, R.A. Niederman, L.G. Mourkh, S.D. Minter, P.G. Falkowski, and M. Vittadello, “A Photosynthetic-Respiratory Electron Transport Chain Chimera Based on Photosystem I and Cytochrome c Oxidase” *Proceedings of the National Academy of Science*, 2026, 123, e2524884123.
 511. N. Ricks, M. Brachi, F. Arun, E. Baierashov, S.D. Minter, and M. Hammond, “Fluorescent Biosensor-Guided Engineering of Enzyme Cascades for Electrochemical Applications,” *ACS Catalysis*, 2026, 16, 4729-4748.
 512. Y. Zhang, C.G. Edward, E. Keuhn, S.D. Minter, and R. Wang, “Scalable Transfer of DNA Origami-Directed Nanoparticle Arrays onto Functional Surfaces Using Thermal Release Tape,” *Particle & Particle System Characterization*, 2026, 43(1), e00205.
 513. N. Ricks, M. Pence, M. Brachi, and S.D. Minter, “High-Throughput Optical Analysis to Inform Design of Electrochemical Biosensors,” *ACS Measurement Science Au*, 2026, 6, 567-578.

514. R. Jadhav, V. Kamaja, and S.D. Minter, "Electroenzymatic cascades for nitrogen upgrading: beyond ammonia towards value added nitrogen chemicals," *ChemCatChem*, 2026, 18, e01835.
515. M. Pence, Z. Nguyen, L. Kays, D. Boucher, J. Rodriguez-Lopez, and S.D. Minter, "An Automated Electrochemistry Platform for Accelerating the Characterization of Enzymatic Electrochemistry," *ACS Electrochemistry*, 2026, 2, 1519-1526.
516. W. El Hosseini, R. Gerulskis, N. Behara, H. Guan, R. Jadhav, Z. Nguyen, E. Baierashov, M. Pence, V. Kamaja, T. Larkin, L. Luo, and S.D. Minter, "Employing AC and DC Electrolysis to Modulate Electroenzymatic Pathways for Efficient and Stereoselective H-D Exchange," *Journal of the American Chemical Society*, 2026, 148, 22641-22652.
517. H. S. Dinani, B. Zhang, M. Karimi, R. Gerald, S.D. Minter, and J. Huang, "pH-compensated hydrogen peroxide quantification using a dual-modal fiber-optic probe," *Sensors & Actuators: B. Chemical*, 2026, 464, 140196.
518. E. Carroll, M. Pence, E. Winterholler, T. Sparks, and S.D. Minter, "Data-Driven Electrochemistry Reveals the Impact of Hydrophobicity on Aptamer Cross Reactivity," *ACS Measurement Science Au*, 2026, 6, 752-765.
519. M. Brachi and S.D. Minter, "Challenges and opportunities in integrating biocatalysis with photo- and electrocatalysts for scalable synthesis," *Nature Synthesis*, 5, 801-803.
520. Z. Nguyen, N. Quah, M. Tanwar, K. McFadden, D. Boucher, M. Neurock, and S.D. Minter, "'Innocent' Electrolytes Can Influence Organic Electrosynthetic Selectivity," *ChemElectroChem*, 2026, 6, 567-578.
521. A. Milam, J.J. Intano, and S.D. Minter, "Terminal Starch Oxidation via Hybrid Organic-Enzymatic Bioanode for Renewable Carbohydrate Conversion," *Green Chemistry*, 2026, 28, 11511 - 11521.
522. Y. Wang, W. Dong, M. Wei, S. Song, Z. Huang, Y. Liu, S.D. Minter, and H. Chen, "Hybrid Microbial-Enzymatic Electrosynthesis for De Novo Decanoic Acid Production from CO₂," *JACS Au*, 2026, in press.
523. A. Fitch, I. Fritsch, C. Korzeniewski, S.D. Minter, and J. Leddy, "Lessons Learned Teaching Electrochemistry," *Journal of the Electrochemical Society*, 2026, 173, 115502.
524. L. Zhou, Y. Zhang, and S.D. Minter, "Closing the Nitrogen Loop in Groundwater with Biohybrid Technologies," *Trends in Biotechnology*, 20206, in press.
525. L. Wey, M. Brachi, and S. D. Minter, "Reduced mediators released by cyanobacteria during exoelectrogenesis detected using differential pulse voltammetry," *Bioelectrochemistry*, 2026, 172, 109374.
526. S. Jackson, M. Koh, S.D. Minter, and C. Bischak, "Electrolyte pH Drives a Crossover to Proton-Coupled Doping in n-Type Organic Mixed Conductors," *Advanced Functional Materials*, 2026, in press.

VII. Books

1. O. Simosk and S.D. Minter, "Techniques in Electroanalytical Chemistry," ACS eBook, ACS: Washington DC, 2022.

VIII. Books Edited

1. *Microfluidic Techniques: Reviews and Protocols*. [In Series: *Methods in Molecular Biology*; 2006; vol. 321]. Humana Press: Totowa, NJ, 2006.

2. Alcoholic Fuels. [In Series: Chemical Industries; 2006; vol. 112]. CRC Press: New York, NY, 2006.
3. Electrochemistry of Novel Electrode Materials for Energy Conversion and Storage [In Series: ECS Transactions; 2008; vol. 6]. Electrochemical Society: Pennington, NJ, 2008. (Co-Editors: J. Weidner, K. Zaghib, and N. Dudney)
4. Biological Fuel Cells 3 [In Series: ECS Transactions; 2008; vol. 13]. Electrochemical Society: Pennington, NJ, 2008. (Co-Editors: S. Calabrese Barton, H.C. DeLong, and K. Kano)
5. Bioelectroanalysis [In Series: ECS Transactions; 2009; vol. 16]. Electrochemical Society: Pennington, NJ, 2009. (Co-Editors: H. DeLong and J. Burgess)
6. Role of Electrochemistry in Addressing Climate Change [In Series: ECS Transactions; 2009; vol. 19]. Electrochemical Society: Pennington, NJ, 2009. (Co-Editor: S. Narayanan)
7. Enzyme Stabilization and Immobilization: Methods and Protocols. [In Series: Methods in Molecular Biology; 2010; vol. 679]. Humana Press: New York, NY, 2010.
8. Physical, Electroanalytical, and Bioanalytical Electrochemistry [In Series: ECS Transactions; 2010; vol. 25]. Electrochemical Society: Pennington, NJ, 2010. (Co-Editors: P. Kulesza and P. Trulove)
9. Physical and Analytical Electrochemistry [In Series: ECS Transactions; 2010; vol. 28(18)]. Electrochemical Society: Pennington, NJ, 2010.
10. Physical and Analytical Electrochemistry [In Series: ECS Transactions; 2011; vol. 33(26)]. Electrochemical Society: Pennington, NJ, 2011.
11. Enzyme Stabilization and Immobilization: Methods and Protocols. 2nd edition. [In Series: Methods in Molecular Biology; 2017; vol. 1504]. Springer: New York, NY, 2017.
12. Bioelectrocatalysis: From Electron Transfer Processes to Emerging Technological Applications. Wiley: New York, NY, 2026.
13. Enzyme Stabilization and Immobilization: Methods and Protocols. 3rd edition. [In Series: Methods in Molecular Biology; 2026; vol. 3019]. Springer: New York, NY, 2026.

IX. Patents and Patent Applications

1. D.P. Hickey and S.D. Minter, U.S. Patent #11,44,166, "Redox enzyme-embedded pyrene-poly(ethylenimine) hydrogel electrode for electrosynthesis," issued September 13, 2022.
2. C. Curchoe and S.D. Minter, U.S. Patent #10,090,116, "Biological supercapacitor structure and method for manufacturing and use of the same," issued October 2, 2018.
3. S. Minter and S. Svoboda, U.S. Patent #9,285,331 "Systems and methods for detecting materials in food products," issued March 15, 2016.
4. Y. Ulyanova, S. Minter, S. Singhal, S. Svoboda, J. Wei, U.S. Patent# 9,509,009, "Enzyme catalyzed oxidation of hydrocarbons," issued November 29, 2016.
5. S.D. Minter and G. Lee, PCT Application # WO2015-US28799, "Magnetically-modified conducting polymer composites and methods of preparation thereof," filed May 1, 2015.
6. Y. Ulyanova, S. Minter, S. Singhal, S. Svoboda, J. Wei, U.S. Patent Application 20150050566, "Enzyme catalyzed oxidation of hydrocarbons," filed March 5, 2014.
7. R. Willits, V.K. Nagarajan, A.B. Harkins, and S.D. Minter, U.S. Patent Application 20150125899, "Fluorescence-assisted counting apparatus for qualitative and/or

- quantitative measurement of fluorescently tagged particles including cells or cell organelles,” filed November 3, 2013.
8. S. Topcagic, B. Treu, and S.D. Minter, U.S. Patent #8,859,151, “Immobilized enzymes in biocathodes,” issued October 14, 2014.
 9. S.D. Minter and R. Arechederra, U.S. Patent #8,845,879, “Organelle bioelectrodes and methods of making and using the same,” issued September 30, 2014.
 10. J. Ulyanova and S.D. Minter, “Drug delivery from electroactive molecularly imprinted polymer,” issued April 22, 2014.
 11. S.D. Minter, N. Akers, and C.M. Moore, Korean Patent #1901224672: “Enzyme Immobilization for Use in Biofuel Cells and Sensors,” issued January 15, 2013.
 12. S.D. Minter, N. Akers, and C.M. Moore, Korean Patent #10-1086928: “Enzyme Immobilization for Use in Biofuel Cells and Sensors,” issued November 18, 2011.
 13. S.D. Minter, N. Akers, and C.M. Moore, Japanese Patent no 4878756: “Enzyme Immobilization for Use in Biofuel Cells and Sensors,” issued December 9, 2011.
 14. S.D. Minter, R. Duma, and B.L. Treu, U.S. Patent #8,415,059: "Direct Electron Transfer of Enzymes in Bioanodes, Biocathodes, and Biofuel Cells," issued April 9, 2013.
 15. S.D. Minter and J. Ulyanova, U.S. Patent #8,252,045, “Drug Delivery from Electroactive Molecularly Imprinted Polymers,” issued August 28, 2012.
 16. S.D. Minter and J. Ulyanova, U.S. Patent #8,216,300, “Drug Delivery from Electroactive Molecularly Imprinted Polymer,” issued July 10, 2012.
 17. S.D. Minter, N. Akers, and C.M. Moore, U.S. Patent #8,048,660, “Immobilized Enzymes and Uses Thereof,” issued November 1, 2011.
 18. S. Minter, U.S. Provisional Patent Application #61/417,123, “Organelle Bioelectrodes and Methods of Making and Using the Same,” filed November 24, 2010.
 19. S. Minter, R.S. Martin, and C.M. Moore, U.S. Patent # 7,709,134, “Microfluidic biofuel cell,” issued May 4, 2010.
 20. J. Leddy and S.D. Minter, U.S. Patent #7,691,638, “Methods for determining electron transfer rates in metalloproteins,” issued April 6, 2010.
 21. S.D. Minter, N. Akers, and C.M. Moore, U.S. Patent Application 12/576,014, “Immobilized Enzymes and Uses Thereof,” filed on October 8, 2009.
 22. N. Akers, C.M. Moore, and S.D. Minter, U.S. Patent #7,638,228 , “ Enzyme immobilization for use in biofuel cells and biosensors,” issued December 29, 2009.
 23. J. Leddy, S.D. Minter, and W.L. Gellett, U.S. Patent #7,585,543, “Magnetic materials and metallic particles and methods of making same,” issued September 8, 2009.
 24. W.L. Gellett, J. Shumacher, T.L. Bucholz, D.B. Le, D.A. Busekrus, and S.D. Minter, U.S. Provisional Application No. 61/100,766: “Direct Alcohol Anion Fuel Cell with Biocathode,” filed on September 29, 2008.
 25. S.D. Minter and R. Arechederra, International Patent Application No. 2007/73596: “Organelles in Bioanode, Biocathodes, and Biofuel Cells,” filed on July 16, 2007.
 26. S.D. Minter, R. Duma, and B.L. Treu, International Patent Application No. 2006/60492: "Direct Electron Transfer of Enzymes in Bioanodes, Biocathodes, and Biofuel Cells," filed on November 2, 2006.
 27. S.D. Minter, R. Duma, and T.L. Klotzbach, International Patent Application No. 2006/60487: "Enzymes Immobilized in Hydrophobically Modified Polysaccharides," filed on November 2, 2006.
 28. S.D. Minter, R.S. Martin, and C.M. Moore, U.S. Patent Application No. 10/598,951: "Microfluidic Biofuel Cells," filed on September 15, 2006.

29. S.D. Minter and R. Arechederra, U.S. Provisional Application No. 60/807,419: "Organelles in Bioanode, Biocathodes, and Biofuel Cells," filed on July 14, 2006.
30. S.D. Minter and B.L. Treu, U.S. Provisional Application No. 60/784,650: "Direct Electron Transfer of Enzymes in Bioanodes and Biocathodes," filed on March 22, 2006.
31. S.D. Minter and B.L. Treu, U.S. Provisional Application No. 60/732,742: "Direct Electron Transfer of Enzymes in Bioanodes, Biocathodes, and Biofuel Cells," filed on November 2, 2005.
32. S.D. Minter and T.L. Klotzbach, U.S. Provisional Application No. 60/732,473: "Enzymes Immobilized in Hydrophobically Modified Polysaccharides," filed on November 2, 2005.
33. J. Leddy and S. Minter, U.S. Patent No. 6,949,179: "Magnetically Modified Electrodes and Articles Produced Thereby," issued September 27, 2005.
34. S.D. Minter and J. Ulyanova, U.S. Provisional Application No. not yet assigned: "MEMS-based Smart Drug Delivery Device and Method," filed on March 11, 2005.
35. S.D. Minter, R.S. Martin, and C.M. Moore, International Patent Application No. 05/001827: "Microfluidic Biofuel Cells," filed on January 19, 2005.
36. S.D. Minter, S. Topcagic, and B.L. Treu, International Patent Application No. 04/037151: "Immobilized Enzymes in Biocathodes," filed on November 4, 2004.
37. S.D. Minter, S. Topcagic, and B.L. Treu, U.S. Patent Application No. 10/931,147: "Immobilized Enzymes in Biocathodes," filed on August 31, 2004.
38. S.D. Minter, R.S. Martin, and C.M. Moore, U.S. Provisional Application No. 60/544,260: "Microfluidic Biofuel Cell," filed March 15, 2004.
39. S. D. Minter, N.L. Akers, and C.M. Moore, International Patent Application No. 03/37336: "Enzyme Immobilization for Use in Biofuel Cells and Sensors," filed November 21, 2003.
40. S.D. Minter and S. Topcagic, U.S. Provisional Application No. 60/517,626: "Improved Biocathode for Use in Fuel Cells," filed November 5, 2003.
41. S. D. Minter, International Patent Application No. 03/23587: "Magnetically-Enhanced Electrolytic Cells for Generating Chlor-Alkali and Methods Related Thereto," filed July 31, 2003.
42. S. Minter, N.L. Akers, and C.M. Moore, U.S. Patent Application No. 10/617,452: "Enzyme Immobilization for Use in Biofuel Cells and Sensors," filed on July 11, 2003.
43. S. Minter, N.L. Akers, and C.M. Moore, U.S. Provisional Application No. 60/486,076: "Enzyme Immobilization for Use in Biofuel Cells and Sensors," filed on July 10, 2003.
44. J. Leddy and S. Minter, U.S. Patent Application No. 10/406,000: "Methods for Exploiting Electron Transfer Rates in Metalloproteins," filed on April 3, 2003.
45. J. Leddy and S. Minter, U.S. Patent Application No. 10/406,002: "Flux Enhancement of Organic Radicals," filed on April 3, 2003.
46. S.D. Minter, U.S. Provisional Application No. 60/429,829: "Biofuel Cells that Yield High Power Densities Utilizing Immobilized Dehydrogenase Enzymes," filed on November 27, 2002.
47. S. D. Minter, U.S. Patent Application No. 10/210,259: "Magnetically-Enhanced Electrolytic Cells for Generating Chlor-Alkali and Methods Related Thereto," filed July 31, 2002.
48. J. Leddy and S.D. Minter, U.S. Provisional Patent, "Spin Diffusion in sMetalloprotein Electron Transfer", April 3, 2002.

49. S. Amarasinghe, S.D. Minter, L.A. Zook, D. Dunwoody, C. Spolar, H. Chung, and J. Leddy, U.S. Patent No. 6,355,166 B1: "Magnetically Enhanced Composite Materials and Methods for Making and Using the Same," March 12, 2002.
50. S.D. Minter, W. Gellett, and J. Leddy, International Patent Application No. US01/19368: "New Magnetic Materials and Metallic Particles and Methods of Making Same," filed June 19, 2001. (84 National filings)
51. J. Leddy, L. Zook, S. Amarasinghe, S. Minter, D. Dunwoody, H. Chung, and C. Spolar, International Patent Application No. US00/28242: "Magnetically Modified Fuel Cells," filed October 13, 2000. (82 National filings)
52. S. Minter and J. Leddy, U.S. Provisional Patent Application No. 60/212,630: "New Magnetic Materials," filed June 19, 2000.
53. S. Amarasinghe, S. Minter, L.A. Zook, D. Dunwoody, C. Spolar, H. Chung, and J. Leddy, International Patent Application No. US00/15041: "Field Enhanced Composite Materials and Methods for Making and Using the Same," filed June 15, 2000.
54. S. Amarasinghe, S. Minter, D. Dunwoody, H. Chung, and J. Leddy, U.S. Provisional Application No. 60/208,322: "Magnetically Modified Fuel Cells," filed June 1, 2000.
55. S. Minter, S. Amarasinghe, L.A. Zook, D. Dunwoody, C. Spolar, H. Chung, and J. Leddy, U.S. Provisional Patent Application No. 60/159,374: "Modified Fuel Cells," filed October 14, 1999.
56. S. Amarasinghe, S. Minter, L.A. Zook, and J. Leddy, U.S. Provisional Patent Application No. 60/139,318: "Gradient Interface Composites," filed June 15, 1999.

X. **Presentations**

1. S.D. Minter, "Powering Wearable/Implantable Devices with the Body's Own Chemistry," NetxGen Precision Health Discovery Series, Rolla, MO, July 21, 2026. (invited)
2. S.D. Minter, "Transitioning Bioelectrocatalysis from Analytical Applications to Electrifying the Chemical Industry," Bioelectrochemical Society Meeting, Bari, Italy, June 25, 2026. (invited keynote)
3. S.D. Minter, "Combining Biocatalysis with Electrochemistry for Green Chemical Production," 30th Annual Green Chemistry and Engineering Conference, San Antonio, TX, June 16, 2026. (invited)
4. S.D. Minter, "Electrifying Chemical Synthesis," 5th International Conference of Hydrogen Atom Transfer, Rome, Italy, June 3, 2026. (invited)
5. S.D. Minter, "Transitioning from Biosensors to Energy Conversion and Electrification of the Chemical Industry," Electrochemical Society Meeting, Seattle, WA, May 25, 2026. (invited keynote)
6. S.D. Minter, "Combining Biocatalysis with Electrochemistry for Green Chemical Production," Colorado School of Mines Student Organized Seminar, Golden, CO, May 1, 2026. (invited)
7. S. D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Texas Tech University ECS Student Chapter Seminar, April 22, 2026. (invited)
8. S.D. Minter "Transitioning from Biosensors to Energy Conversion and Electrification of the Chemical Industry," Kansas State University Chemistry Department Seminar, Manhattan, KS, April 16, 2026. (invited)
9. S.D. Minter, "Bioelectrocatalysis for Organic Electrosynthesis," Organic Reactions Chemical Society meeting, Santa Rosa, CA, April 14, 2026. (invited)

10. S. Minter, "Enzymatic biofuel cell for oceanic energy harvesting," DARPA BLUE meeting, Baltimore, Maryland, April 9, 2026. (invited)
11. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Stanford University Chemistry Colloquium, April 6, 2026. (invited)
12. S.D. Minter, "Designing the electrode/biocatalyst interface for electrocatalysis," American Chemical Society Meeting, Atlanta, GA, March 25, 2026. (invited)
13. S.D. Minter, "Evolution of ACS Publishing in the 21st Century," American Chemical Society Meeting, Atlanta, GA, March 23, 2026. (invited)
14. S.D. Minter, "Strategies for Supporting Extracellular Electron Transfer between Microbes and Electrode Surfaces," Army Research Office Workshop on Biogeobatteries, February 18, 2026. (invited)
15. S.D. Minter, "Bio-electrocatalysis for Self-Powered Sensing Applications for Defense Use," U.S. Department of War Defense Threat Reduction Agency Webinar, February 4, 2026. (invited)
16. S.D. Minter, "Biocatalysis for Electrochemical Applications," ChemCatalysis Webinar on Biocatalysis: Sustainable innovations in catalysis for a greener future, November 21, 2025. (invited)
17. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Center for Environmentally Beneficial Catalysis – University of Kansas, November 11, 2025. (invited)
18. S.D. Minter, "Enzymatic Bioelectrocatalysis for Organic Electrosynthesis," Hutchison Distinguished Lecture Series, University of Rochester, Rochester, NY, November 6, 2025. (invited)
19. S.D. Minter, "Substrate Channeling in Enzymatic Cascades for Energy Conversion Applications," Hutchison Distinguished Lecture Series, University of Rochester, Rochester, NY, November 5, 2025. (invited)
20. S.D. Minter, "Bio-electrochemical Alternatives to Haber Bosch," Hutchison Distinguished Lecture Series, University of Rochester, Rochester, NY, November 4, 2025. (invited)
21. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Cincinnati Chemistry Department Seminar, October 31, 2025. (invited)
22. S.D. Minter, "Substrate Channeling in Catalytic Cascades for Energy Conversion Applications," University of Iowa Department of Biochemistry and Molecular Biology Vestling Lecture, October 23, 2025. (invited)
23. S.D. Minter, "Substrate Channeling in Catalytic Cascades for Energy Conversion Applications," Biological Sciences Department Seminar, Missouri University of Science and Technology, October 20, 2025. (invited)
24. S.D. Minter, "Bioelectrocatalysis for Organic Electrosynthesis," Electrochemical Society Meeting, Chicago, IL, October 16, 2025. (invited)
25. M. Pence and S.D. Minter, "An Automated Platform for Studying Enzyme-Modified Electrodes for Bioelectrocatalysis," Electrochemical Society Meeting, Chicago, IL, October 13, 2025.
26. Z. Nguyen, M. Pence, and S.D. Minter, "Development of Polymer-Modified Electrodes for Organic Electrosynthesis," Electrochemical Society Meeting, Chicago, IL, October 13, 2025.
27. S.D. Minter, "Using Genetically Engineered Cyanobacteria for Photoelectrocatalytic Nitrogen Reduction," Electrochemical Society Meeting, Chicago, IL, October 13, 2025. (invited)
28. S.D. Minter, "Combining Biocatalysis with Electrochemistry for Organic Synthesis," New Jersey Institute of Technology Chemistry Department Seminar, Newark, NJ, October 1, 2025. (invited)

29. S.D. Minter, "Bioelectrocatalysis for Organic Electrosynthesis," Bioelectrochemical Society Workshop, Hiroshima, Japan, September 26, 2025. (invited)
30. W. El Hosseini, R. Gerulskis, Z. Nguyen, L. Luo, and S.D. Minter, "Electroenzymatic Strategies for Efficient and Stereoselective Hydrogen Isotope Exchange in Drug-Like Molecules," International Society of Electrochemistry Annual Meeting, Mainz, Germany, September 12, 2025.
31. S.D. Minter, "Bioelectrocatalytic Nitrogen Reduction for Value Added Products," International Society of Electrochemistry Annual Meeting, Mainz, Germany, September 11, 2025. (invited keynote)
32. S.D. Minter, "Combining Biocatalysis with Electrochemistry for Organic Synthesis," Electrifying Organic Synthesis Conference, Max Planck Institute of Chemical Energy Conversion, Mülheim de Ruhr, Germany, September 5, 2025. (invited keynote)
33. S.D. Minter, "Nanomaterials for Enzymatic Bioelectrocatalysis," NanoMat2025 of the European Nanoscience and Nanotechnology Association, Zagreb, Croatia, September 3, 2025. (invited plenary)
34. S.D. Minter, "Electroanalytical characterization of enzyme biocatalysts," American Chemical Society National Meeting, Washington, DC, August 18, 2025. (invited keynote)
35. S.D. Minter, "Utilizing enzymes for selective electrosynthesis of nitrogen containing compounds," American Chemical Society National Meeting, Washington, DC, August 18, 2025. (invited)
36. S.D. Minter, "Enzymatic Bioelectrocatalysis of Biomass," Telluride Science Workshop on Biomass Valorization Through Electro-Conversion Technologies, Telluride, CO, June 26, 2025. (invited)
37. S.D. Minter, "Enzymatic Bioelectrocatalysis for Sensing, Energy, and Electrosynthesis Applications," University of Washington Institute of Protein Design Seminar, Seattle, WA, June 10, 2025. (invited)
38. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," Engineering Biology Solutions for Energy and Power Challenges Meeting, Edinburgh, UK, June 3, 2025. (invited keynote)
39. S.D. Minter, "Tutorials in Bioelectrochemistry for Sensing, Energy Conversion, and Electrosynthesis," Electrochemical Society Meeting, Montreal, Canada, May 22, 2025. (invited)
40. S.D. Minter, "Role of Bioelectrocatalysis in Climate Change," BIG Symposium, North Carolina State University, Raleigh, NC, May 16, 2025. (invited)
41. S.D. Minter, "Enzymatic Bioelectrocatalysis for Organic Electrosynthesis," Scripps Research Institute Novartis Lecture, May 2, 2025. (invited)
42. S.D. Minter, "Enzymatic Bioelectrocatalysis for Organic Electrosynthesis," Enabling Technologies for Organic Chemistry at University of Amsterdam, virtual presentation, April 9, 2025. (invited plenary)
43. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Sir Run Run Shaw Lecture at Stonybrook University, Stonybrook, NY, April 7, 2025. (invited)
44. S.D. Minter, "Using Ionic Liquids to Improve Bioelectrochemical Carbon Dioxide Reduction," International Society of Electrochemistry Meeting, Natal, Brazil, March 25, 2025. (invited)
45. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," CURB Seminar, Washington University Department of Energy, Environmental, and Chemical Engineering, March 5, 2025, St. Louis, MO. (invited)
46. S.D. Minter, "Improving the Selectivity and Efficiency of Organic Electrosynthesis," Pittcon, March 3, 2025, Boston, MA. (invited)

47. S.D. Minter, "Redox Polymers for Analytical Applications," Pittcon, March 2, 2025, Boston, MA. (invited)
48. S.D. Minter, "Developing and Evaluating Anion Exchange Membranes for Non-aqueous Redox Flow Batteries," Materials Research Society Fall Meeting, December 3, 2024. (invited)
49. S.D. Minter, "Surface Display Techniques for Bioelectrocatalysis," Materials Research Society Fall Meeting, December 2, 2024. (invited)
50. S.D. Minter, "Design of Electrode Materials for Contact Lens-based Lactate Biofuel Cells," Wearable and Implantable Sensors and Electrochemical Devices 2024, Lyon, France, November 28, 2024. (invited plenary)
51. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Missouri Water Center Seminar in Environmental Engineering/Mizzou iChange/Aspire Seminar, Columbia MO, November 15, 2024. (invited)
52. S.D. Minter, "Biological Approaches to Electrifying the Chemical Industry," Gilead Process Chemistry Seminar, November 12, 2024, San Francisco, CA. (invited)
53. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Arkansas Chemistry Department Seminar, October 28, 2024, Fayetteville, AR. (invited)
54. S.D. Minter, "Bioelectrocatalysis for Sustainability Applications," RENEW Institute Spotlight Symposia, October 26, 2024, Buffalo, NY. (invited)
55. J.D. McBrayer, N.S. Schoff, K.L. Harrison, E. Alicorn, N. Lam, M. Meyerson, and S. Minter, "Silicon SEI Instability and its Effect on Calendar Aging," Electrochemical PRIME meeting, October 8, 2024. Honolulu, HI.
56. L. Kays, D. Boucher, A. Kumar, P. Gupta, and J. Lewis, "Non-Native Bioelectrocatalytic C-C and C-N Bond Formation via Cobalamin Dependent Enzymes," Electrochemical PRIME meeting, October 8, 2024. Honolulu, HI.
57. M. Koh, E. Baierashov, J. Kitt, C. Kozeniewski, J.M. Harris, and S.D. Minter, "Immobilization of Dimethylferrocene-Modified Linear Poly(ethylenimine) on Epoxy-Terminated Supports for in-situ Confocal Raman Microscopy," Electrochemical PRIME meeting, October 9, 2024. Honolulu, HI.
58. Z. Nguyen, D. Boucher, K. McFadden, and S.D. Minter, "Electrolyte Cage Effects in Organic Electrosynthesis: Measuring and Driving Selectivity," Electrochemical PRIME meeting, October 7, 2024. Honolulu, HI.
59. K. McFadden and S.D. Minter, "Measuring Hydride Transfer Kinetics to MHAT Relevant Catalysts Using Cyclic Voltammetry," Electrochemical PRIME meeting, October 7, 2024. Honolulu, HI.
60. E. Carroll, E. Winterholler, T. Sparks, and S.D. Minter, "Electrochemical Aptasensors for Progesterone Detection," Electrochemical PRIME meeting, October 8, 2024. Honolulu, HI.
61. S.D. Minter, "Combining biocatalysis and electrochemistry for organic electrosynthesis," Electrochemical PRIME meeting, October 9, 2024. Honolulu, HI. (invited)
62. S.D. Minter, "Bioengineering Cyanobacteria for Electrosynthesis," Electrochemical PRIME meeting, October 8, 2024. Honolulu, HI. (invited)
63. S.D. Minter, "Biological Approaches to Electrifying the Chemical Industry," ETOS Annual Meeting, Frankfurt, Germany, October 2, 2024. (invited keynote)
64. S.D. Minter, "Toward Electrification of the Chemical Industry," Southern California Section of the American Chemical Society Sustainability Seminar, September 27, 2024. (invited))

65. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Electrochem 2024, Pacific Northwest Section of the Electrochemical Society, Eugene, OR, September 19, 2024. (invited keynote)
66. S.D. Minter, "Electrifying the Chemical Industry," Missouri University of Science and Technology Chemical and Biochemical Engineering Department Seminar, Rolla, MO, September 16, 2024. (invited)
67. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Missouri-Columbia Chemistry Department Colloquium, Columbia, MO, September 11, 2024. (invited)
68. S.D. Minter, "Enzyme Cascades for Fuel Cell and Electrosynthesis Applications," 11th International Congress on Biocatalysis, Hamburg, Germany, August 28, 2024. (invited keynote)
69. S.D. Minter, "From cofactor regeneration to enzyme cascades: using enzymes as electrocatalysts for electrosynthesis," American Chemical Society National Meeting, Denver, CO, August 19, 2024. (invited)
70. S.D. Minter, "Developing electroanalytical techniques for studying native and engineered oxidoreductase enzymes," American Chemical Society National Meeting, Denver, CO, August 20, 2024. (invited)
71. S.D. Minter, "Cell-free Bioelectrocatalysis for Electrosynthesis," Society of Industrial Microbiology Annual Meeting, Boston, MA, August 5, 2024. (invited)
72. S.D. Minter, "Direct and Mediated Nitrogenase Bioelectrocatalysis," International Conference on Coordination Chemistry 45, Fort Collins, CO, July 29, 2024. (invited)
73. S.D. Minter, "Biological Approaches to Electrifying the Chemical Industry," University of Texas-El Paso Electrochemistry Workshop, El Paso, TX, July 1, 2024. (invited)
74. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Chemistry Department Seminar, Kyung Hee University, Seoul, South Korea, June 26, 2024. (invited)
75. S.D. Minter, "Enzymatic Bioelectrocatalysis for Organic Electrosynthesis," Center for Electron Transfer Workshop, Seoul National University, Seoul, South Korea, June 25, 2024. (invited)
76. S.D. Minter, "Bioelectrocatalysis for Energy Conversion Applications," 2nd Europe=USA Symposium on Energy, Society of Chemical Industry, London, England, June 21, 2024. (invited)
77. S.D. Minter, "Biological Approaches to Electrifying the Chemical Industry," Merck Green * Sustainable Science Symposium, Ralway, NJ, June 17, 2024. (invited)
78. S.D. Minter, "Using Electroanalytical Techniques to Study Inhibition Mechanisms in Enzymes," Electrochemical Society Meeting, San Francisco, CA, May 29, 2024. (invited)
79. S.D. Minter, "Improving the Selectivity and Efficiency of Synthetic Organic Electrosynthesis," Electrochemical Society Meeting, San Francisco, CA, May 28, 2024. (invited)
80. S.D. Minter, "Analyzing Cyclic Voltammetry to Understand (Bio)Electrocatalysis for Electrosynthesis," Electrochemical Society Meeting, San Francisco, CA, May 27, 2024. (invited keynote)
81. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," BioCity Frontiers of Science Lecture, University of Turku, Turku, Finland, May 16, 2024. (invited)
82. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Wisconsin Energy Institute Electrochemical Synthesis Workshop, Madison, WI, May 2, 2024. (invited)

83. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Rensselaer Polytechnic Institute Chemistry Department Seminar, Troy, NY, April 23, 2024. (invited)
84. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," ECS SoCal Electrochemistry Meeting, UC-Irvine, CA, April 19, 2024. (invited plenary)
85. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Washington State University Chemistry Department Seminar, Pullman, WA, April 15, 2024. (invited)
86. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," North Carolina State University Chemistry Department Seminar, Raleigh, NC, April 12, 2024. (invited)
87. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of South Carolina Chemistry Department Seminar, Columbia, SC, April 5, 2024. (invited)
88. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Akron Knight Lectureship, Akron, OH, April 2, 2024. (invited)
89. S.D. Minter, "Rational Design of Redox Polymers for Sustainability Applications," University of Akron Knight Lectureship, Akron, OH, April 1, 2024. (invited)
90. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Kentucky Naff Endowed Lecture, Lexington, KY, March 28, 2024. (invited)
91. S.D. Minter, "Using Electrochemistry to Control Intermediates," American Society of Biochemistry and Molecular Biology Annual Meeting, San Antonio, TX, March 24, 2024. (invited)
92. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of Montreal Chemistry Department Seminar, March 20, 2024. (invited)
93. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," McGill University Chemistry Department Seminar, March 19, 2024. (invited)
94. S.D. Minter, "Enzymatic Bioelectrocatalysis for Organic Electrosynthesis," National American Chemical Society Meeting, March 17, 2024. (invited)
95. S.D. Minter, "Biological Approaches to Electrifying the Chemical Industry," Missouri University of Science and Technology Center for Research in Energy and the Environment Seminar, March 5, 2024. (invited)
96. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of Arizona Chemistry Department Colloquium, February 29, 2024. (invited)
97. S.D. Minter, "An electrochemist's toolkit for studying oxidoreductase enzymes," Pittcon, February 27, 2024. (invited)
98. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Iowa State University Mechanical Engineering Seminar, February 20, 2024. (invited)
99. S.D. Minter, "Rational Design of Redox Polymers for Sustainability Applications," Missouri S&T Materials Science and Engineering Department Seminar, February 15, 2024. (invited)
100. S.D. Minter, "Enzymatic Bioelectrocatalysis for Green Synthesis of Ammonia," Novo Nordisk Foundation BIG Science Seminar, December 19, 2023. (invited)
101. S.D. Minter, "Tuning the Bio/Electrode Interface for Direct Bioelectrocatalysis," Materials Research Society Meeting, December 5, 2023. (invited)
102. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of Missouri-St. Louis Chemistry Colloquium, November 27, 2023. (invited)
103. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Chevis Endowed Seminar Series, Department of Chemical Engineering and Materials Science, East Lansing, MI, November 16, 2023. (invited)

104. S.D. Minter, "Microbial Bioelectrocatalysis for Electrosynthesis," Wolman Endowed Seminar at John Hopkins University Department of Environmental Engineering, Baltimore, MD, November 14, 2023. (invited)
105. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Cornell University Chemistry Department Seminar, Ithaca, NY, November 10, 2023. (invited)
106. S. D. Minter, "Bioelectrocatalysis for Electrosynthesis," Midwest ACS Regional Meeting, St. Charles, MO, October 19, 2023. (invited)
107. S.D. Minter, "Mimicking the Krebs cycle electrochemically for fuel cell applications," Midwest ACS Regional Meeting, St. Charles, MO, October 19, 2023. (invited)
108. S.D. Minter, "Developing bioelectrocatalytic techniques for water quality sensing," Midwest ACS Regional Meeting, St. Charles, MO, October 20, 2023. (invited)
109. S.D. Minter, "Enzymatic Bioelectrocatalysis for Organic Synthesis," Electrochemical Society Meeting, Gothenburg, Sweden, October 9, 2023.
110. S.D. Minter, "Towards Self Powered Biosensing," Electrochemical Society Meeting, Gothenburg, Sweden, October 10, 2023. (invited)
111. S.D. Minter, "Interfacing Biocatalysts with Electrode Surfaces," Institut Català d'Investigació Química (ICIQ) Summer School in Chemistry, Terragona, Spain, September 14, 2023. (invited)
112. S.D. Minter, "Bioelectrocatalysis for Nitrogen Reduction," International Society of Electrochemistry Annual Meeting, Lyon, France, September 4, 2023.
113. S.D. Minter, "Using Synthetic Biology Tools for Efficient Ammonia Production in Cyanobacteria," 20th Congress of the European Society of Photobiology, Lyon, France, August 31, 2023. (invited plenary)
114. S.D. Minter, "Developing Electroanalytical Techniques for Enzymology Applications," National American Chemical Society Meeting, San Francisco, CA, August 15, 2023. (invited)
115. S.D. Minter, "Enzymatic Bioelectrocatalysis for Sustainable Electrosynthesis," National American Chemical Society Meeting, San Francisco, CA, August 15, 2023. (invited)
116. S.D. Minter, "Merging Biocatalysis with Electrochemistry for Organic Synthesis," National American Chemical Society Meeting, San Francisco, CA, August 14, 2023. (invited)
117. S.D. Minter, "Engineering Cyanobacteria for Nitrogen Reduction," Telluride Science Research Conference on Solar Solutions to Energy and Environmental Problems, Telluride, CO, July 18, 2023.
118. D. Boucher, Z. Nguyen, and S. D. Minter, "Fundamental Aspects of Molecular Electrocatalysis," Faraday Discussion on Electrosynthesis, Edinburgh, UK, July 13, 2023.
119. S.D. Minter, "Alkane Monooxygenase Bioelectrocatalysis for Energy Conversion," 13th International Conference on Hydrogenases, Walla Walla, WA, June 28, 2023. (invited keynote)
120. R. Geulskis and S.D. Minter, "Rapid Preparation of Disposable Carbon Paper Electrodes via Machine-Cutting and High Throughput Waxing," 1st International Workshop of the Bioelectrochemical Society, Salt Lake City, UT, June 14, 2023.
121. K. Beaver and S.D. Minter, "Nitric oxide as a signaling molecule for biofilm formation and dispersal in mediated electron transfer," 1st International Workshop of the Bioelectrochemical Society, Salt Lake City, UT, June 14, 2023.
122. S.D. Minter, "Bioelectrocatalysis for Nitrogen Reduction," 1st International Workshop of the Bioelectrochemical Society, Salt Lake City, UT, June 16, 2023.

123. D. Boucher and S.D. Minter, "Direct Electron Transfer for Enzymatic Electrosynthesis," 1st International Workshop of the Bioelectrochemical Society, Salt Lake City, UT, June 16, 2023.
124. S.D. Minter, "The Role of Biofilms in Microbial Bioelectrochemical Systems," Biosensors 2023, Busan, Korea, June 8, 2023. (invited)
125. S.D. Minter, "Use of Redox Mediators and Polymers to Provide Additional Control of Bioelectrocatalytic Systems," Electrochemical Society Meeting, Boston, MA, May 31, 2023. (invited)
126. S.D. Minter, "New Membranes for Preventing Crossover in Non-aqueous Redox Flow Batteries," Electrochemical Society Meeting, Boston, MA, May 31, 2023. (invited)
127. E. Carroll, O. Simoska, Z. Rhodes, K.N. Petrosky, and S.D. Minter, "Biological Anolyte Regeneration System for Redox Flow Batteries," Electrochemical Society Meeting, Boston, MA, May 29, 2023.
128. J. McBrayer, K.L. Harrison, K. Fenton, and S.D. Minter, "SECM as a Direct Method to Track Changes in Silicon Passivation," Electrochemical Society Meeting, Boston, MA, May 29, 2023.
129. S.D. Minter, "Bioelectrochemical Strategies for C-H Activation," Electrochemical Society Meeting, Boston, MA, May 30, 2023. (invited)
130. O. Simoska and S.D. Minter, "Enhancing the Performance of Microbial Fuel Cells via Metabolic Engineering of *E. coli* for Phenazine Production," Electrochemical Society Meeting, Boston, MA, May 30, 2023.
131. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of Massachusetts-Amherst Chemical Engineering Department Seminar, Amherst, MA, April 27, 2023. (invited)
132. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Illinois Urbana Champaign Chemical and Biomolecular Engineering Department Seminar, Urbana, IL April 20, 2023. (invited)
133. S.D. Minter, "Analytical Approaches to Organic Electrosynthesis," Dennis G. Peters Memorial Symposium, Bloomington, IN, April 15, 2023. (invited)
134. S.D. Minter, "Electrocatalysis for Electrosynthesis," Florida State University Chemistry Department Seminar, Tallahassee, FL, April 14, 2023. (invited)
135. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of Louisville Brown and Williamson Chemistry Lecture Series, Louisville, KY, April 7, 2023. (invited)
136. S.D. Minter, "Redoxmer Design," JCESR and Beyond: Translating the Basic Science of Batteries Meeting, Chicago, IL, April 3, 2023. (invited)
137. S.D. Minter, "Engineering Cyanobacteria for Nitrogen Reduction," Cambridge University Biophotoelectrochemical Systems Workshop, Cambridge, England, March 29, 2023. (invited plenary)
138. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Geneva Chemistry Seminar, Geneva, Switzerland, March 27, 2023. (invited)
139. S.D. Minter, "Towards Self-Powered Biosensing," Pittcon 2023, Philadelphia, PA, March 20, 2023. (invited)
140. S.D. Minter, "Synthetic Biology Strategies for Improving the Bioelectrocatalytic Synthesis of Ammonia," Pittcon 2023, Philadelphia, PA, March 20, 2023. (invited)
141. S.D. Minter, "Combining Analytical Techniques for Evaluating Mechanism and Performance of Electrosynthesis Systems," Pittcon 2023, Philadelphia, PA, March 21, 2023. (invited)

142. S.D. Minter, "Electroanalytical Techniques for Studying Natural and Artificial Enzymology," ACS Publications Summit: Innovations in Measurement Science, Barcelona, Spain, March 14, 2023. (invited)
143. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Concordia University Chemical and Materials Engineering Seminar, March 9, 2023. (invited)
144. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Texas- Austin Chemistry Department Seminar, Austin, TX, March 8, 2023. (invited)
145. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Old Dominion University Center for Bioelectronics Seminar, March 2, 2023. (invited)
146. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Missouri University of Science and Technology Chemistry Department Seminar, Rolla, MO, January 27, 2023. (invited)
147. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Washington Chemistry Department Seminar, Seattle, WA, January 23, 2023. (invited)
148. S.D. Minter, "Strategies for Improving Extracellular Electron Transfer Between Microbes and Electrodes," Material Research Society Meeting, Boston, MA, November 28, 2022. (invited)
149. S.D. Minter, "Mitigating Performance Degradation due to Crossover in Redox Flow Batteries," Material Research Society Meeting, Boston, MA, November 29, 2022. (invited)
150. S.D. Minter, "Using Bioelectrocatalysis for Analysis," Eastern Analytical Symposium, Princeton, NJ, November 14, 2022. (invited)
151. R. Jadhav and S.D. Minter, "Conjugated Bipolar Redox-Active Electrolyte for Symmetric Redox Flow Battery," Electrochemical Society Meeting, Atlanta, GA, October 9, 2022.
152. M. Mazumder and S.D. Minter, "Cross-linked Phenyl-Acrylate-Based Anion Exchange Membranes: Synthesis, Characterization, and Performance in Non-Aqueous Redox Flow Battery," Electrochemical Society Meeting, Atlanta, GA, October 10, 2022.
153. D. Boucher and S.D. Minter, "Electrocatalytic Hydrogen Atom Transfer for the Activation of Alkenes: Mechanism of Formation and Reactivity of Cobalt Hydride," Electrochemical Society Meeting, Atlanta, GA, October 11, 2022.
154. S.D. Minter, "Bioelectrocatalysis for Organic Synthesis," University of Minnesota Kolthoff Lecture Series, Minneapolis, MN, October 6, 2022. (invited lecturer)
155. S.D. Minter, "Catalytic Cascades for Energy Conversion Devices," University of Minnesota Kolthoff Lecture Series, Minneapolis, MN, October 5, 2022. (invited lecturer)
156. S.D. Minter, "Electrochemical Alternatives to Haber-Bosch Ammonia Production," University of Minnesota Kolthoff Lecture Series, Minneapolis, MN, October 4, 2022. (invited lecturer)
157. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," GDCh Electrochemistry 2022, Berlin, Germany, September 28, 2022. (invited plenary)
158. S.D. Minter, "Strategies for Interfacing Biocatalysts with Electrode Surfaces," Paul Scherrer Institute Electrochemistry Colloquium, September 15, 2022. (invited)
159. K. Beaver, E. Gaffney, and S.D. Minter, "Understanding metabolic bioelectrocatalysis of the purple bacterium *Rhodobacter capsulatus* through substrate modulation," International Society of Electrochemistry Annual Meeting, September 14, 2022.

160. S.D. Minter, "Fundamentals and Applications of Microbial Electrochemistry," Missouri University of Science and Technology Biological Sciences Department Seminar, Rolla, MO, September 12, 2022. (invited)
161. S.D. Minter, "Synthetic biology strategies for improving the bioelectrocatalytic synthesis of ammonia," American Chemical Society National Meeting, Chicago, IL, August 23, 2022. (invited)
162. S.D. Minter, "Bioelectrocatalysis for Organic Synthesis," American Chemical Society National Meeting, Chicago, IL, August 24, 2022.
163. S.D. Minter, "Strategies for Mitigating Crossover in Non-Aqueous Redox Flow Batteries," 23rd International Conference on Solid State Ionics, Boston, MA, July 22, 2022. (invited keynote)
164. S.D. Minter, "Enzymatic and Microbial Bioelectrocatalysis for Electrosynthesis," EuroBIC 16, Lyon, France, July 19, 2022. (invited keynote)
165. S.D. Minter, "Enzymatic Bioelectrocatalysis: From Mechanistic Studies to Bioelectronics to Electrosynthesis Applications," Biocatalysis Gordon Research Conference, Manchester, NH, July 13, 2022. (invited)
166. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Royal Australian Chemical Institute 2022 Congress, Brisbane, Australia, July 4, 2022. (invited keynote)
167. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Chem Catalysis 1st Anniversary Webinar on Synergistic Catalysis, June 20, 2022. (invited)
168. S.D. Minter, "Nitrogenase Electrochemistry," Metallocofactors Gordon Research Conference, Newport, RI, June 8, 2022. (invited)
169. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy and Synthesis Applications," European Society of Electroanalytical Chemistry 2022 Meeting, Vilnius, Lithuania, June 6, 2022. (invited plenary)
170. S.D. Minter, "Enzymatic Bioelectrocatalysis for Reduction of Nitrogen to Ammonia and Chiral Amines," Electrochemical Society Meeting, Vancouver, Canada, June 1, 2022. (invited keynote streamed virtually)
171. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of Vermont Chemistry Department Seminar, April 22, 2022. (invited)
172. S.D. Minter, "Catalytic Cascades for Improving Performance," U.S. Department of Defense Office of the Secretary of Defense Basic Energy Forum Seminar, April 14, 2022. (invited)
173. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Saint Louis University Department of Chemistry Seminar, April 8, 2022. (invited)
174. S.D. Minter, "Bioelectrocatalysis for Electrofuels, Materials Synthesis, and Recycling/Regeneration," Idaho National Laboratory Frontiers of Science Lecture, March 14, 2022. (invited)
175. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," SUNY- Buffalo Chemistry Department Seminar, March 11, 2022. (invited)
176. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," 2022 nanoGe Conference, March 9, 2022. (invited)
177. S.D. Minter, "Bioelectrocatalysis for electrosynthesis," City University of New York Biochemistry Seminar, March 2, 2022. (invited)
178. S.D. Minter, "Bioelectrocatalysis for electrosynthesis," University of Utah Department of Chemistry Graduate Research Symposium, February 25, 2022. (invited keynote)
179. S.D. Minter, "Bioelectrocatalysis for electrosynthesis," Pacifichem 2021, December 21, 2021. (invited)

180. S.D. Minter, "Bioelectroanalysis for enzymology studies of metalloproteins," Pacificchem 2021, December 19, 2021. (invited keynote)
181. S.D. Minter, "Enzyme Cascades for Electrosynthesis," Pacificchem 2021, December 16, 2021.
182. S.D. Minter, "Designing Electrocatalytic System for Organic Electrosynthesis," Swedish Chemical Society Trends in Organic Chemistry Conference, Stockholm, Sweden, December 6, 2021. (invited keynote)
183. S.D. Minter, "Employing Synthetic Biology to Design Microbial Electrocatalysts for Nitrogen Reduction," Materials Research Society Fall Meeting, Boston, MA, December 1, 2021. (invited keynote)
184. S.D. Minter, "Rational Design of Phenazine Mediator Promoted Extracellular Electron Transfer in *E. coli*," Materials Research Society Fall Meeting, Boston, MA, November 30, 2021. (invited keynote)
185. S.D. Minter, "Nanopore-based measurement of the interaction of P450cam monooxygenase and putidaredoxin at single-molecule level," Faraday Discussion on Next Generation Nanoelectrochemistry, November 30, 2021. (invited)
186. S.D. Minter, "Bioelectrocatalysis for Applications Ranging from Sensing to Energy to Synthesis," AIChE Meeting, Boston, MA, November 9, 2021. (invited)
187. S.D. Minter, "Enzymatic Electrocatalysis for Energy Applications," Indian Institute of Technology – Guwahati Biosciences and Bioengineering Seminar, November 2, 2021. (invited)
188. S.D. Minter, "Electrocatalysis for Electrosynthesis," United Kingdom Society of Chemical Industries/Royal Society of Chemistry Webinar on Exciting developments in photochemistry and electrochemistry, October 19, 2021. (invited plenary)
189. S.D. Minter, "Engineering Cyanobacteria for Nitrogen Reduction," Electrochemical Society Meeting, October 12, 2021. (invited keynote)
190. A. Fitch, J. Leddy, I. Fritsch, C. Korzeniewski, and S.D. Minter, "'Hooked' on Electrochemistry Education," Electrochemical Society Meeting, October 12, 2021. (invited)
191. S.D. Minter, "Enzymatic Bioelectrocatalysis for Fuel Cell Applications," University of California- Santa Barbara Biomolecular Science and Engineering Program Seminar, September 28, 2021. (invited)
192. S.D. Minter, "Enzymatic Bioelectrocatalysis for Synthetic Organic Electrosynthesis," International Society of Electrochemistry Annual Meeting, August 30, 2021. (invited keynote)
193. S.D. Minter, "Enzymatic Bioelectrocatalysis," IUPAC 2021, August 17, 2021. (invited keynote)
194. S.D. Minter, "Nanobioelectrocatalysis for Energy and Environmental Applications," IEEE NANO 2021, July 30, 2021. (invited plenary)
195. S.D. Minter, "Microbial Photobioelectrocatalysis," International Solar Fuels Conference 2021, July 26, 2021. (invited plenary)
196. S.D. Minter, "Nitrogenase Bioelectrochemistry," Telluride Conference on Exploring Nitrogen Activation Mechanism, June 24, 2021. (invited)
197. S.D. Minter, "Strategies for Reducing Redox Flow Battery Performance Losses Due to Crossover," Beyond Lithium-Ion XIII Symposium on the Future of Energy Storage, June 10, 2021. (invited)
198. C. Malapit and S.D. Minter, "Electrochemical Cobalt-Catalyzed selective Carboxylation of Benzyl Halides with Carbon Dioxide," Electrochemical Society Meeting, June 2, 2021.

199. Z. Rhodes and S.D. Minter, "Understanding Chemical Crossover in Redox Flow Batteries via Quantitative Structure-Property Relationship Modelling," Electrochemical Society Meeting, June 2, 2021.
200. O. Simoska and S.D. Minter, "Understanding the Properties of Phenazine Mediators that Promote Extracellular Electron Transfer in *Escherichia coli*," Electrochemical Society Meeting, May 31, 2021.
201. E.M. Gaffney and S.D. Minter, "Bioinformatic Insights into Mechanisms of a Halophilic Electroactive Bacterium," Electrochemical Society Meeting, May 31, 2021.
202. M. Li and S.D. Minter, "Bipolar Redox-Active Molecules: Coupling Structure and Cycling Engineering in Extending Cycling Longevity," Electrochemical Society Meeting, May 30, 2021.
203. K. Beaver and S.D. Minter, "Evaluating Organic Acids as Oxidizable Fuels in *R. Capsulatus*-based Bioelectrochemical Systems," Electrochemical Society Meeting, May 30, 2021.
204. J. Honorio Franco, K. Klunder, V. Russel, A.R. de Andrade, and S.D. Minter, "Unveiling Complete Ethanol Oxidation through a Hybrid Enzymatic and Organic Catalyst Cascade in an Electrochemical Micro-reactor Device," Electrochemical Society Meeting, May 30, 2021.
205. H. Chen and S.D. Minter, "Bioelectrocatalytic Conversion of N₂: From Chemically Inert Gas to Chiral Chemicals," Electrochemical Society Meeting, May 30, 2021.
206. J. Honorio Franco, S. Minter, P.Z. Almeida, and A.R. de Andrade, "Hybrid Electrocatalysts for Bioelectrooxidation of Small Alcohols: Ethanol and Ethylene Glycerol," Electrochemical Society Meeting, May 30, 2021. (invited)
207. Y.S. Lee and S.D. Minter, "ATP-independent Electroenzymatic Ammonia Production Using an Organic Redox Polymer-Immobilized Enzymatic System," Electrochemical Society Meeting, May 30, 2021. (invited)
208. S.D. Minter, "DNA-enabled biobattery," ONR Global Biotechnology Showcase, May 28, 2021. (invited)
209. S.D. Minter, "From Electroanalysis to Bioelectrochemistry to Organic Synthesis: My Journey in Academia," Clarkson University Science and Engineering Junior Faculty Research Symposium, May 20, 2021. (invited)
210. S.D. Minter, "Enzymatic Bioelectrocatalysis for Green Electrosynthesis," ECS Canada Section Spring Meeting, May 15, 2021. (invited)
211. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," UCLA Center for Integrated Catalysis Seminar, May 11, 2021. (invited)
212. S.D. Minter, "Electrocatalysis for Organic Electrosynthesis," University of Arizona Chemical and Environmental Engineering Department, May 3, 2021. (invited)
213. S.D. Minter, "Engineering Cyanobacteria for Electrosynthesis," Eastern Regional Photosynthesis Conference, April 24, 2021. (invited)
214. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," ACS In Argentina Lecture, April 16, 2021. (invited virtual)
215. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Pacific Northwest National Laboratory Frontiers of Catalysis Seminar, April 14, 2021. (invited)
216. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," John Hopkins University Chemistry Department Seminar, April 13, 2021. (invited)
217. S.D. Minter, "Bioelectrocatalysis for Organic Electrosynthesis," New York University Chemical Engineering Colloquium, April 9, 2021. (invited)

218. S.D. Minter, "Enzymatic Bioelectrocatalysis for Nitrogen Reduction to Ammonia and Value Added Products," New York University Chemistry Department Seminar, April 2, 2021. (invited)
219. S.D. Minter, "Bioelectrocatalysis for Energy Conversion Applications," International Workshop on Nanocatalysts and Green Energy, March 30, 2021. (invited)
220. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Gustavus Adolphus College, Chemistry Department Seminar, March, 26, 2021. (invited)
221. S.D. Minter, "Redox Polymer Design and Implementation for Electrochemical Systems," University of Kentucky Chemistry Department Seminar, March 19, 2021. (invited)
222. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Northeastern University Chemistry Department Colloquium, March 17, 2021. (invited)
223. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of New Hampshire Chemistry Departmental Seminar, February 2, 2021. (invited)
224. S.D. Minter, "Enzymatic Bioelectrocatalysis for Fuel Cell Applications," University of Notre Dame ECS Student Organized Seminar, January 13, 2021. (invited)
225. S.D. Minter, "Redoxmer Design, Engineering, and Use, Materials Research Society Spring/Fall Virtual Meeting, November 30, 2020. (invited)
226. S.D. Minter, "Tutorial on Bioelectrocatalysis for Applications Ranging from Sensing to Energy to Synthesis," AIChE Virtual Meeting, November 19, 2020. (invited)
227. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of Delaware Chemical Engineering Department Virtual Seminar, November 11, 2020. (invited)
228. S.D. Minter, "Self-Powered Biosensors," 1st International Electronics Conference on Biosensors," Virtual, November 9, 2020. (invited plenary)
229. S.D. Minter, "Enzymatic Bioelectrocatalysis for Fuel Cell Applications," University of Arkansas, Chemistry Virtual Department Seminar, October 30, 2020. (invited)
230. S.D. Minter, "Bioelectrocatalysis for Greener Synthesis," Danish Electrochemical Society Annual Meeting, October 29, 2020. (invited plenary)
231. S.D. Minter, "Nitrogenase Bioelectrocatalysis," National Renewable Energy Laboratory Virtual Seminar Series, October 20, 2020. (invited)
232. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," CUNY Chemistry Department Seminar, October 19, 2020. (invited, virtual)
233. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Electrochemical Society Webinar, October, 14, 2020. (invited)
234. J. McBrayer, D. Serkland, K. Fenton, C. Apblett, and S. Minter, "The Change in Strain in Silicon Anodes Due to the Formation of the Solid Electrolyte Interphase," Electrochemical Society Meeting (PRIME 2020 - virtual), October 5, 2020.
235. F. Dong, H. Chen, and S.D. Minter, "Biphasic Bioelectrocatalytic Synthesis of Chiral beta-Hydroxy Nitriles," Electrochemical Society Meeting (PRIME 2020 - virtual), October 5, 2020.
236. K. Lim, F. Macazo, C. Scholes, H. Chen, K. Sumampong, and S.D. Minter, "Elucidating the Mechanism behind the Bionanomanufacturing of Gold Nanoparticles Using *Bacillus Subtilis*," Electrochemical Society Meeting (PRIME 2020 - virtual), October 6, 2020.
237. M. Li and S.D. Minter, "Ionic Liquid Stabilized TEMPO Catalysis for Alcohol Oxidation," Electrochemical Society Meeting (PRIME 2020- virtual), October 4, 2020.

238. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Virginia Tech Highlands in Chemistry Seminar Series, September 25, 2020. (invited)
239. S.D. Minter, "Electroanalytical Tools for Enzymology," Analytical Chemistry Diversity Colloquium, September 23, 2020. (invited)
240. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy and Electrosynthesis," MIT Virtual Chemical Engineering Seminar, Boston, MA, May 8, 2020. (invited, but postponed due to COVID until September 11, 2020)
241. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," Princeton Organic Chemistry Seminar, Princeton, NJ, April 7, 2020. (invited, but postponed due to COVID to September 8, 2020).
242. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," University of California-Berkeley Inorganic Chemistry Seminar, Berkeley, CA, September 4, 2020 (postponed from March 27, 2020 for COVID). (invited)
243. S.D. Minter, "Bioelectrocatalysis for Electrosynthesis," International Society of Electrochemistry Annual Meeting, September 2, 2020. (virtual)
244. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," ACS Virtual National Meeting, August 17, 2020. (invited)
245. H. Chen and S.D. Minter, "The application of bioelectrocatalysis in the preparation of chiral chemicals," Virtual Biocatalysis and Protein Engineering Meeting Hosted by Merck, Zoom webinar, August 6, 2020. (invited)
246. S.D. Minter, "Enzymatic Bioelectrocatalysis," Biocatalysis Gordon Research Conference, Hooksett, NH, July 14, 2020. (invited, but cancelled)
247. S.D. Minter, "Nitrogenase Bioelectrochemistry," Metallocofactors Gordon Research Conference, Newport, RI, June 8, 2020. (invited, but cancelled)
248. S.D. Minter, "From Fundamental Studies of Extracellular Electron Transfer to Developing Next Generation Photobioelectrodes," Photobioelectrochemical Systems Workshop, Cambridge, UK, April 22, 2020 (invited, but postponed due to COVID)
249. S.D. Minter, "Redoxmer Design, Engineering and Use," Materials Research Society National Meeting, Phoenix, AZ, April 15, 2020. (invited, but cancelled due to COVID).
250. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Michigan State University CORE-CM Chemistry Seminar, Lansing, MI, April 2, 2020. (invited, but postponed due to COVID)
251. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," Washington State University Chemical Engineering Seminar, Pullman, WA, March 23, 2020 (invited, but postponed due to COVID).
252. S.D. Minter, "Enzymatic Bioelectrocatalysis for Electrosynthesis," University of Washington Chemistry Seminar, Seattle, WA, March 9, 2020. (invited, but postponed due to COVID).
253. S.D. Minter, "Cascade-based Electrocatalysis for Electrosynthesis," Pittcon 2020, Chicago, IL, March 2, 2020. (invited)
254. S.D. Minter, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Florida Gulf Coast University, Ft. Myers, FL, February 27, 2020. (invited)
255. S.D. Minter, "Enzymatic Electrosynthesis for Chiral Molecules," Gordon Research Conference in Electrochemistry, Ventura, CA, January 6, 2020. (invited)
256. S.D. Minter, "Next Generation Applications of Bioelectrochemistry," National Academy of Sciences Electrochemistry Workshop, Washington, DC, November 19, 2019. (invited)

257. S.D. Minter, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Science Seminar Series, Boise State University, Boise, ID, October 25, 2019. (invited)
258. S.D. Minter, "Biomolecular Electrocatalysis for Energy Applications," Midwest Regional American Chemical Society Meeting, Wichita, KS, October 18, 2019. (invited)
259. K. Lim, R. Stewart, and S.D. Minter, "A Cross-Linker Free Enzyme Immobilization for Direct Bioelectrocatalysis Using Aqueous Phase Inversion of a High-Ionic-Strength, Liquid Complex Coacervate," Electrochemical Society Meeting, Atlanta, GA, October 14, 2019.
260. E. Gaffney, M. Grattieri, and S.D. Minter, "Extracellular Electron Transfer Mechanisms in a Moderately Halophilic Bacterium from the Great Salt Lake for High Salinity Heavy Metal Biosensing," Electrochemical Society Meeting, Atlanta, GA, October 14, 2019.
261. E. Gaffney, M. Grattieri, and S.D. Minter, "Unveiling Purple Bacteria Salt Tolerance Mechanisms for Environmental Monitoring in Photo-Bioelectrochemical Systems," Electrochemical Society Meeting, Atlanta, GA, October 14, 2019.
262. S.D. Minter, "Enzymatic Bioelectrosynthesis," International Center for Advanced Studies on Energy Conversion Seminar, Georg-August-Universität, Göttingen, Germany, October 9, 2019. (invited)
263. S.D. Minter, "Enzymatic Bioelectrocatalysis for Synthesis Applications," University of Pittsburgh, Chemistry Department Colloquium, Pittsburgh, PA, October 4, 2019. (invited)
264. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy and Synthesis Applications," Louisiana State University, Chemistry Department Seminar, Baton Rouge, LA, September 27, 2019. (invited)
265. S.D. Minter, "Nitrogenase Bioelectrochemistry," Potter's Lodge Meeting on Electrochemistry, Blue Mountain, NY, September 7, 2019.
266. S.D. Minter, "Developing materials to promote substrate channeling of intermediates in electrocatalytic cascades," American Chemical Society National Meeting, San Diego, CA, August 27, 2019. (invited)
267. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," American Chemical Society National Meeting, San Diego, CA, August 25, 2019. (invited)
268. S.D. Minter, "Enzymatic Bioelectrocatalysis for Analytical Evaluation of Enzymology," International Symposium on Electroanalytical Chemistry, Changchun, China, August 23, 2019. (invited plenary)
269. S.D. Minter, "Catalytic Cascades for Energy Conversion Applications," Applied Chemistry Lecture Series, Changchun Institute of Applied Chemistry, Changchun, China, August 22, 2019. (invited)
270. S.D. Minter, "Nitrogenase Bioelectrochemistry," Institute of Chemistry Chinese Academy of Sciences, Molecular Science Frontier Lecture, Beijing, China, August 19, 2019. (invited)
271. S.D. Minter, "Enzyme Cascades for Energy Conversion Applications," International Society of Electrochemistry Meeting, Durban, South Africa, August 6, 2019. (invited)
272. S.D. Minter, "Nitrogenase Bioelectrocatalysis," ECS ECEE 2019 Meeting, Glasgow, UK, July 24, 2019.
273. S.D. Minter, "Direct and Mediated Enzymatic Bioelectrocatalysis," Telluride Science Research Conference on Biological and Bio-inspired Redox Chemistry, Telluride, CO, July 17, 2019. (invited)

274. S.D. Minteer, "Direct and Mediated Bioelectrocatalysis," Gordon Research Conference in Bioelectronics, Andover, NH, June 20, 2019. (invited)
275. S.D. Minteer, "Tailoring Bioelectrodes for Energy Conversion, Sensing, and Electrosynthesis Applications," NGenE 2019, Chicago, IL, June 4, 2019. (invited)
276. S.D. Minteer, "Materials Design for Microbial Bioelectrochemical Systems," Electrochemical Society Meeting, Dallas, TX, May 28, 2019. (invited)
277. S.D. Minteer, "Translating Knowledge from PEM and AEM Fuel Cells to Biofuel Cells and Hybrid Fuel Cells," Electrochemical Society Meeting, Dallas, TX, May 28, 2019. (invited)
278. S.D. Minteer, "Electroanalytical Techniques for Studying Nitrogenase Enzyme Mechanisms," Electrochemical Society Meeting, Dallas, TX, May 28, 2019. (invited)
279. C. Korzeniewski, R. Cai, J. Kitt, Y. Liang, S.D. Minteer, and J. Harris, "Confocal Raman Microscopy in the Study of Membrane Materials for Energy Conversion," Electrochemical Society Meeting, Dallas, TX, May 28, 2019.
280. S.D. Minteer, "Predictive Structure-Property Relationships for Redox Flow Batteries," MIT Redoxmer Workshop, Boston, MA, May 22, 2019. (invited)
281. S.D. Minteer, "Designing Electrodes for Electrosynthesis," Beilstein Organic Chemistry Symposium, Mainz, Germany, April 11, 2019. (invited)
282. S.D. Minteer, "Mechanisms of Extracellular Electron Transfer: From Methods of Evaluation to Materials for Promotion," BEE Workshop, University of Warwick, Coventry, UK, March 28, 2019. (invited)
283. S.D. Minteer, "Tuning purple bacteria salt-tolerance for photobioelectrochemical systems in saline environments," University of Cambridge, Cambridge, UK, March 25, 2019. (invited)
284. S.D. Minteer, "Analytical Characterization of Bioelectrocatalysis in Extreme Environments," Pittcon, Philadelphia, PA, March 19, 2019. (invited)
285. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy and Synthesis Applications," Frontiers Lecture, Department of Chemistry, Wayne State University, Detroit, MI, February 19, 2019. (invited)
286. S.D. Minteer, "Tailoring Enzyme/Electrode Interfaces for Energy Conversion and Electrosynthesis," 2019 Center for Electrochemistry Annual Workshop on Electrochemistry, Austin, TX, February 9, 2019. (invited)
287. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Green Synthesis and Energy Harvesting," Metals in Biology Gordon Research Conference, Ventura, CA, January 30, 2019. (invited)
288. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," University of North Carolina Analytical Chemistry Seminar, Chapel Hill, NC, November 19, 2018. (invited)
289. S.D. Minteer, "Enzymatic Electrocatalysis: From Metabolic Pathways to Metabolons," San Jose State University Chemistry Seminar, San Jose, CA, October 16, 2018. (invited)
290. S.D. Minteer, "Electrocatalysis for Electrosynthesis," Electrochemical Society Meeting, Cancun, MX, September 30, 2018. (invited keynote)
291. R.A. Escalona-Villalpando, R.C. Reid, R. Milton, L.D. Arriaga, S.D. Minteer, and J. Ledesma-Garcia, "Evaluation of a Lactate/Oxygen Biofuel Cell Using A Flow Through Air-Breathing Microfluidic Design," Electrochemical Society Meeting, Cancun, MX, September 30, 2018.
292. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Colorado School of Mines Chemistry Department Seminar, Golden, CO, September 14, 2018. (invited)

293. S.D. Minter, "Electrocatalytic Cascades for Energy Conversion and Electrosynthesis Applications," University of Rome Tor Vergata Chemistry Department Seminar, Rome, Italy, September 10, 2018. (invited)
294. M. Grattieri, D.P. Hickey, and S.D. Minter, "Tuning Redox Mediator Properties for Extracellular Electron Transfer in the Photosynthetic Purple Bacterium *Rhodobacter Capsulatus*," International Society of Electrochemistry Annual Meeting, Bologna, Italy, September 6, 2018.
295. S.D. Minter, "Electrocatalytic Cascades for Energy Conversion and Electrosynthesis Applications," International Society of Electrochemistry Annual Meeting, Bologna, Italy, September 5, 2018. (invited plenary)
296. M. Grattieri, D. P. Hickey, and S. D. Minter, "Microbial Self-Powered Biosensors: Improving Sensitivity with an On-Demand, Disposable Cathode," International Society of Electrochemistry Annual Meeting, Bologna, Italy, September 3, 2018.
297. V. Russell, S. Abdellaoui, S.D. Minter, "Directed evolution of oxalate decarboxylase for the enhancement of a hybrid enzymatic and organic electrolytic cascade," American Chemical Society National Meeting, Boston, MA, August 22, 2018.
298. S.D. Minter, "Electrocatalytic cascades for energy conversion and electrosynthesis," American Chemical Society National Meeting, Boston, MA, August 21, 2018. (invited)
299. S.D. Minter, "Designing organic redox polymers for energy applications," American Chemical Society National Meeting, Boston, MA, August 20, 2018. (invited)
300. S. D. Minter, "Materials Engineering for Enzymatic Bioelectrocatalysis," Society of Industrial Microbiology and Biotechnology Annual Meeting, Chicago, Illinois, August 15, 2018. (invited)
301. S.D. Minter, "Natural and Artificial Metabolons for Energy Applications," University fo Limerick Department of Chemistry, Limerick, Ireland, June 25, 2018. (invited)
302. S.D. Minter, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," ECS Montreal Student Chapter Symposium, Montreal, Canada, June 15, 2018. (invited)
303. S.D. Minter, "Nitrogenase Bioelectrochemistry," PCET2018, Blowing Rock, NC, June 11, 2018. (invited)
304. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy and Electrosynthesis Applications," University of Calgary Chemistry Department Seminar, Calgary, Canada, June 8, 2018. (invited)
305. S.D. Minter, "Electrocatalysis for Energy and Electrosynthesis Applications," Chemistry Department Seminar, Renmin University, Beijing, China, June 5, 2018. (invited)
306. S.D. Minter, "Electrocatalysis for Energy and Electrosynthesis Applications," College of Chemistry and Chemical Engineering Seminar, Xiamen University, Xiamen, China, June 4, 2018. (invited)
307. S.D. Minter, "Electrocatalysis for Energy and Electrosynthesis Applications," Chemistry College Seminar, Beijing Normal University, Beijing, China, June 1, 2018. (invited)
308. S.D. Minter, "Electrocatalysis for Energy and Electrosynthesis Applications," Molecular Science Forum Lecture, Institute of Chemistry Chinese Academy of Sciences, Beijing, China, May 31, 2018. (invited)

309. S.D. Minter, "Electrocatalysis for Energy and Electrosynthesis Applications," University of Science and Technology of Beijing, Chemistry Seminar, Beijing, China, May 30, 2018. (invited)
310. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy and Electrosynthesis Applications," Molecular Foundry Seminar Series, Lawrence Berkeley National Laboratory, Berkeley, CA, May 22, 2018. (invited)
311. D. Hickey, M. Sigman, and S. Minter, "TEMPO-based Catalyst Design," Electrochemical Society Meeting, Seattle, WA, May 17, 2018. (invited keynote)
312. F. Macazo, D. Hickey, S. Abdellaoui, M. Sigman and S. Minter, "A Hybrid Multi-Catalyst Motif for Enhanced Electro-Oxidation of Glycerol," Electrochemical Society Meeting, Seattle, WA, May 16, 2018.
313. M. Chavez, J. Monclava, D. Hickey, S. Abdellaoui, I. Gonzales, S. Minter, and P. Atanassov, "Multi-Modal Catalytic Cascades on Carbonaceous Scaffolds," Electrochemical Society Meeting, Seattle, WA, May 16, 2018.
314. M. Arugula, E. Pinchon, U. Lindstrom, P. Juzang, K. Pant, S. Minter, and S. Singhal, "Cascade Bioanode for glycerol/Oxygen Biofuel Cell Applications," Electrochemical Society Meeting, Seattle, WA, May 16, 2018.
315. R. Reid, S.D. Minter, and B. Gale, "Enzymatic Bioelectrodes for a Contact Lens Lactate Biofuel Cell: Design and Analysis," Electrochemical Society Meeting, Seattle, WA, May 15, 2018. (invited)
316. F. Macazo and S.D. Minter, "Mechanistic Studies of Protein-Based, Metal Nanoparticle Biosynthesis," Electrochemical Society Meeting, Seattle, WA, May 15, 2018.
317. R. Cai, R. Milton, S. Abdellaoui, A. De Lacey, M. Pita, S. Sahin, and S. Minter, "Nitrogenase Electrochemistry for Ammonia Production," Electrochemical Society Meeting, Seattle, WA, May 14, 2018. (invited)
318. S.D. Minter, "Electrochemistry of MoFe and VFe Nitrogenase," Midwest Inorganic Chemistry Conference, Wuhan, China, April 21, 2018. (invited plenary)
319. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy Applications," Wuhan University, Wuhan, China, April 21, 2018. (invited)
320. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy Applications," China University of Biosciences, Wuhan, China, April 19, 2018. (invited)
321. S.D. Minter, "Enzymatic Bioelectrocatalysis: Lessons Learned from Metabolic Pathways to Metabolons," Auburn University Chemistry Seminar, Auburn, AL, March 29, 2018. (invited)
322. S.D. Minter, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Naff Lecture, University of Kentucky, Lexington, KY, March 23, 2018. (invited)
323. S.D. Minter, "Enzymatic Bioelectrocatalysis for Biofuel Cell Applications," Chemistry Department Seminar, Lebanon Valley College, Lebanon, PA, March 16, 2018. (invited)
324. S.D. Minter, "Natural and Artificial Metabolons for Energy Applications," Chemistry Seminar, Penn State University, State College, PA, March 15, 2018. (invited)
325. S.D. Minter, "Electrocatalysis for Energy Conversion Applications and Electrosynthesis," Chemistry Seminar, University of Wisconsin-Madison, Madison, WI, March 8, 2018. (invited)
326. S.D. Minter, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Chemistry Seminar, University of Illinois-Champaign Urbana, February 16, 2018. (invited)

327. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Fassel Lecture in Analytical Chemistry, Iowa State University, February 9, 2018. (invited)
328. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Department of Chemistry Seminar, Western Washington University, February 2, 2018. (invited)
329. S.D. Minteer, "Nitrogenase Bioelectrochemistry," Sandia National Laboratory/University of New Mexico Advanced Materials Laboratory Seminar, January 22, 2018. (invited)
330. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Department of Chemical and Biological Engineering Seminar, University of New Mexico, November 29, 2017. (invited)
331. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Institute of Chemistry Chinese Academy of Sciences Seminar, November 18, 2017. (invited)
332. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Xingda Lecture Series, Department of Chemistry, Peking University, November 17, 2017. (invited)
333. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Bernard L. Feringa Advanced Chemistry Lecture Series, East China University of Science and Technology, Shanghai, China, November 16, 2017. (invited)
334. S.D. Minteer, "Self-Powered Enzymatic Biosensors," International Symposium on Biosensing and Bioimaging for Neuroscience 2017, Shanghai, China, November 15, 2017. (invited plenary)
335. S.D. Minteer, "Designing Redox Polymers for Mediated Bioelectrocatalysis," Electrochemical Society National Meeting, National Harbor, MD, October 4, 2017.
336. I. Matanovic, S. Babanova, M. Chavez, S. Abdellaoui, S.D. Minteer, and P. Atanassov, "Novel Computational Approaches in Practical Bioelectrocatalysis," Electrochemical Society National Meeting, National Harbor, MD, October 4, 2017.
337. S.D. Minteer, "Redox Polymers for Enzymatic and Hybrid Bioelectrocatalysis," Redox Films for Energy Conversion-Bioelectrochemical and Molecular Systems Workshop, Marseille, France, September 29, 2017. (invited)
338. S.D. Minteer, "Bioelectrocatalysis for Energy and Electrosynthesis Applications," Chemistry Seminar, Yale University, New Haven, CT, September 18, 2017. (invited)
339. S.D. Minteer, "Advances in Microbial Fuel Cells," USP Quimica Department Seminar, Sao Paulo, Brazil, September 13, 2017. (invited)
340. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," EnqBiotec 2017, Ribeirao Preto, Brazil, September 4, 2017. (invited plenary)
341. S.D. Minteer, "Curriculum Development Focused on Experimental and Simulation Skills in Electrochemistry," International Society of Electrochemistry, Providence, RI, August 29, 2017.
342. R. Milton, R. Cai, S. Abdellaoui, and S.D. Minteer, "Bioelectrochemical Haber-Bosch Process: Coupling Hydrogenase and Nitrogenase to Create an Ammonia Producing H_2/N_2 Fuel Cell," International Society of Electrochemistry, Providence, RI, August 28, 2017.
343. S. Aquino Neto, R. Milton, S.D. Minteer, and A. de Andrade, "Enhanced Bioelectrocatalytic Reduction of Oxygen Using Hybrid Biocathodes Containing

- Anthracene modified MWCNTs Decorated with Ni₉₀Pd₁₀ Nanoparticles,” International Society of Electrochemistry, Providence, RI, August 28, 2017.
344. K. Hasan, M. Grattieri, and S. D. Minter, “Enhanced Microbial Electrocatalysis with Naphthoquinone Redox Polymer Modified Electrodes,” International Society of Electrochemistry, Providence, RI, August 28, 2017.
 345. F. Macazo, S. Abdellaoui, D. Hickey, and S.D. Minter, “Polymer-Immobilized Hybrid Enzyme-TEMPO Electrocatalytic Systems for Enhanced Oxidation of Glycerol,” International Symposium on Bioelectrochemistry and Bioenergetics, Lyon, France, July 5, 2017.
 346. M. Grattieri, K. Hasan, and S.D. Minter, “Halotolerant Bacteria for Treatment and Monitoring of Hypersaline Solutions in Microbial Fuel Cells,” International Symposium on Bioelectrochemistry and Bioenergetics, Lyon, France, July 5, 2017.
 347. S. Abdellaoui, R. Cai, R.D. Minter, and S.D. Minter, “Enzymatic Bioelectrosynthesis of Ammonia and Hydrocarbon,” International Symposium on Bioelectrochemistry and Bioenergetics, Lyon, France, July 4, 2017.
 348. S.D. Minter, “Self-Powered Biosensors Employing Enzymatic Bioelectrocatalysis,” Instituto de Microelectrónica de Barcelona (Universitat Autònoma de Barcelona) Seminar, Barcelona, Spain, June 30, 2017. (invited)
 349. S.D. Minter, R. Cai, S. Abdellaoui, J. Kitt, J. Harris, and C. Korzeniewski “Tetrabutylammonium-modified Aquivion Ionomers for Enzyme Immobilization Bioelectrocatalytic Applications,” 21st International Conference on Solid State Ionics, Padua, Italy, June 20, 2017.
 350. S.D. Minter, “Bio-inspired Artificial Electron Transfer in Bioelectrocatalysis,” Electrochemical Society Meeting, New Orleans, LA, May 31, 2017.
 351. S.D. Minter, “Utilization of DNA as a Scaffold for Electrode Design for Efficient Bioelectrocatalysis in Fuel Cell Applications,” Electrochemical Society Meeting, New Orleans, LA, May 31, 2017. (invited)
 352. K. Hasan, R.D. Milton, M. Grattieri, and S.D. Minter, “Photobioelectrochemistry of Intact Chloroplasts for Solar Energy Conversion,” Electrochemical Society Meeting, New Orleans, LA, May 31, 2017.
 353. M. Grattieri, S. Abdellaoui, K. Hasan, and S.D. Minter, “Extracellular Electron Transfer in Mixed Species Biofilms: The Role of *Rikenella Microfus*,” Electrochemical Society Meeting, New Orleans, LA, May 31, 2017.
 354. S.D. Minter, “Enzymatic Bioelectrocatalysis for Energy Conversion and Electrosynthesis Applications,” Shanghai Institute of Applied Physics Physical Biology Lecture, Shanghai, China, May 9, 2017. (invited)
 355. S.D. Minter, “Self-Powered Biosensors Utilizing Enzymatic Bioelectrocatalysis,” IUPAC International Congress on Analytical Sciences 2017, Haikou, China, May 7, 2017. (invited keynote)
 356. S.D. Minter, “Enzymatic Bioelectrocatalysis for Energy Conversion and Electrosynthesis Applications,” Southeast University Chemistry Seminar, Nanjing, China, May 5, 2017. (invited)
 357. S.D. Minter, “Enzymatic Bioelectrocatalysis for Energy Conversion and Electrosynthesis Applications,” Nanjing University Chemistry Seminar, Nanjing, China, May 4, 2017. (invited)
 358. S.D. Minter, “Enzyme Cascade Bioelectrocatalysis,” USP International Graduate Seminar, Sao Paulo, Brazil, April 28, 2017. (invited)
 359. S.D. Minter, “Redox Polymers for Biosensors, Smart Contact Lenses, and Hybrid Fuel Cells,” SIBEE Simposio Brasileiro de Electroquímica e Eletroanalítica, Natal, Brazil, April 21, 2017 (invited plenary).

360. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Conversion and Electrosynthesis Applications," Colorado State University Chemistry Department Seminar, April 5, 2017. (invited)
361. S.D. Minteer, "Advanced Bioelectrocatalytic Materials for Fuel Cells and Electrosynthesis," National American Chemical Society Meeting, April 2, 2017. (invited)
362. S.D. Minteer, "Enzymatic Fuel Cells," Hong Kong University of Science and Technology Seminar, Hong Kong, March 27, 2017. (invited)
363. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," University of California- Irvine Chemical Engineering and Materials Science Seminar, Irvine, CA, March 17, 2017. (invited)
364. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Case Western Reserve University Chemical Engineering Seminar, Cleveland, OH, March 2, 2017. (invited)
365. S.D. Minteer, "Designing Biosensors and Smart Contact Lenses Using Redox Polymers," West Virginia University Materials Science & Engineering Seminar, Morgantown, WV, February 17, 2017. (invited)
366. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Applications," Ohio State University Departmental Seminar, Columbus, OH, February 13, 2017. (invited)
367. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," California State University- Chico Department Seminar, Chico, CA, February 10, 2017. (invited)
368. S.D. Minteer, "Substrate Channeling in Natural and Artificial Metabolons," California State University- San Bernardino Department Seminar, San Bernardino, CA, February 9, 2017. (invited)
369. S.D. Minteer, "Enzymatic Bioelectroanalysis for Amperometric and Self-Powered Biosensing," SWAP 2017, Salt Lake City, UT, February 4, 2017.
370. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Applications," Utah State University Department of Chemistry Seminar, Logan, UT, November 30, 2016. (invited)
371. S.D. Minteer, "Utilizing Bioengineering for Fabricating Catalytic Cascade Bioanodes," Ceramtec Seminar, Salt Lake City, UT, October 19, 2016. (invited)
372. S.D. Minteer, "Utilizing Bioengineering for Fabricating Catalytic Cascade Bioanodes," Electrochemical Society Meeting, Honolulu, HI, October 4, 2016. (invited keynote)
373. S.D. Minteer, "Substrate Channeling in Natural and Artificial Metabolons," USP-Quimica Seminar, Ribeirao Preto, Brazil, September 20, 2016. (invited)
374. S.D. Minteer, "Micellar Polymers for Enzyme Immobilization," State Key Laboratory of Environmental Geochemistry Seminar, Institute of Geochemistry, Chinese Academy of Sciences, Guiyang, China, August 30, 2016. (invited)
375. R. Milton, S. Abdellaoui, D. Leech, and S.D. Minteer, "Heterogeneous Bioelectrochemistry of Nitrogenase," International Society of Electrochemistry, Hague, Netherlands, August 23, 2016.
376. S.D. Minteer, "Energy Harvesting with Biological Fuel Cells," Gordon Research Conference in Fuel Cells, Easton, MA, August 9, 2016. (invited)
377. S.D. Minteer, "Substrate Channeling in Natural and Artificial Metabolons," Gordon Research Conference in Enzymes, Coenzymes, and Metabolic Pathways, Waterville Valley, NH, July 25, 2016. (invited)
378. S.D. Minteer, "Self-Powered Arsenic Biosensor Based on the Inhibition of Laccase By As^{3+} and As^{5+} ," USDA AFRI Nanotechnology Meeting, State College, PA, June 6, 2016. (invited)

379. K. Knoche, J. Renner, and S.D. Minter, "Geobacter Sulfurreducens Electrodes for Nitrate Reduction in Ground Water," Electrochemical Society Meeting, San Diego, CA, June 1, 2016.
380. T. Wang, R.D. Milton, S. Abdellaoui, D. Hickey, and S.D. Minter, "Self-Powered Arsenic Biosensor Based on the Inhibition of Laccase by Arsenite and Arsenate," Electrochemical Society Meeting, San Diego, CA, June 2, 2016.
381. D.P. Hickey, K. Albertson, R.D. Milton, and S.D. Minter, "Overcoming Biocathode Limitations in BFCs: Enhancing O₂ Concentration with Micelles," Electrochemical Society Meeting, San Diego, CA, May 31, 2016. (invited)
382. R.D. Milton, M. Yuan, D.P. Hickey, A. Sugawara, C. Peterbauer, D. Haltrich, and S.D. Minter, "Deep Oxidation of Multiple (Poly)Saccharides at a Bi-Enzymatic Bioelectrodes," Electrochemical Society Meeting, San Diego, CA, May 31, 2016.
383. S. Abdellaoui, R.D. Milton, T. Quah, and S.D. Minter, "NADH Bioelectrocatalysis at a Naphthoquinone Redox Polymer," Electrochemical Society Meeting, San Diego, CA, May 31, 2016.
384. D.P. Hickey, D. Schiedler, I. Matanovic, P.V. Doan, P. Atanassov, M.S. Sigman, and S.D. Minter, "Predicting Electrocatalytic Properties: Modeling Structure-Activity Relationships of Nitroxyl Radicals," Electrochemical Society Meeting, San Diego, CA, May 30, 2016. (invited)
385. S.D. Minter, "Metabolon Bioelectrocatalysis for Enzymatic Fuel Cells," Biosensors 2016 Conference, Gothenburg, Sweden, May 27, 2016. (invited plenary)
386. S.D. Minter, "Enzymatic Bioelectrocatalysis: From metabolic pathways to metabolons," East China Normal University, Chemistry Department Seminar, Shanghai, China, May 6, 2016. (invited)
387. S.D. Minter, "Enzymatic Bioelectrocatalysis: From metabolic pathways to metabolons," Santa Clara University, Chemistry Department Seminar, Santa Clara, CA, April 29, 2016. (invited)
388. S.D. Minter, "Designing Amperometric Biosensors and Smart Contact Lenses Utilizing Redox Polymer Systems," Instituto de Quimica de Sao Carlos Seminar, Sao Carlos, Brazil, April 5, 2016. (invited)
389. S.D. Minter, "Designing Amperometric Biosensors and Smart Contact lenses Utilizing Redox Polymer Systems," PPGQ-RP Seminar, Sao Paulo, Brazil, March 30, 2016. (invited)
390. S.D. Minter, "Enzymatic Bioelectrocatalysis: From metabolic pathways to metabolons," University of Maryland Baltimore County, Chemistry Department Seminar, Baltimore, MD, March 21, 2016. (invited)
391. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," Brigham Young University Department of Chemical Engineering Seminar, Provo, UT, March 10, 2016. (invited)
392. S. Abdellaoui and S.D. Minter, "New Enzymes for the Hybrid Enzymatic and Organic Electrocatalytic Cascade for the Complete Oxidation of Glycerol," Pittcon, Atlanta, GA, March 9, 2016. (invited)
393. S.D. Minter, "Role of Undergraduate Research in Solving the Renewable Energy Challenges of the Future," Utah Conference on Undergraduate Research, Salt Lake City, UT, February 19, 2016. (invited keynote)
394. S.D. Minter, F. Wu, and S. Xu, "From mitochondria to metabolons: Enzyme cascade-based bioelectrocatalysis," Pacifichem, Honolulu, HI, December 18, 2015. (invited)
395. R. Milton, D. Hickey, S. Abdellaoui, B. Tan, and K. Lim, "Application and immobilization of a novel naphthoquinone derivative for mediated bioelectrocatalysis

- of glucose by FAD-dependent glucose dehydrogenase,” Pacificchem, Honolulu, HI, December 19, 2015.
396. S.D. Minteer, D. Hickey, M. Sigman, I. Matanovic, P. Atanassov, “Combining theory and experimental validation in the use of TEMPO for anodic electrocatalysis,” Pacificchem, Honolulu, HI, December 17, 2015. (invited)
397. S.D. Minteer, “Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons,” University of Arizona Chemistry Department Seminar, December 10, 2015. (invited)
398. S.D. Minteer, “Bioelectrocatalytic Oxidation of Sucrose with an Artificial Metabolon Assembled on a DNA Scaffold,” ConTech2015, Suwon, South Korea, November 26, 2015. (invited keynote)
399. S.D. Minteer, “Hybrid Chemoenzymatic Biofuel Cells,” Chemistry Department Seminar, Seoul National University, Seoul, South Korea, November 25, 2015. (invited)
400. D. Hickey, S. Abdellaoui, M. Sigman, and S.D. Minteer, “A Nanostructured Hybrid Bioanode Hydrogel for Deep Oxidation of Glycerol,” American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 11, 2015.
401. S.D. Minteer, “Using DNA as a Scaffold for Immobilizing Enzymes Cascades for Biofuel Cells,” American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 10, 2015. (invited)
402. S. Abdellaoui, D.P. Hickey, M.S. Sigman, and S.D. Minteer, “New enzymes for the hybrid enzymatic organic electrocatalytic cascade for the complete oxidation of glycerol,” American Institute of Chemical Engineers National Meeting, Salt Lake City, UT, November 10, 2015.
403. S.D. Minteer, “Rational Design of Redox Polymers and Pyrene Moieties for Biosensor, Biofuel Cells, and Smart Contact Lens Applications,” Medtronics TeVTalk, Northridge, CA, November 6, 2015. (invited)
404. S.D. Minteer, “Krebs Cycle Metabolons: From Structural Biology to Bioelectrocatalysis,” Beijing Conference and Exhibition on Instrumental Analysis, Beijing, China, October 29, 2015. (invited keynote)
405. S.D. Minteer, “Moving Electrochemical Biosensors from Human Serum to Contact Lenses,” International Symposium on In Vivo Analysis, Beijing, China, October 26, 2015. (invited)
406. S.D. Minteer, “Designing Amperometric Biosensors and Smart Contact Lenses Utilizing Redox Polymer Systems,” University of Arizona Chemical and Environmental Engineering Department Seminar, Tucson, AZ, October 16, 2015. (invited)
407. D.P. Hickey, R.D. Milton, S. Abdellaoui, K. Lim, B. Tan, and S.D. Minteer, “Naphthoquinone Derivatives as Low-Potential Electron Mediators of FAD-Dependent Glucose Dehydrogenase, Electrochemical Society Meeting, Phoenix, AZ, October 13, 2015.
408. D.P. Hickey, R.D. Milton, D. Chen, M. Sigman, and S.D. Minteer, “TEMPO-Modified Linear Poly(ethylenimine) for Immobilization-Enhanced Electrocatalytic Oxidation of Alcohol,” Electrochemical Society Meeting, Phoenix, AZ, October 12, 2015.
409. D.P. Hickey, I. Matanovic, D. Schiedler, P. Atanassov, M. Sigman, and S.D. Minteer, “Catalytic Design through Computational Modeling: Exploring the Electrochemical Oxidation of Glycerol by Nitroxyl Radical,” Electrochemical Society Meeting, Phoenix, AZ, October 12, 2015. (invited)
410. S.D. Minteer, “Bioelectrocatalytic Oxidation of Sucrose with an Artificial Metabolon Assembled on a DNA Scaffold,” 30th Anniversary Meeting and

- International Symposium of the Korean Society for Biotechnology and Bioengineering, Incheon, South Korea, October 12, 2015. (invited keynote)
411. R. Milton, David Hickey, Sofiene Abdellaoui, Koun Lim, Boxuan Tan, and S.D. Minteer, "Naphthoquinone Derivatives as Low-Potential Electron Mediators of FAD-Dependent Glucose Dehydrogenase," International Society of Electrochemistry Meeting, Taipei, Taiwan, October 5, 2015.
 412. S.D. Minteer, "Plasmonic Enhancement of Glycerol Fuel Cell Performance," ISE Satellite Meeting – New Devices for energy Conversion and Storage, Kowloon, Hong Kong, October 3, 2015 (invited).
 413. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Metabolic Pathways to Metabolons," Oklahoma State University Chemistry Department Seminar, Stillwater, OK, September 24, 2015 (invited).
 414. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," SIBEE Simposio Brasileiro de Electroquimica e Eletroanalitica, Uberlandia, Brazil, August 20, 2015 (invited plenary).
 415. S.D. Minteer, "Bio-inspired and Biological Electrocatalysis," EPSuM Innovation Workshop, Columbus, OH, July 8, 2015. (invited)
 416. S.D. Minteer, "Metabolon Bioelectrocatalysis for Biofuel Cells," NORM ACS Regional Meeting, Pocatello, ID, June 23, 2015.
 417. F. Wu and S.D. Minteer, "Structural probing of substrate channeling in the Krebs cycle: From natural metabolon to engineered biocatalyst," NORM ACS Regional Meeting, Pocatello, ID, June 24, 2015.
 418. D. Hickey, M. McCamant, M. Sigman, and S.D. Minteer, "The complete oxidation of glycerol to CO₂: A hybrid enzymatic and organic electrocatalytic cascade," NORM ACS Regional Meeting, Pocatello, ID, June 24, 2015.
 419. S.D. Minteer, "Bioelectrocatalytic Oxidation of Sucrose with an Artificial Metabolon Assemble don a DNA Scaffold," International Symposium on Bioelectrochemistry and Bioenergetics, Malmo, Sweden, June 14, 2015. (invited Luigi Galvani Prize lecture)
 420. M. Rasmussen, G.C. Bazan, F.W. Dahlquist, N.D. Kirchhofer, and S.D. Minteer, "Enhanced Photobioelectrochemical Activity of Thylakoid Bioanodes via Interfacial Modification and FRET by Membrane-Intercalating Conjugated Oligoelectrolytes," International Symposium on Bioelectrochemistry and Bioenergetics, Malmo, Sweden, June 15, 2015.
 421. R. Milton, S. Abdellaoui, D. Hickey, K. Lim, and S.D. Minteer, "Engineering Glucose Oxidase to Exhibit Enhanced Substrate Promiscuity for Biofuel Cell Applications," International Symposium on Bioelectrochemistry and Bioenergetics, Malmo, Sweden, June 16, 2015.
 422. S.D. Minteer, "Bioelectrocatalytic Oxidation of Sucrose with an Enzyme Cascade Assembled on a DNA Scaffold," Electrochemical Society Meeting, Chicago, IL, May 25, 2015.
 423. S.D. Minteer, D.P. Hickey, M. McCamant, F. Giroud, and M.S. Sigman, "The Complete Oxidation of Glycerol to CO₂: A hybrid Enzymatic and Organic Electrocatalytic Cascade," Electrochemical Society Meeting, Chicago, IL, May 25, 2015.
 424. R.C. Reid, S.D. Minteer, and B.K. Gale, "Contact Lens Biofuel Cell Tested in Conditions Similar to Human Eyes," Electrochemical Society Meeting, Chicago, IL, May 26, 2015.
 425. S.D. Minteer, F. Giroud, R.D. Milton, and B. Tan, "Quinone Electrochemistry: From Electron Transport Chain to Electron Mediators and Orientational Moieties," Electrochemical Society Meeting, Chicago, IL, May 26, 2015.

426. S.D. Minteer, "Natural and Artificial Metabolons for Bioelectrocatalysis for Enzymatic Biofuel Cells," University of Sao Paulo Department of Chemistry Seminar, Ribeirao Preto, Brazil, April 29, 2015. (invited)
427. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," Argonne National Laboratory Chemical Sciences Division Seminar, Chicago, IL, April 15, 2015. (invited)
428. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," Columbia University Departmental Seminar, New York City, NY, March 31, 2015. (invited)
429. S.D. Minteer, "Organelle Bioelectrocatalysis," National American Chemical Society Meeting, Denver, CO, March 24, 2015. (invited)
430. S.D. Minteer, "Enzymatic Bioelectrocatalysis: From Buffer to Bodily Fluids," Pittcon 2015, New Orleans, LA, March 8, 2015. (invited)
431. S.D. Minteer, "Improving the Photocurrent Generation of Thylakoid Bio-solar Cells," Rice University, Houston, TX, December 14, 2014. (invited)
432. S.D. Minteer, "From Enzymatic Biosensors Towards Implantable Enzymatic Biofuel Cells," Materials Research Society National Meeting, Boston, MA, December 3, 2014 (invited).
433. S.D. Minteer, "My Journey from Enzyme Cascades to Metabolons to Mitochondria," 2014 Biotic-Abiotic Interface Meeting, Redondo Beach, CA, October 16, 2014. (invited)
434. S.D. Minteer, "From PEM Fuel Cell Design to Biological Fuel Cells: The Status of Systems Development for Biological Fuel Cells," Electrochemical Society Meeting, Cancun, Mexico, October 7, 2014. (invited)
435. S.D. Minteer, "Water Quality and Water Toxicity Sensing," Electrochemical Society Meeting, Cancun, Mexico, October 8, 2014.
436. L. Pelster and S.D. Minteer, "Characterizing Electron Transport Chain Metabolon Bioelectrocatalysis," Electrochemical Society Meeting, Cancun, Mexico, October 8, 2014.
437. S.D. Minteer, "Enzymatic Bioelectrocatalysis for Energy Conversion Applications," University of Iowa, Department of Chemistry, Iowa City, IA, September 12, 2014. (invited)
438. S.D. Minteer, "Structural and Electrochemical Characterization of Metabolons," Air Force Human Performance Review, Arlington, VA, September 9, 2014. (invited)
439. S.D. Minteer, "Bioelectrocatalysis of Carbon Dioxide Reduction," US-Korea Conference on Science, Technology, and Engineering, San Francisco, CA, August 9, 2014. (invited)
440. S.D. Minteer, "Enzyme Cascades for Bioelectrocatalysis," Bioenergy14 Conference, Malaga, Spain, June 3, 2014. (invited keynote)
441. S.D. Minteer and M. Rasmussen, "Thylakoid-based Biosolar Cells," Electrochemical Society Meeting, Orlando, FL, May 12, 2014.
442. S.D. Minteer and S. Xu, "Investigating the Role of Orientation of PQQ-Dependent Dehydrogenases on Electrochemical Performance of a Bioanode," Electrochemical Society Meeting, Orlando, FL, May 13, 2014.
443. R.D. Milton, F. Giroud, A.E. Thumser, S.D. Minteer and R.C. Slade, "Glucose Oxidase Affects Laccase and Bilirubin Oxidase Direct Bioelectrocatalytic Cathodes," Electrochemical Society Meeting, Orlando, FL, May 13, 2014.
444. D. Hickey, D.W. Schmidke, D.T. Glatzhofer, and S.D. Minteer, "Enzyme Cascade for Catalyzing Sucrose Oxidation in a Biofuel Cell," Electrochemical Society Meeting, Orlando, FL, May 12, 2014.

445. S.D. Minter, "Enzymatic and Mitochondrial Bioelectrocatalysis for Energy Conversion Applications," University of Minnesota Department Seminar, Minneapolis, MN, May 1, 2014. (invited)
446. S.D. Minter, "From Biofuel Cells to Self-Powered Biosensors," International Society of Electrochemistry Meeting, Nanjing, China, March 29, 2014. (invited keynote)
447. S.D. Minter, "From Bacteria to Biobatteries: Transitioning Multi-Disciplinary Innovation Out of the Research Laboratory," "Washington University Women in Innovation and Entrepreneurship Seminar, St. Louis, MO, March 21, 2014. (invited)
448. S.D. Minter and F. Giroud, "Immobilized Anthracenyl-Modified Pyrenes on Carbon Nanotubes for Improved Oxygen Reduction Reaction By *Trametes Versicolor* Laccase," Electrochemistry Conference on Energy and the Environment, Shanghai, China, March 15, 2014. (invited keynote)
449. S.D. Minter, "Bioelectrocatalysis for Electroanalysis of Waste Water," Pittcon, Chicago, IL, March 3, 2014. (invited)
450. S.D. Minter, "Mitochondrial Bioelectrocatalysis for Power and Sensing Applications, Willamette University, Salem, OR, February 24, 2014. (invited)
451. S.D. Minter, "Bioelectrocatalysis for Energy Conversion Applications," University of St. Thomas, St. Paul, MN, February 7, 2014. (invited)
452. S.D. Minter, "Bioelectrocatalysis for Alternative Energy Applications," Trinity University, San Antonio, TX, January 30, 2014. (invited)
453. S.D. Minter, "From Bioelectrocatalysis to DNA to Alkaline Electrocatalysis," 7th Bishop's Lodge Workshop on Materials for Energy Conversion, Santa Fe, NM, November 5, 2013. (invited)
454. B. Ohlsen and S.D. Minter, "NADH Regeneration for Bioelectrofuels," Electrochemical Society Meeting, San Francisco, CA, October 30, 2013.
455. F. Giroud and S.D. Minter, "Functionalization of Multi-Walled Carbon Nanotubes with Pyrene-based Groups for Enhanced Oxygen Reduction by Laccase," Electrochemical Society Meeting, San Francisco, CA, October 29, 2013. (invited)
456. S. Aquino Neto, A. Gautreau, T. Almeida, A. De Andrade, and S.D. Minter, "Preparation of Hybrid Nanocatalysts Containing Enzymes and Gold Nanoparticles for Ethanol/O₂ Biofuel Cells," Electrochemical Society Meeting, San Francisco, CA, October 29, 2013.
457. S. Calabrese-Barton, B. Piering, and S.D. Minter, "Metabolic Control Analysis of Bioelectrodes for Multistep Oxidation of Biofuels," Electrochemical Society Meeting, San Francisco, CA, October 29, 2013. (invited)
458. M. Rasmussen and S.D. Minter, "Investigating the Mechanism of Thylakoid Direct Electron Transfer for Photocurrent Generation," Electrochemical Society Meeting, San Francisco, CA, October 28, 2013.
459. S.D. Minter, "Carbon nanotube modification for high efficiency laccase biocathodes," NanoUtah, Salt Lake City, UT, October 18, 2013. (invited)
460. S.D. Minter, "Enzymatic and Organelle Bioelectrocatalysis," CEET Seminar, University of New Mexico, Albuquerque, NM, October 17, 2013. (invited)
461. S.D. Minter, "Enzymatic and Organelle Bioelectrocatalysis," CINT Seminar, Los Alamos National Laboratory, Los Alamos, NM, October 16, 2013. (invited)
462. S.D. Minter, "Bioelectrocatalysis for Energy Conversion," Chemistry Department Seminar, University of Northern Iowa, Cedar Falls, IA, October 4, 2013. (invited)
463. S.D. Minter, "Bioelectrocatalysis for Energy Conversion," Chemistry Department Seminar, University of Sao Paulo-Ribeirao Preto, September 27, 2013. (invited)

464. S.D. Minter, "Enzymatic and Mitochondrial Bioelectrocatalysis for Bioanalysis," *Analytica Latin America*, September 26, 2013. (invited)
465. S.D. Minter, "Mitochondrial Bioelectrocatalysis," *MicroEchem 2013*, Amealco, Mexico, September 17, 2013. (invited plenary)
466. S. Minter, "Biohybrid Materials Design for Bioanodes," *International Society of Electrochemistry Annual Meeting*, Queretaro, Mexico, September 9, 2013. (invited keynote)
467. R. Milton, F. Giroud, A. Thumser, S. Minter, and R. Slade, "The Effect of Oxygen Sensitivity/Insensitivity of Glucose-Oxidising Anodes on Oxygen-Reduction Enzymatic Cathodes in Enzymatic Biological Fuel Cells," *International Society of Electrochemistry Annual Meeting*, Queretaro, Mexico, September 9, 2013.
468. S.D. Minter, "Effect of Supporting Electrolyte on the Electrocatalytic Activity of Electrodeposited Catalysts for Alkaline Fuel Cells," *Pacific Rim International Congress on Advanced Materials and Processing*, Waikoloa, HI, August 8, 2013.
469. S.D. Minter, "Enzymatic Biofuel Cells for Energy Harvesting," *Electrochemical Society Meeting*, Toronto, Canada, May 13, 2013.
470. G.G.W. Lee, J. Leddy, and S. Minter, "Magnetic Composite Effects on a Nickel Electrocatalyst for Alcohol Oxidation," *Electrochemical Society Meeting*, Toronto, Canada, May 15, 2013.
471. S.D. Minter, "Ethanol Oxidation and Beyond: Trends in Alternative Fuel Oxidation Schemes and Progress Towards the Complete Oxidation of Higher Energy Density Fuels," *Electrochemical Society Meeting*, Toronto, Canada, May 15, 2013. (invited)
472. S.D. Minter, "Designing Metabolons for Improving the Efficiency of Enzyme Cascades," *American Chemical Society National Meeting*, New Orleans, LA, April 11, 2013. (invited)
473. S.D. Minter, "Exploring the Role of Phosphate on Nickel Electrocatalysis," *American Chemical Society National Meeting*, New Orleans, LA, April 9, 2013. (invited)
474. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy Conversion," *California State University-Chico Chemistry Seminar*, Chico, CA, April 5, 2013. (invited)
475. S.D. Minter, "Utilizing Metabolons and Enzyme Cascades for Artificial Organelles," *DSRC/DARPA Workshop on Synthetic Organelles*, Arlington, VA, April 4, 2013. (invited)
476. S.D. Minter and M. Rasmussen, "Thyalkoid Bioelectrocatalysis for Energy Conversion and Sensing," *ISE Bioelectrochemistry 2013*, Bochum, Germany, March 20, 2013. (invited Keynote)
477. S.D. Minter, "Electroanalytical Techniques for Toxin Biosensing," *Pittcon*, Philadelphia, PA, March 19, 2013. (invited)
478. S.D. Minter, "Enzyme Cascades for Biofuel Cells," *Indo-US Workshop on Electrocatalytic Materials for Fuel and Biofuel Cells*, Varanasi, India, February 26, 2013. (invited)
479. S.D. Minter, "Enzymatic Bioelectrocatalysis for Energy Conversion," *St. Olaf College, Chemistry Seminar*, Northfield, MN, December 8, 2012. (invited)
480. S. Minter, "Organelle Bioelectrochemistry," *6h Santa Fe Workshop on Materials for Energy Conversion*, Santa Fe, NM, November 9, 2012. (invited)
481. S. Minter, "Bioelectrocatalysis for Energy Conversion," *Wayne State University Chemistry Department Seminar*, Detroit, MI, November 6, 2012. (invited)
482. S.R. Higgins, R. Lopez, D. forester, M. Cooney, P. Atanassov, C. Lau, S. Minter, K. Nealson, A. Cheung, O. Bretschger, T. Yan, and E. Pagaling,

- “Characterization of Microbial Fuel Cell Anodic Biofilms Grown on Pure and Mixed Cultures,” Electrochemical Society Meeting, Honolulu, HI, October 9, 2012.
483. S. Minter, “Solar Bioelectrocatalysis Utilizing Thylakoids,” Electrochemical Society Meeting, Honolulu, HI, October 9, 2012.
 484. M.T. Meredith, F. Giroud, and S.D. Minter, “Electrochemically Azine-Modified CNTs Embedded in Hydrogel Scaffold for NADH Oxidation,” International Society of Electrochemistry Annual Meeting, Prague, Czech Republic, August 21, 2012.
 485. S. Minter, “Mitochondrial-based Voltammetric Toxicity Sensor,” International Society of Electrochemistry Annual Meeting, Prague, Czech Republic, August 21, 2012.
 486. S. Aquino Neto, E.L. Suda, S. Xu, M.T. Meredith, A. De Andrade, and S.D. Minter, “Preparation and electrochemical characterization of direct electron transfer-based bioanodes for ethanol biofuel cell,” International Society of Electrochemistry Annual Meeting, Prague, Czech Republic, August 20, 2012.
 487. S. Minter, “Bioelectrocatalysis for Bioanalysis Applications,” University of New Mexico IGERT Symposium on Integrating Nanotechnology with Cell Biology and Neuroscience, Albuquerque, NM, August 14, 2012. (invited)
 488. S. Minter, “Designing Metabolons for Improving the Efficiency of Enzyme Cascades,” AFOSR Bioenergy Review, Arlington, VA, August 9, 2012. (invited)
 489. S. Minter, “Micellar Polymer Membranes for Use in Biological Sensors and Biofuel Cells,” Gordon Research Conference in Membranes: Materials & Processes, New London, NH, July 30, 2012. (invited)
 490. S. Minter, “Novel Properties of Hydrophobically Modified Nafion,” North American Membrane Society Annual Meeting, New Orleans, LA, June 11, 2012.
 491. S. Minter, “Enzymatic Bioelectrocatalysis for Energy Conversion,” California State University-Los Angeles Chemistry Department Seminar, Los Angeles, CA, June 5, 2012. (invited)
 492. S. Minter, “Enzyme Bioelectrocatalysis for Biosensors and Energy Conversion Devices,” IV Simposio Cinvestav/Sigma Aldrich, Mexico City, Mexico, May 16, 2012 (invited).
 493. S.L. Maltzman and S.D. Minter, “Development of a Mitochondria-based Electrochemical Sensors for Pesticides in Water,” Electrochemical Society Meeting, Seattle, WA, May 8, 2012.
 494. N.Z. Hausmann and S.D. Minter, “Towards the Design of a Breath Sensor for Acetone,” Electrochemical Society Meeting, Seattle, WA, May 8, 2012.
 495. S.D. Minter, “Utilizing Natural and Synthetic Metabolic Pathways for Deep Oxidation of Biofuels in Enzymatic Biofuel Cells,” Electrochemical Society Meeting, Seattle, WA, May 7, 2012. (invited)
 496. S. Xu and S.D. Minter, “Minimal Enzyme Cascade for Oxidation of Glucose to Carbon Dioxide at the Anode: Importance of Promiscuous Enzymes,” Electrochemical Society Meeting, Seattle, WA, May 7, 2012.
 497. M. Meredith, F. Giroud, and S.D. Minter, “Polyazine/Carbon Nanotube/Hydrogel Composites for Enzyme Immobilization and Bioelectrocatalysis,” Electrochemical Society Meeting, Seattle, WA, May 7, 2012.
 498. L. Pelster, M. Meredith, and S.D. Minter, “Electrocatalysis Studies of Nicotinamide Adenine Dinucleotide at Multiwalled Carbon Nanotube/Glassy Carbon Electrode with Different Polymers,” Electrochemical Society Meeting, Seattle, WA, May 7, 2012.
 499. D. Chen and S.D. Minter, “A DNA-Nickel Complex Based Fuel Cell for Deep Oxidation of Various Fuels,” Electrochemical Society Meeting, Seattle, WA, May 7, 2012.

500. S.D. Minter, "Utilization of Enzyme Cascades for Biofuel Cells: From Metabolism to Metabolons," University of Freiburg IMTEK Seminar, Freiburg, Germany, April 27, 2012. (invited)
501. S.D. Minter, "Mitochondrial Electrodes for Electrochemically Assaying Carbonic Anhydrase," 9th International Conference on Carbonic Anhydrase, Antalya, Turkey, April, 14, 2012. (invited)
502. S.D. Minter, "Utilization of Enzyme Cascades for Biofuel Cells: From Metabolism to Metabolons," Georgia Institute of Technology Cherry Emerson Lecture, Atlanta, GA, March 15, 2012. (invited)
503. S.D. Minter, "Self-Powered Explosive Sensors," Pittsburg Conference, Orlando, FL, March 13, 2012.
504. S.D. Minter, "Enzymatic and Mitochondrial Bioelectrocatalysis for Energy Conversion Applications," University of Denver Chemistry Department Seminar, Denver, CO, February 23, 2012. (invited)
505. S.D. Minter, "Metabolic Pathways and Metabolons as Electrocatalysts for Fuel Cells," VTT Biotechnology Seminar, Espoo, Finland, February 16, 2012. (invited)
506. S.D. Minter, "Enzyme Cascades for Anodic Bioelectrocatalysis," Pacific Power Sources Symposium, Kona, HI, January 12, 2012. (invited)
507. M. Meredith, M. Minson, and S.D. Minter, "Biobattery Cathode Materials Based on Aromatically Modified Carbon Nanotubes as Scaffolds for Laccase-Catalyzed Oxygen Reduction," Pacific Power Sources Symposium, Kona, HI, January 12, 2012.
508. N. Hausmann and S. D. Minter, "Towards the design of an enzymatic breath sensor for acetone," Midwest ACS Meeting, St. Louis, MO, October 20, 2011.
509. D. Sokic-Lazic and S.D. Minter, "Utilizing enzyme cascades for deep oxidation of a variety of biofuels," Midwest ACS Meeting, St. Louis, MO, October 20, 2011.
510. S. Maltzman and S.D. Minter, "Development of a Mitochondria-based Electrochemical Water Quality Sensor for Pesticides," Midwest ACS Meeting, St. Louis, MO, October 21, 2011.
511. S.D. Minter, "Metabolons as Electrocatalysts for Fuel Cells," University of Utah Department of Materials Science & Engineering, Salt Lake City, UT, November 2, 2011.
512. S.D. Minter, R. Arechederra, K. Artyushkova, and P. Atanassov, "Growth of Phthalocyanine Doped and Undoped Nanotubes Using Mild Synthesis Conditions For Development of Novel Oxygen Reduction Catalysts," Electrochemical Society Meeting, Boston, MA, October 12, 2011.
513. J. Leddy and S.D. Minter, "Magnetic Effects on Electron Transfer: Evolution of the Model and Technologies," Electrochemical Society Meeting, Boston, MA, October 12, 2011.
514. S.D. Minter, "Bioelectrocatalysis for Energy Conversion and Sensor Applications," Fort Lewis College Department of Chemistry Departmental Seminar, Durango, CO, September 30, 2011.
515. S.D. Minter, "Enzyme and Organelle-based Bioelectrocatalysis," International Society of Electrochemistry, Niigata, Japan, September 13, 2011. (invited)
516. S.D. Minter, "Metabolic Pathways and Metabolons for Bioelectrocatalysis," Potter's Lodge Meeting of Electrochemistry, Blue Mountain Lake, NY, September 8, 2011.
517. V. Ganesan, K.H. Sjöholm, R. Arechederra, and S.D. Minter, "Thylakoid-based photobioelectrochemical cell for solar energy conversion," National American Chemical Society Meeting, Denver, CO, August 28, 2011.

518. S. Minteer, "Self Powered Sensor for Rapid Detection of Hidden Explosives," TTC Defeating IEDs Conference, Washington, DC, June 21, 2011. (invited)
519. S. Minteer, "Multi-step Oxidation of Biofuels," Air Force Office of Scientific Research Bioenergy Review, Arlington, VA, June 6, 2011. (invited)
520. S. Minteer, "From Mitochondria to Metabolon-based Biofuel Cells," XXI International Symposium on Bioelectrochemistry and Bioenergetics, Cracow, Poland, May 9, 2011. (invited)
521. S. Xu and S.D. Minteer, "Developing a Complete Oxidation Direct Electron Transfer Enzymatic Glucose Biofuel Cell," Electrochemical Society Meeting, Montreal, Canada, May 4, 2011.
522. K. Sjöholm, M. Cooney, and S.D. Minteer, "Development of non-platinum conductive mesoporous catalysts as renewable materials for alternative fuel cells," Electrochemical Society Meeting, Montreal, Canada, May 4, 2011.
523. M. Arechederra, P. Addo, and S.D. Minteer, "Renewable NAD/NADH Electrocatalysts," Electrochemical Society Meeting, Montreal, Canada, May 4, 2011. (invited)
524. P. Addo, R. Arechederra, A. Waheed, and S.D. Minteer, "Role of Carbonic Anhydrase in Bioelectrocatalytic Reduction of Carbon Dioxide," Electrochemical Society Meeting, Montreal, Canada, May 4, 2011. (invited)
525. S. Minteer, "Bioelectrocatalysis for Energy Conversion and Sensor Applications," University of Illinois- Champaign/Urbana, Chemistry Department Seminar, Urbana, IL, April 15, 2011. (invited)
526. S. Higgins, C. Lau, S. Minteer, P. Atanassov, and M. Cooney, "Standardized characterization of microbial fuel cells," American Chemical Society National Meeting, Anaheim, CA, March 31, 2011.
527. E. Campbell, Z. Zulic, S. Minteer, and S. Banta, "Engineering a thermostable dehydrogenase to utilize biomimetic cofactors to improve enzymatic biofuel cell performance," American Chemical Society National Meeting, Anaheim, CA, March 30, 2011.
528. D. Wetzel, L. Pelster, C. Fischer, and S.D. Minteer, "Mitoplast bioelectrocatalysis immobilized in modified Nafion membranes," American Chemical Society National Meeting, Anaheim, CA, March 30, 2011.
529. S.D. Minteer, "From Enzymes to Metabolons: Improving Metabolic Flux in Enzymatic Biofuel Cells," 2011 Pittcon, Atlanta, GA, March 17, 2011. (invited)
530. S.D. Minteer, "Reversible NAD/NADH Electrocatalysts for Rechargeable Biobatteries," 2011 Pacific Power Sources Symposium, Kona, HI, January 12, 2011. (invited)
531. S.D. Minteer, "Nitroaromatic Actuation of Mitochondrial Bioelectrocatalysis for Self Powered Explosive Sensors," 2010 Pacificchem Conference, Honolulu, HI, December 15, 2010. (invited)
532. S.D. Minteer, "Bioelectrocatalysis for Energy Conversion and Sensor Applications," Pennsylvania State University Department of Chemistry, State College, PA, December 8, 2010. (invited)
533. S.D. Minteer, "Improving the Efficiency of Enzymatic Biofuel Cells," Materials Research Society Fall Meeting, Boston, MA, December 1, 2010. (invited)
534. S.D. Minteer, "Mitochondrial biofuel cells: Transitioning mitochondrial energy conversion from cells to electrodes to batteries," ISANH Targeting Mitochondria 2010, Berlin, Germany, November 18, 2010. (invited)
535. S.D. Minteer, "Nanobioelectrocatalysis for Efficient Deep Oxidation," AIChE National Meeting, Salt Lake City, UT, November 10, 2010. (invited)

536. S.D. Minteer, "Bioelectrocatalysis of Ethanol," 4th Santa Fe Workshop on Materials for Energy Conversion: Catalysts for Ethanol Oxidation and Electro-oxidation, Santa Fe, NM, November 5, 2010. (invited)
537. S.D. Minteer, "Bioelectrocatalysis for Energy Conversion Applications," University of New Mexico Chemical and Nuclear Engineering Departmental Seminar, Albuquerque, NM, November 2, 2010. (invited)
538. S.D. Minteer, "Mitochondrial Bioelectrocatalysis," Washington University Department of Energy, Environmental, and Chemical Engineering Seminar Series, St. Louis, MO, October 29, 2010. (invited)
539. S.D. Minteer, "Nanobioelectrocatalysis for Energy Conversion," NanoFrontiers Gateway to Economic Development in Missouri Conference, St. Louis, MO, October 27, 2010. (invited)
540. S.D. Minteer, "Improving the Efficiency of Biofuel Cells with Enzyme Cascades," Electrochemical Society Meeting, Las Vegas, NV, October 11, 2010.
541. S. D. Minteer, "Improving the Energy Density and Efficiency of Enzymatic Biofuel Cells," International Society of Electrochemistry Annual Meeting, Nice, France, September 30, 2010. (invited keynote)
542. S.D. Minteer, "Bioelectrocatalysis for Energy Conversion Applications," Aarhus University, iNANO Seminar, Aarhus, Denmark, September 24, 2010.
543. S.D. Minteer, "Bioelectrocatalysis for Energy Conversion Applications," Loyola University Chemistry Department Seminar, Chicago, IL, September 18, 2010. (invited)
544. S.D. Minteer, "Bioelectrochemical Systems: What is a Biobattery?," 1st Students Potters Lodge Electrochemistry Meeting, Blue Mountain Lake, NY, September 10, 2010. (invited)
545. R. Arechederra and S.D. Minteer, "Fuel cells that use mitochondria as energy conversion matrices to generate electricity from biofuel," National American Chemical Society Meeting, Boston, MA, August 25, 2010.
546. Shuai Xu and S.D. Minteer, "Developing a complete oxidation direct electron transfer glucose biofuel cell," National American Chemical Society Meeting, Boston, MA, August 25, 2010.
547. M.J. Cooney and S.D. Minteer, "Modification and characterization of chemical microenvironments for enzyme immobilization," National American Chemical Society Meeting, Boston, MA, August 24, 2010.
548. S. Higgins, S. Minteer, and M. Cooney, "Characterization of flow-through microbial fuel cells," National American Chemical Society Meeting, Boston, MA, August 24, 2010.
549. S.D. Minteer, "Multi-Enzyme Bioelectrochemical Systems," AFOSR Bioenergy Program Review, Arlington, VA, July 27, 2010. (invited)
550. S.D. Minteer, "Transitioning from Amperometric Biosensors to Self Powered Sensors," Gordon Research Conference in Bioanalytical Sensors, New London, NH, June 24, 2010. (invited)
551. S.D. Minteer, "Mitochondrial Bioelectrocatalysis: Employing Biological Metabolism for Electrochemical Energy Conversion," University of Utah Chemistry Departmental Seminar, Salt Lake City, UT, May 10, 2010. (invited)
552. M. Arechederra, C. Jenkins, R.A. Rincon, K. Artyushkova, P. Atanassov, and S. Minteer, "Poly(Methylene Blue) and Poly(Methylene Green): Comparison Between the Electrochemical and Chemical Syntheses, Chemical Properties and Application as an NADH Electrocatalyst," 217th Electrochemical Society Meeting, Vancouver, Canada, April 29, 2010.

553. K. Sjöholm, R. Arechederra, E. Schwarz, M. Cooney, and S. Minteer, "Use of Chitosan in the Development of Mesoporous Carbon Structures for Use in Bioelectrocatalysis," 217th Electrochemical Society Meeting, Vancouver, Canada, April 29, 2010.
554. R. Arechederra and S. Minteer, "Understanding the Mechanism of Mitochondrial Bioelectrocatalysis in Organelle Based Biofuel Cell," 217th Electrochemical Society Meeting, Vancouver, Canada, April 27, 2010.
555. G.L. Martin, C. Lau, S. Minteer, and M. Cooney, "Fluorescence characterization of immobilized enzymes," 217th Electrochemical Society Meeting, Vancouver, Canada, April 27, 2010.
556. P. Addo, R. Arechederra, and S.D. Minteer, "Conversion of a Biofuel Cell to a Rechargeable Biobattery," 217th Electrochemical Society Meeting, Vancouver, Canada, April 27, 2010.
557. M. Arechederra, C. Fischer, D. Wetzel, and S. Minteer, "Inhibition and Uncoupling Mechanisms in Mitochondrial Bioelectrocatalysis," 217th Electrochemical Society Meeting, Vancouver, Canada, April 27, 2010.
558. G. Martin, S. Minteer, and M. Cooney, "Fluorescence Characterization of Enzyme Aggregation in the Immobilized State," 217th Electrochemical Society Meeting, Vancouver, Canada, April 27, 2010.
559. Y. Wang, G. Wu, X. Ye, S. Minteer, and Y. Zhang, "Complete oxidation of hexose by using a synthetic thermophilic enzymes pathway for enzymatic biofuel cells," 217th Electrochemical Society Meeting, Vancouver, Canada, April 27, 2010.
560. S.D. Minteer, "Mitochondrial Bioelectrocatalysis," University of Memphis Departmental Seminar, Memphis, TN, April 16, 2010. (invited)
561. M. Moehlenbrock, T. Toby, and S.D. Minteer, "Improving upon enzymatic biofuel cell efficiency through metabolic enzymatic pathway complexation," National American Chemical Society Meeting, San Francisco, CA, March 21, 2010.
562. C. Jenkins, M. Germain, R. Rincón, P. Atanassov, and S.D. Minteer, "Chemical synthesis of poly(methylene blue) and poly(methylene green) for NADH electrocatalysis applications," National American Chemical Society Meeting, San Francisco, CA, March 21, 2010.
563. D. Wetzel, M. Moll, C. Fischer, M. Germain, and S.D. Minteer, "Nitroaromatic uncoupling of mitochondrial bioelectrocatalysis in modified Nafion membranes," National American Chemical Society Meeting, San Francisco, CA, March 21, 2010.
564. S.D. Minteer, "Bioelectrocatalysis for Low Temperature Fuel Cells," Pittsburgh Conference, Orlando, FL, March 3, 2010. (invited)
565. S.D. Minteer, "Enzymatic Biobatteries," United Soybean Board New Uses Meeting, Birmingham, AL, February 18, 2010. (invited)
566. S.D. Minteer, "Quantum Dots as Sensors," St. Louis Institute of Nanomedicine Annual Symposium, St. Louis, MO, February 13, 2010. (invited)
567. P. Addo and S.D. Minteer, "Rechargeable Biobatteries," International Battery Association Meeting, Waikoloa, HI, January 15, 2010. (invited)
568. S.D. Minteer, "Postage-Stamp-sized, Self Powered Sensor for Rapid Detection of Hidden Explosives," Defeating IEDs Conference, San Diego, CA, December 15, 2009. (invited)
569. S.D. Minteer, "Redox mediators vs. electrocatalysts for bioelectrocatalysis," Midwestern Universities Analytical Chemistry Conference, East Lansing, MI, December 4, 2009.
570. S.D. Minteer, "Bioelectrocatalysis for Low Temperature Fuel Cells," 4th Annual Asian Conference on Electrochemical Power Sources, Taipei, Taiwan, November 11, 2009. (invited)

571. S.D. Minter, "Enzymatic and Mitochondrial Bioelectrocatalysis for Fuel Cell Applications," University of Delaware, Fall Seminar Series, Newark, DE, October 31, 2009. (invited)
572. V.G. Paul, M.R. Mormile, S.D. Minter, and B.L. Treu, "Microbial Fuel Cells: Electricity from Bacteria," Midwest Regional American Chemical Society Meeting, Iowa City, IA, October 23, 2009.
573. S.D. Minter, "Improving the Energy Density of Biofuel Cells," Midwest Regional American Chemical Society Meeting, Iowa City, IA, October 23, 2009.
574. P. Addo and S.D. Minter, "Development of a Rechargeable Ethanol Biobattery," Midwest Regional American Chemical Society Meeting, Iowa City, IA, October 23, 2009.
575. D. Sokic-Lazic and S.D. Minter, "Enzymatic Biomimic of the Citric Acid Cycle On a Carbon Electrode for Complete Oxidation of Lactate, Southeast Regional American Chemical Society Meeting, San Juan, Puerto Rico, October 21, 2009.
576. Z. Zulic and S.D. Minter, "Induced Evolution to Enhance PQQ-Dependent Alcohol Dehydrogenase Bioelectrocatalysis," Southeast Regional American Chemical Society Meeting, San Juan, Puerto Rico, October 21, 2009.
577. S.D. Minter, "Mitochondrial Bioelectrocatalysis," University of Michigan, Chemistry Department Seminar, Ann Arbor, MI, October 15, 2009. (invited)
578. I. Felliciano, Z. Zulic, C. Cabrera, and S.D. Minter, "Characterization of PQQ-dependent Alcohol Dehydrogenase from Gluconobacter in L-Cysteine Monolayer on Pd Surface," Electrochemical Society Meeting, Vienna, Austria, October 7, 2009.
579. S.D. Minter and D. Sokic-Lazic, "Bioelectrocatalysis of pyruvate," Electrochemical Society Meeting, Vienna, Austria, October 5, 2009.
580. R. Rincoln, V. Svoboda, B.Y. Liaw, C. Lau, M. Cooney, M. Germain, S. D. Minter, and P. Atanassov, "Fabrication and Characterization of Hierarchically Structured Biofuel Cell Anodes," Electrochemical Society Meeting, Vienna, Austria, October 5, 2009. (invited).
581. S.D. Minter, "What an electrochemist can learn from biological metabolism?", Potter's Lodge Electrochemistry Meeting VI, Blue Mountain Lake, NY, September 11, 2009. (invited)
582. S.D. Minter, "Multi-Enzyme Oxidation of Biofuels," AFOSR Annual Bioenergy Conference, Arlington, VA, August 21, 2009. (invited)
583. S.D. Minter, D. Sokic-Lazic, C. Lau, G.L. Martin, and M.J. Cooney, "Improving the efficiency of biofuel cells with enzymatic cascades and flow-through electrodes," American Chemical Society National Meeting, Washington, DC, August 19, 2009. (invited)
584. R.R. Rincon, K. Artyushkova, P. Atanassov, M.N. Germain, S.D. Minter, C. Lau, and M.J. Cooney, "Integrating polyazine catalysts for NADH oxidation in biofuel cell anodes," American Chemical Society National Meeting, Washington, DC, August 19, 2009.
585. G.L. Martin, S.D. Minter, and M.J. Cooney, "Fluorescence characterization of chemical microenvironments in hydrophobically modified chitosan," American Chemical Society National Meeting, Washington, DC, August 17, 2009.
586. S.D. Minter, "Stable and high current density enzymatic bioelectrocatalysis for biofuel cells," Biochemical Engineering XVI: Past, Present, and Future of Biochemical Engineering, Burlington, VT, July 7, 2009. (invited)
587. S.D. Minter, "Implantable Glucose Biofuel Cells," BES Seminar, Saint Louis university, St. Louis, MO, June 16, 2009. (invited)

588. S.D. Minter, "Direct Bioelectrocatalysis of Glycerol and Other Biofuels for Fuel Cell Applications," Electrochemical Society, San Francisco, CA, May 27, 2009. (invited)
589. R.A. Rincoln, M. Mojica, K. Artyushkova, M. Germain, S. Minter, and P. Atanassov, "Electrodes for NADH oxidation: Structure and electrochemical properties of electropolymerized azines," Electrochemical Society, San Francisco, CA, May 28, 2009.
590. K. Sjöholm, M. Cooney, and S.D. Minter, "Biocompatible Micellar Environment for Enzyme Encapsulation for Bioelectrocatalysis Applications," Electrochemical Society, San Francisco, CA, May 28, 2009.
591. C. Lau, M. Cooney, and S.D. Minter, "Three dimensional chitosan scaffolds for increased power generation in biofuel cells," Electrochemical Society, San Francisco, CA, May 28, 2009.
592. D. Sokic-Lazic and S.D. Minter, "Citric Acid Cycle Enzymatic Cascade for Anodic Bioelectrocatalysis," Central Regional American Chemical Society Meeting, Cleveland, OH, May 22, 2009. (invited)
593. R. Arechederra, M. Germain, K. Boehm, and S.D. Minter, "Mitochondrial Bioelectrocatalysis," Central Regional American Chemical Society Meeting, Cleveland, OH, May 21, 2009. (invited)
594. S.D. Minter, "Bioelectrocatalysis for Fuel Cells," Portable Energy 2009, Orlando, FL, May 6, 2009. (invited)
595. S.D. Minter, "Enzyme Fuel Cells," Society of Plastic Engineers Webinar, April 29, 2009. (invited)
596. R. Arechederra and S.D. Minter, "Development of low temperature glycerol and ethylene glycol fuel cells capable of high energy density and complete oxidation," American Chemical Society Meeting, Salt Lake City, UT, March 22, 2009.
597. J. Breeden, M. Germain, and S.D. Minter, "The effects of pH on the polymerization of methylene green," American Chemical Society Meeting, Salt Lake City, UT, March 22, 2009. (invited)
598. C.E. Menius, R. Arechederra, and S.D. Minter, "Microscopic characterization of micellar structures in modified Nafion films," American Chemical Society Meeting, Salt Lake City, UT, March 25, 2009.
599. S.D. Minter, "Deep Oxidation of Fuels in Biofuel Cells," University of Warsaw Department of Chemistry, Warsaw, Poland, March 26, 2009.(invited)
600. S.D. Minter and R. Arechederra, "Direct Bioelectrocatalysis of Glycerol for Biofuel Cell Applications," International Society of Electrochemistry Meeting, Szczyrk, Poland, March 22, 2009.(invited Keynote)
601. S.D. Minter, "Deep Oxidation of Biofuels in Biofuel Cells," University of Puerto Rico College of Natural Sciences Science Week, San Juan PR, March 13, 2009. (invited)
602. M.J. Moehlenbrock and S.D. Minter, "Applications of Immobilized Biomacromolecules and Whole Organelles at Carbon Electrode Surfaces," Pittsburgh Conference, Chicago, IL, March 10, 2009.
603. J.Wildrick, P. Jelliss, and S.D. Minter, "Evaluation of a Covalently-Bound Laccase Bioelectrode," Pittsburgh Conference, Chicago, IL, March 10, 2009.
604. S.D. Minter, "Nanobioelectrocatalysis for Fuel Cells and Sensors," University of Missouri-St. Louis Center for Nanoscience, St. Louis, MO, February 20, 2009. (invited)
605. S.D. Minter, "Enzyme Immobilization for Bioelectrocatalysis," Michigan State University Chemical Engineering Department, Lansing, MI, January 23, 2009. (invited)

606. S.D. Minteer, "Micellar Polymeric Structures for Enzyme Stabilization," Army Research Office Enzyme Stabilization Workshop, Key West, FL, December 10, 2008. (invited)
607. S.D. Minteer, "Bioelectrocatalysis for Sensor Applications," Eastern Analytical Symposium, Somerset, NJ, November 20, 2008. (invited)
608. S.D. Minteer, "Micellar Immobilization for Bioelectrocatalysis," AIChE National Meeting, Philadelphia, PA, November 19, 2008. (invited)
609. S.D. Minteer, "Nanomaterials for Bioelectrocatalysis for Biosensors and Biofuel Cells," Southeastern Regional Meeting of the American Chemical Society, Nashville, TN, November 14, 2008. (invited)
610. S.D. Minteer, "Enzymatic Biofuel Cells," Society of Plastics Engineers New Technology Symposium, Philadelphia, PA, November 11, 2008. (invited)
611. S.D. Minteer, "Thin film biofuel cells for portable power and sensor applications," 4th Global Plastic Electronics Conference, Berlin, Germany, October 28, 2008. (invited)
612. D. Sokic-Lazic and S.D. Minteer, "Enzymatic Biomimic of the Citric Acid Cycle on a Carbon Electrode," Electrochemical Society Meeting, Honolulu, HI, October 15, 2008.
613. C. Lau, S.D. Minteer, and M. Cooney, "Three Dimensional Chitosan Scaffolds for Biofuel Cell Applications," Electrochemical Society Meeting, Honolulu, HI, October 15, 2008.
614. S. Minteer and J. Leddy, "Models for Magnetic Effects on Electron Transfer Processes," Electrochemical Society Meeting, Honolulu, HI, October 16, 2008.
615. S.D. Minteer, "Bioelectrocatalysis for Sensors and Biofuel Cells," Case Western Reserve University, Department of Chemical Engineering, Cleveland, OH, September 25, 2008. (invited)
616. S.D. Minteer, "Energy from Waste," German-American Frontiers of Science Symposium, Potsdam, Germany, June 12, 2008. (invited)
617. S.D. Minteer, "Organelle-based Biofuel Cells for Self Powered Explosive Sensors," Electrochemical Society Meeting, Phoenix, AZ, May 20, 2008. (invited IDEAS speaker)
618. S.D. Minteer, D. Sokic-Lazic, and M. Beilke, "Enzyme Cascade for Deep Oxidation of Biofuels," Electrochemical Society Meeting, Phoenix, AZ, May 20, 2008.
619. V. Svoboda, M. Wormington, A. Bourgeois, B.L. Liaw, S. Minteer, and P. Atanassov, "Hydrophilic clustering and swelling in Nafion and modified Nafion films," Electrochemical Society Meeting, Phoenix, AZ, May 20, 2008.
620. S. Minteer, W. Gellett, L. Zook Gerdau, and J. Leddy, "Electrodes Modified with Magnetic Microparticles: Activated Complex Theory," Electrochemical Society Meeting, Phoenix, AZ, May 20, 2008.
621. V. Svoboda, B. Liaw, M.J. Cooney, S. Minteer, and P. Atanassov, "Electrochemical Deposition of Poly(methylene green) Films," Electrochemical Society Meeting, Phoenix, AZ, May 22, 2008.
622. S.D. Minteer, "Towards the Alcohol Microbatteries and Microbiofuel Cells," Electrochemical Society Meeting, Phoenix, AZ, May 22, 2008.
623. R. Arechederra and S.D. Minteer, "Development of a Glycerol Bioanode Capable of Complete Oxidation Using a 3 Enzyme Cascade," Electrochemical Society Meeting, Phoenix, AZ, May 22, 2008.
624. C. Hettige, S. Minteer, and S. Calabrese-Barton, "Simulation of Multi-Step Enzyme Electrodes," Electrochemical Society Meeting, Phoenix, AZ, May 22, 2008.

625. M.N. Germain, R.L. Arechederra, and S.D. Minter, "Drug delivery system utilizing molecularly imprinted electropolymers," National American Chemical Society Meeting, New Orleans, LA, April 10, 2008.
626. D. Sokic-Lazic and S.D. Minter, "Polymer-based Krebs's cycle biomimic," National American Chemical Society Meeting, New Orleans, LA, April 10, 2008.
627. Z. Zulic and S.D. Minter, "Induction of PQQ-dependent alcohol dehydrogenase in *Gluconobacter suboxydans* for use as bioelectrocatalysts," National American Chemical Society Meeting, New Orleans, LA, April 10, 2008.
628. R.L. Arechederra and S.D. Minter, "Development of a high power density glycerol bioanode capable of complete oxidation via a 3 enzyme cascade," National American Chemical Society Meeting, New Orleans, LA, April 10, 2008.
629. J.R. Worsham, A. Blackwell, and S.D. Minter, "Conducting dye polymers as an electrocatalyst for NADH oxidation for sensor applications," American Chemical Society National Meeting, New Orleans, LA, April 6, 2008.
630. P.A. Jelliss, S.D. Minter, M. Patel, and M. Watt, "Attenuation of mediator leakage in biofuel cell polymer modified electrodes: Photophysical and electrochemical characterization of a perfluoroalkyl-modified 2,2'-bipyridyl ruthenium complex," American Chemical Society National Meeting, New Orleans, LA, April 6, 2008.
631. S.D. Minter, "Bioelectrocatalysis in Biofuel Cells and Biosensors" Missouri University of Science & Technology, Chemistry Department, Rolla, MO, April 2, 2008. (invited)
632. D. Sokic-Lazic and S.D. Minter, "Mimicking the Citric Acid Cycle at a Carbon Electrodes," Pittsburgh Conference, New Orleans, LA, March 4, 2008.
633. M. Germain, R. Arechederra, and S.D. Minter, "Towards the Development of a Self-Powered Explosive Sensor," Pittsburgh Conference, New Orleans, LA, March 4, 2008.
634. S.D. Minter, "Bioelectrocatalysis for Biofuel Cells and Biosensors," Pittsburgh Conference, New Orleans, LA, March 5, 2008. (invited)
635. S.D. Minter, "Self Powered Explosive Sensors," Department of Homeland Security Explosives (EXP) Conference, Arlington, VA, January 17, 2008. (invited)
636. S.D. Minter, "Overview of Importance of Enzyme Biocatalysts in Bioprocessing," Pacific Rim Summit on Industrial Biotechnology and Bioenergy, Honolulu, HI, November 15, 2007. (invited)
637. M.N. Germain, R. Arechederra, and S.D. Minter, "Comparison of Molecularly Imprinted Electropolymers for Drug Release Systems Utilizing IDA Electrodes," Midwest Regional ACS Meeting, Kansas City, MO, November 8, 2007.
638. S.D. Minter, T. Klotzbach, M. Cooney, and B.Y. Liaw, "Nanopore Engineering of Chitosan Polymer for Enzyme Immobilization and Stabilization," AIChE National Meeting, Salt Lake City, UT, November 7, 2007. (invited)
639. M. Cooney, B.Y. Liaw, C. Lau, and S.D. Minter, "Application of Mesopore Engineered Chitosan Polymer for Fabrication of Multi-Dimensional and Multi-Directional Enzyme Catalyzed Electrodes," AIChE National Meeting, Salt Lake City, UT, November 7, 2007. (invited)
640. S.D. Minter, "Lifelong Mentoring for the Professional," Senniger-Powers Networking Seminar, St. Louis, MO, November 2, 2007. (invited)
641. S.D. Minter, "From Bacteria to Batteries: Harnessing Energy from Biofuels," University of Puerto Rico Departmental Seminar, San Juan, PR, October 22, 2007. (invited)

642. B.L. Treu, T.L. Klotzbach, A. Blackwell, and S.D. Minteer, „Mediated and Direct Bioelectrocatalysis for Sensing Applications,” FACSS 2008, Memphis, TN, October 15, 2007. (invited)
643. P. Jelliss, S. Minteer, M. Patel, M. Watt, “Attenuation of Mediator Leakage in Biofuel Cell Polymer Modified Electrodes: Synthesis and Characterization of a Perfluoroalkyl-modified 2,2'-bipyridyl Ruthenium Complex,” FACSS 2008, Memphis, TN, October 16, 2007.
644. R. Arechederra, D. Sokic-Lazic, and S.D. Minteer, “Mitochondria Modified Electrodes,” International Society of Electrochemistry, Banff, Canada, September 13, 2007. (invited Keynote)
645. S.D. Minteer, “From Bacteria to Biobatteries: Transitioning Multi-Disciplinary Innovation Out of the Research Laboratory,” Solae Science and Technology Conference, Chesterfield, MO, September 11, 2007. (invited)
646. S.D. Minteer, “Consumer Applications for Alternative Energy,” Academy of Science of St. Louis Passport to Science Series, St. Louis, MO, June 14, 2007. (invited)
647. S. Minteer, “Employing Biofuels in Batteries for Power Generation,” ACS Symposium on Chemistry of Alternative and Sustainable Fuels, St. Louis, MO, May 29, 2007. (invited)
648. B. Liaw, V. Svoboda, M.J. Cooney, and S. Minteer, “Fabrication of an Effective Biocatalytic Electrode with InSitu Characterization of Electrode and Its Materials,” Electrochemical Society Meeting, Chicago, IL, May 10, 2007.
649. M.J. Cooney, M. Windmeisser, B. Liaw, and S.D. Minteer, “Design of Chitosan Gel Pore Structure: Towards Enzyme Catalyzed Electrodes,” Electrochemical Society Meeting, Chicago, IL, May 9, 2007.
650. S.D. Minteer, M. Beilke, and D. Sokic-Lazic, “Immobilization of Enzyme Cascades at Bioanodes of Biofuel Cells,” Electrochemical Society Meeting, Chicago, IL, May 8, 2007. (invited)
651. S.D. Minteer, “Development of Stable Dehydrogenase-based Bioanodes,” International Society of Electrochemistry Meeting, Dublin, Ireland, May 3, 2007.
652. S.D. Minteer, “Bio-inspired Power Sources,” Sigma Xi Spring Banquet, St. Louis, MO, April 24, 2007 (invited).
653. S.D. Minteer, “Employing Micellar Polymers for Enzyme Immobilization and Stabilization at the Anodes of Biofuel Cells,” 19th International Symposium on Bioelectrochemistry and Bioenergetics, Toulouse, France, April 3, 2007. (invited Keynote lecture)
654. A. Blackwell and S.D. Minteer, “Dye polymers as a drug release system and an electrocatalyst for NADH oxidation,” National American Chemical Society Meeting, Chicago, IL, March 25, 2007.
655. T. Klotzbach and S.D. Minteer, “Toward the development of an azure C mediated chitosan membrane based bioanode,” National American Chemical Society Meeting, Chicago, IL, March 25, 2007.
656. R.L. Arechederra and S.D. Minteer, “Using glycerol as fuel in biofuel cells,” National American Chemical Society Meeting, Chicago, IL, March 28, 2007.
657. B.L. Treu and S.D. Minteer, “Characterization of PQQ-Dependent Alcohol Dehydrogenase Bioelectrodes Capable of Direct Electron Transfer,” Pittsburgh Conference, Chicago, IL, March 1, 2007.
658. R. Arechederra, D. Sokic-Lazic, and S.D. Minteer, “Immobilizing Mitochondria on Electrode Surfaces,” Pittsburgh Conference, Chicago, IL, March 1, 2007.
659. M.C. Beilke and S.D. Minteer, “Glycolysis Biomimic in Hydrophobically Modified Nafion,” Pittsburgh Conference, Chicago, IL, February 26, 2007.

660. S.D. Minteer, "Towards the Development of Implantable Glucose Biofuel Cells," Biomedical Engineering Society Symposium, St. Louis, MO, February 24, 2007. (invited)
661. S.D. Minteer, "Electropolymerized Molecularly Imprinted Polymers for Use in Sensing and Drug Delivery," University of Missouri-Rolla Department of Chemical and Biochemical Engineering, Rolla, MO, January 23, 2006. (invited)
662. S.D. Minteer, "Bioelectrocatalysis for Enzymatic Biofuel Cells," Gordon Research Conference in Electrochemistry, Ventura, CA, January 16, 2007. (invited)
663. S.D. Minteer, "From Bacteria to Batteries: Harnessing Energy from Biofuels," Instituto Tecnológico de Tijuana, Tijuana, Mexico, November 17, 2006. (invited)
664. S.D. Minteer, "Enzymatic Biofuel Cells," Air Force Research Laboratory, Fort Walton Beach, FL, November 6, 2006. (invited)
665. S.D. Minteer, "Development of Bioanodes for Biofuel Cells," Hawaii Natural Energy Institute, Honolulu, HI, October 24, 2006. (invited)
666. S.D. Minteer, "Utilization of Complex Fuels," Air Force Biophysical Mechanisms Seminar, Arlington, VA, September 7, 2006. (invited)
667. P. Kenis, S.K. Yoon, M. Mitchel, R. Jayashree, and S.D. Minteer, "Laminar Flow Based Biofuel Cells," Electrochemical Society Meeting, Denver, CO, May 10, 2006.
668. S. Minteer, Y. Ansari, B. Treu, "Glucose Dehydrogenase Bioanodes for Biofuel Cells," Electrochemical Society Meeting, Denver, CO, May 9, 2006.
669. S.D. Minteer, "Developing High Power Density and Long Lasting Enzymatic Biofuel Cells," Small Fuel Cells 2006, Washington, DC, April 2, 2006. (invited)
670. A. Kinsella, R.S. Martin, and S.D. Minteer, "Towards the Development of a Microchip-based Biofuel Cell," American Chemical Society National Meeting, Atlanta, GA, March 26, 2006. (invited)
671. B.L. Treu, D. Anderson, A. Behrmann, and S.D. Minteer, "Mediator-less Electron Transfer at Enzyme Modified Electrodes," Pittsburgh Conference, Orlando, FL, March 13, 2006.
672. J. Kerr and S.D. Minteer, "Voltammetric Investigation of Enzyme Modified Electrodes," Pittsburgh Conference, Orlando, FL, March 14, 2006.
673. S.D. Minteer, "Designing Enzyme Immobilization Architectures for Electrodes Using Micellar Polymers," Saint Louis University, Biomedical Engineering Departmental Seminar, March 9, 2006, St. Louis, MO. (invited)
674. S.D. Minteer, "Development and Characterization of Chemically Selective Layers for Amperometric Sensors," Saint Louis University Department of Pharmacological and Physiological Science Departmental Seminar, St. Louis, MO, February 28, 2006. (invited)
675. S.D. Minteer, "Mentoring Across the Lifespan: Student to PI, Industry to Academia," American Association for the Advancement of Science National Meeting, St. Louis, MO, February 20, 2006. (invited)
676. S.D. Minteer, "Bio-Inspired Power Supplies," Joint Meeting of the St. Louis Section of the American Chemical Society and AIChE-St. Louis Chapter, Engineers Club of St. Louis, St. Louis, MO, February 15, 2006. (invited)
677. S.D. Minteer, "Applied Learning in the Saint Louis University Chemistry Department," Conference on Applied Learning in Higher Education, Missouri Western University, St. Joseph, MO, February 10, 2006.
678. S.D. Minteer, "From Bacteria to Batteries: Mimicking Cellular Processes to Develop Alternative Energy Sources," University of Missouri- St. Louis STARS Seminar, St. Louis, MO, January 17, 2006. (invited)
679. S.D. Minteer, "Enzymatic Biofuel Cells," Pacific Rim Summit, Honolulu, HI, January 13, 2006. (invited)

680. S.D. Minteer, "Fuel Choices for Enzymatic and Microbial Biofuel Cells," Air Force Munitions Directorate, Eglin Air Force Base, January 5, 2006. (invited)
681. S.D. Minteer, "Designing Enzyme Immobilization Architectures for Electrodes Using Micellar Polymers," University of Missouri-St. Louis, December 5, 2005, St. Louis, MO. (invited)
682. S.D. Minteer, "Bio-Batteries," St. Louis Science Center, November 30, 2005, St. Louis, MO. (invited)
683. S.D. Minteer, "From Bacteria to Batteries: Mimicking Cellular Process to Develop Alternative Energy Sources," St. Louis Academy of Science's Science Seminar Series, November 16, 2005, St. Louis, MO. (invited)
684. S.D. Minteer, "Alcohol and Carbohydrate Based Biofuel Cells," International Bioenergy Conference, November 4, 2005, Taipei, Taiwan. (invited)
685. S.D. Minteer, "Alcohol and Carbohydrate Based Biofuel Cells," Taiwan Bureau of Energy, November 3, 2005, Taipei, Taiwan. (invited)
686. A. Kinsella, C. Moore, R.S. Martin, and S.D. Minteer, "Microfluidic Biofuel Cells for Self-Powered Sensing Applications," October 12, 2005, Federation of Analytical Chemistry and Spectroscopy Societies National Meeting, Quebec, Canada. (invited)
687. S.D. Minteer, B.L. Treu, S. Topcagic, "Membraneless Ethanol/Oxygen Biofuel Cell," October 5, 2005, Grove Fuel Cell Symposium, London, England.
688. A. Kinsella, R.S. Martin, and S.D. Minteer, "Microfluidic Ethanol Biofuel Cell," August 30, 2005, National American Chemical Society Meeting, Washington, D.C. (invited plenary speaker).
689. S.D. Minteer, "Biofuel Cells: Alternative Use for Agricultural Products," June 10, 2005, University of Iowa, Iowa City, IA (invited).
690. S.D. Minteer, "Modeling the Effects of Magnetic Field Gradients on Mass Transport," May 19, 2005, Electrochemical Society Meeting, Quebec, CA. (invited).
691. S.D. Minteer, "Ethanol/Air Biofuel Cells," April 22, 2005, World Congress on Industrial Biotechnology and Bioprocessing, Orlando, FL. (invited)
692. S.D. Minteer, "Development of Ethanol/Air Biofuel Cells," March 24, 2005, Washington University, St. Louis, MO. (invited)
693. Y.V. Ulyanova and S.D. Minteer, "Molecularly imprinted poly(methylene green) electrodes for the determination of theophylline," March 13, 2005, National American Chemical Society Meeting, San Diego, CA.
694. B.L. Treu and S.D. Minteer, "Improving the lifetime, simplicity, and power of an ethanol biofuel cell by employing ammonium treated Nafion membranes to immobilize PQQ-dependent alcohol dehydrogenase," March 14, 2005, National American Chemical Society Meeting, San Diego, CA.
695. S. Topcagic and S.D. Minteer, "Characterization of oxygen biocathodes employing tetrabutylammonium bromide treated Nafion immobilization membranes," March 14, 2005, National American Chemical Society Meeting, San Diego, CA.
696. J.V. Ulyanova and S.D. Minteer, "Molecularly Imprinted Polymer Composite Modified Electrodes for the Detection of Theophylline," March 2, 2005, Pittsburgh Conference, Orlando, FL.
697. S. D. Minteer, B. Treu, N. Akers, and C.M. Moore, "Employing Quaternary Ammonium Salts to Form Bio-Compatible Nafion Membranes for Use to Immobilize Enzymes at Bioanodes, February 28, 2005, Pittsburgh Conference, Orlando, FL. (invited)
698. S.D. Minteer, "Ethanol/Oxygen Fuel Cells," January 11, 2005, National Intelligence Council, McClean, VA. (invited)

699. S.D. Minter, "Alcohol/Air Biofuel Cells," December 1, 2004, Sandia National Laboratory, Albuquerque, NM. (invited)
700. S.D. Minter, "Developing Long Lifetime Ethanol/Air Biofuel Cells," November 30, 2004, University of New Mexico, Chemical and Nuclear Engineering Department, Albuquerque, NM. (invited)
701. S. Minter, "Harnessing Electrical Energy from Alcohol," October 17, 2004, Great Lakes Regional ACS Meeting, Peoria, IL. (invited)
702. S. Minter and S. Topcagic, "Characterization of Oxygen Biocathodes," October 4, 2004, Electrochemical Society Meeting, Honolulu, HA.
703. S. Minter, D. Capretto, S. Pasek, and S. Reidy, "Magnetic Field Effects on the Chlor-Alkali Process," October 3, 2004, Electrochemical Society Meeting, Honolulu, HA.
704. S. Minter, "Development of Ethanol/Oxygen Biofuel Cells," September 24, 2004, Western Illinois University, Macomb, IL. (invited)
705. S. Minter, B.L. Treu, and S. Topcagic, "Development and characterization of polymer modified electrodes for biofuel cell applications," September 16, 2004, International Conference on Electrode Processes, Szczyrk, Poland. (invited)
706. S. Minter and B.L. Treu, "Increasing the Lifetime and Current Density of an Ethanol Bioanode Using PQQ-Dependent Dehydrogenase Enzymes," August 24, 2004, National American Chemical Society Meeting, Philadelphia, PA.
707. S. Minter, "Towards the Development of Commercially Viable Biofuel Cells," July 16, 2004, Motorola, St. Louis, MO. (invited)
708. S. Minter, "A Novel Approach to Designing Highly Efficient and Commercially Viable Biofuel Cells," June 16, 2004, 2nd International Conference on Fuel Cell Science, Engineering, and Technology, Rochester, NY. (invited)
709. S. Minter, "Modeling of Mass Transport to a Microelectrode in a Magnetic Field Gradient," May 10, 2004, Electrochemical Society Meeting, San Antonio, TX. (invited)
710. D. Capretto and S.D. Minter, "Improving efficiency in chlor-alkali systems using encapsulated high field magnetic materials in composite modified anodes," April 16, 2004, St. Louis American Chemical Society Undergraduate Research Symposium, Elsa, IL. (first place)
711. N.L. Akers and S.D. Minter, "Enzymatic Catalysis for Fuel Cell Development," April 23, 2004, World Congress on Industrial Biotechnology and Bioprocessing, Orlando, FL. (invited)
712. D. Capretto and S.D. Minter, "Improving efficiency in chlor-alkali systems using encapsulated high field magnetic materials in composite modified anodes," March 28, 2004, American Chemical Society National Meeting, Anaheim, CA.
713. C.M. Moore and S.D. Minter, "Immobilizing oxidoreductase enzymes in surfactant and symmetrical ammonium treated Nafion," March 28, 2004, American Chemical Society National Meeting, Anaheim, CA.
714. S.D. Minter, D. Capretto, S.L. Reidy, S.J. Pasek, "Magnetoadsorption (MAD) effects on the chlor-alkali process," March 27, 2004, American Chemical Society National Meeting, Anaheim, CA (invited).
715. N.L. Akers and S.D. Minter, "Powering your cell phone with Vodka," March 21, 2004, World's Best Technology Conference, Arlington, TX (invited).
716. S.D. Minter, C.M. Moore, S. Hackman, and T. Brennan. "Employing Ammonium and Phosphonium Salts to Alter the Mass Transport of Redox Species through Nafion Membranes," March 9, 2004, Pittsburgh Conference, Chicago, IL.

717. S.D. Minter. "Stimulating Creativity and Critical Thinking In and Out of the Classroom," January 9, 2004, Forum on Integrating Teaching and Research, Center for Teaching Excellence, Saint Louis University, St. Louis, MO. (invited)
718. S.D. Minter. "Bioscrubbing of Carbon Monoxide," November 18, 2003, Mine Safety Applications, St. Louis, MO. (invited)
719. S.D. Minter. "Immobilizing Oxidoreductase Enzymes at Surfaces: From Bacteria to Batteries," November 14, 2003, Saint Louis University Department of Biology, St. Louis, MO. (invited)
720. N. Akers and S.D. Minter. "A Membrane Electrode Assembly (MEA) Style Ethanol/Oxygen Biofuel Cell," November 7, 2003, Midwest Regional Meeting of the American Chemical Society, Columbia, MO.
721. S.D. Minter, C.M. Moore, and N.L. Akers, "Development of Bioanodes Using Salt-Extracted Quaternary Ammonium Bromide/Nafion Membranes to Immobilize Dehydrogenase Enzymes," October 14, 2003, 204th Meeting of The Electrochemical Society, Orlando, FL. (invited)
722. W.L. Gellett, J. Leddy, S.D. Minter, and K. Bahram-ahi, "Facilitation of CO Oxidation on Pt- Impact of Magnetic Fields," October 14, 2003, 204th Meeting of The Electrochemical Society, Orlando, FL.
723. S.D. Minter, "Towards the Development of a Perfume Fueled Biofuel Cell," September 11, 2003, Estee Lauder, New York, NY (invited).
724. N.L. Akers and S.D. Minter, "Towards the Development of a Membrane Electrode Assembly (MEA) Style Biofuel Cell," September 11, 2003, American Chemical Society, New York, NY.
725. D. Capretto and S.D. Minter, "Achieving Selectivity for Artificial Neurotransmitter Binding Site in Nafion Composite Electrodes," April 26, 2003, St. Louis Section ACS Undergraduate Research Symposium, St. Louis, MO. (second place)
726. S.D. Minter, "Improving Power Densities and Lifetimes of Biofuel Cells Using Quaternary Ammonium Bromide Doped Nafion Membranes," April 10, 2003, ONR Molecular Biomimetics V, Coolfont, WV. (invited)
727. S.D. Minter, "Designing High Power Density Biofuel Cells," April 7, 2003, University of Arkansas, Fayetteville, AR. (invited)
728. S.D. Minter, "Magnetic Field Effects on Chlor-Alkali," March 31, 2003, DOW Chemical Company, Freeport, TX (invited).
729. T.J. Thomas and S.D. Minter, "Studies of the Transport of Erythromycin through Tetrabutylammonium-doped Nafion/surface-modified Glass Microsphere Composites," March 23, 2003, American Chemical Society, New Orleans, LA.
730. S.D. Minter, N.L. Akers, T.J. Thomas, C.M. Moore, "Development and Characterization of Microbioanodes for Alcohol/Oxygen Biofuel Cells," March 27, 2003, American Chemical Society, New Orleans, LA. (invited)
731. S.D. Minter, T.J. Thomas, K. Galmore, K.E. Ponnusamy, N.M. Chang, "Effects of Annealing on Mixture-Cast Membranes of Nafion and Quaternary Ammonium Bromide Salts," March 10, 2003, Pittsburgh Conference, Orlando, FL.
732. S.D. Minter, M. Dittman, S. Pasek, and S. Reidy, "Magnetic Field Effects on Electrosynthesis Processes," October 21, 2002, 202nd Meeting of the The Electrochemical Society, Salt Lake City, UT (invited).
733. S. D. Minter, M. Schrenk, R. Villigam, S. Brancato, and N. Torrence, "Employing Quaternary Ammonium Bromides to Increase Mass Transport Through Nafion," March 21, 2002, Pittsburgh Conference, New Orleans, LA.

734. S. Minter, "Using Spin Density Calculations to Model Magnetic Field Effects on Electrocatalysts," November 1, 2001, Physical Chemistry Seminar, University of Iowa, Iowa City, IA (invited).
735. S. Brancato, N. Torrence, and S.D. Minter, "Can Chromatographic Knowledge Help in the Design of Selective Amperometric Sensors?," October 2001, 28th Annual Conference of the Federation of Analytical Chemists and Spectroscopist's Society (FACSS), Detroit, MI.
736. S. Minter, S. Amarasinghe, L.Zook, and J. Leddy, "Magnetic Field Effects on Electron Transfer: Magnetically Modified Electrodes," March 2000, Pittsburgh Conference, New Orleans, LA.
737. S. Minter and J. Leddy, "Magnetic Field Effects on Self-Exchange Rates in Nafion/ Magnetic Microsphere Composite Modified Electrodes," October 1999, Electrochemical Society Meeting, Honolulu, Hawaii.
738. S.D. Minter and J. Leddy, "Magnetic Field Effects on Self-Exchange Reactions in Magnetic Microsphere/Nafion Composites," April 1999, Iowa Academy of Science, Ames, IA.
739. S.D. Minter and J. Leddy, "Magnetically Influenced Self-Exchange Reactions in Polymer Composites," April 1999, Graduate Students Symposium of the Chicago/SE Wisconsin Section of the Electrochemical Society, Milwaukee, WI.
740. J. Watkins, S. Minter, and J. Leddy, "Angle Studies in Nafion Ion Exchange Polymer/Magnetic Microsphere Composites," April 1999, Graduate Student Symposium of the Chicago/SE Wisconsin Section of the Electrochemical Society.
741. S.D. Minter and J. Leddy, "Stabilization of Free Radicals in Magnetic Composites," June 1998, Great Lakes Regional Meeting of the American Chemical Society, Milwaukee, WI.
742. J. Leddy, S. Minter, and S. Amarasinghe, "Composite Matrices of Ion Exchange Polymers and Magnetic Microbeads," May 1998, Electrochemical Society Meeting, San Diego, CA.
743. S.D. Minter and J. Leddy, "A Model of Mass Transport Through Ion Exchange Polymer/Magnetic Microsphere Composites," April 1998, Iowa Academy of Science, Mason City, IA.
744. J. Leddy, S. Minter, L. Zook, and S. Amarasinghe, "Magnetic Microstructures in Ion Exchange Polymers," April 1998, American Chemical Society Meeting, Dallas, TX.
745. J. Leddy, S. Amarasinghe, L.Zook, F. Tinoco, and S. Minter, "Non-uniform Magnetic Fields on Electrodes Surfaces: The Role of Interfaces in Enhancing Current," September 1997, Electrochemical Society Meeting, Paris, France.
746. S. Minter, K. Sando, and R. Arroyo-Sucre, "Diversity, Cooperative Learning, and Peer Tutoring in a First-Semester Chemistry Course," May 1997, Committee on Institutional Cooperation WISE Best Practices Workshop, Purdue, IN.

XI. Teaching Experience at Saint Louis University

1. Fall 2000
 - a. CH A 320: Analytical Chemistry I
2. Spring 2001
 - a. CH A 320: Analytical Chemistry I
 - b. CH A 420/520: Analytical Chemistry II –Co-taught with Dr. Dana Spence
 - c. CH A 422/522: Analytical Chemistry III –Co-taught with Dr. Dana Spence
3. Summer 2001

- a. CH A529: Advanced Analytical Chemistry – Co-taught with Dr. Dana Spence and Dr. Alexa Serfis
4. Fall 2001
 - a. CH A391: Introduction to Chemical Literature
 - b. CH A529: Special Topics in Analytical Chemistry: Electrochemistry
5. Spring 2002
 - a. CH A 320: Analytical Chemistry I
 - b. CH A 420/520: Analytical Chemistry II –Co-taught with Dr. Dana Spence
 - c. CH A 422/522: Analytical Chemistry III –Co-taught with Dr. Dana Spence
6. Summer 2002
 - a. CH A162: Introduction to Chemistry II
7. Fall 2002
 - a. CH A391: Introduction to Chemical Literature
 - b. CH A529: Special Topics in Analytical Chemistry: Chemical Sensors
8. Spring 2003
 - a. CH A320: Analytical Chemistry I lab
 - b. CH A420/520: Analytical Chemistry II- Co-taught with Dr. Dana Spence
 - c. CH A422/522: Analytical Chemistry III- Co-taught with Dr. Dana Spence
9. Summer 2003
 - a. CH A162: Introduction to Chemistry II
10. Spring 2004
 - a. CH A529: Special Topics in Analytical Chemistry: Electrochemistry
11. Summer 2004
 - a. CH A162: Introduction to Chemistry II
12. Fall 2004
 - a. CH A529: Special Topics in Analytical Chemistry: Chemical Sensors
 - b. EDHI101: University 101
13. Spring 2005
 - a. CH A420/520: Analytical Chemistry II- Co-taught with Dr. Scott Martin
 - b. CH A422/522: Analytical Chemistry III- Co-taught with Dr. Scott Martin
14. Summer 2005
 - a. CH A162: Introduction to Chemistry II –Co-taught with Dr. Paul Jelliss
15. Fall 2005
 - c. CH A391: Introduction to Chemical Literature
 - d. CH A524: Introduction to Electrochemistry
16. Spring 2006
 - a. CH A420/520: Analytical Chemistry II- Co-taught with Dr. Steve Buckner
 - b. CH A422/522: Analytical Chemistry III- Co-taught with Dr. Steve Buckner
17. Summer 2006
 - a. CH A162: Introduction to Chemistry II- Co-taught with Dr. Chuck Kirkpatrick
18. Spring 2007
 - a. CH A422: Analytical Chemistry III
19. Summer 2007
 - a. CH A164: General Chemistry II
20. Fall 2007
 - a. CH A524: Introduction to Electrochemistry
 - b. CH 391: Departmental Seminar
21. Summer 2008
 - a. CH A164: General Chemistry II
22. Fall 2008

- a. CH A523: Chemical Sensors
- 23. Summer 2009
 - a. CH A164: General Chemistry II
- 24. Fall 2009
 - a. CH A524: Introduction to Electrochemistry
 - b. CH A690: Introduction to Proposal Writing and Oral Presentations
- 25. Summer 2010
 - a. CH A164: General Chemistry II: Co-taught with Dr. Jennifer Monahan
- 26. Fall 2010
 - a. CH A523: Chemical Sensors
 - b. CH A690: Introduction to Proposal Writing and Oral Presentations

Teaching Experience at University of Utah

- 27. Fall 2011
 - a. CHEM7730: Electrochemistry
- 28. Spring 2012
 - a. CHEM7590: Chemical Sensors and Biosensors
- 29. Fall 2012
 - a. MSE3032: Introduction to Thermodynamics
- 30. Spring 2013
 - a. CHEM 5700: Advanced Analytical Lab
- 31. Fall 2013
 - a. CHEM 7730: Electrochemistry
 - b. MSE 6100: Introduction to Materials
- 32. Spring 2014
 - a. CHEM 5700: Advanced Analytical Lab
 - b. CHEM 7490: Materials Strategies for Alternative Energy
- 33. Fall 2014
 - a. MSE3032: Introduction to Thermodynamics
 - b. CHEM6740: Bioanalytical Chemistry
- 34. Fall 2015
 - a. MSE 3032: Introduction to Thermodynamics
- 35. Spring 2016
 - a. CHEM5640/7640: Materials Chemistry for Alternative Energy
- 36. Summer 2016
 - a. CHEM 3000: Quantitative Analysis
- 37. Fall 2016
 - a. CHEM 7740: Electrochemistry II
- 38. Spring 2019
 - a. CHEM5640/7640: Materials Chemistry for Alternative Energy
 - b. MSE 5050: Biomaterials Engineering
- 39. Fall 2019
 - a. CHEM 7740: Electrochemistry II
- 40. Spring 2020
 - a. CHEM5640/7640: Materials Chemistry for Alternative Energy
 - b. CHEM 5700: Advanced Analytical Chemistry Lab
- 41. Fall 2020
 - a. CHEM 7730: Electrochemistry I (co-taught with Henry White)
 - b. CHEM 7740: Electrochemistry II (co-taught with Henry White)
- 42. Spring 2021
 - a. CHEM5640/7640: Materials Chemistry for Alternative Energy
 - b. CHEM 5700: Advanced Analytical Chemistry Lab

43. Fall 2021
 - a. CHEM 7730: Electrochemistry I (co-taught with Henry White)
 - b. CHEM 7740: Electrochemistry II (co-taught with Henry White)
44. Spring 2022
 - a. CHEM5640/7640: Materials Chemistry for Alternative Energy
 - b. CHEM 5700: Advanced Analytical Chemistry Lab
45. Fall 2022
 - a. CHEM 7740: Electrochemistry II
46. Spring 2023
 - a. CHEM 5700: Advanced Analytical Chemistry Lab
- Teaching Experience at Missouri University of Science and Technology**
47. Spring 2025
 - a. CHEM 6570: Electrochemistry

Student Mentoring

1. Current Graduate Research Students

Adam Milam (December 2020-present): Utah graduate program
 Emily Carroll (December 2021- present): Utah graduate program
 Zach Nguyen (December 2021- present): Utah graduate program
 Egor Baiarashov (August 2022-present): Missouri University of Science and Technology
 Huaijun Guan (December 2023-present): Missouri University of Science and Technology graduate program
 Linda Ifediora (August 2024-present): Missouri University of Science and Technology graduate program
 Sa'adat Usman (August 2024-present): Missouri University of Science and Technology graduate program
 Maryam Karimi (August 2024-present): Missouri University of Science and Technology graduate program
 Trevor Larkin (August 2024-present): Missouri University of Science and Technology graduate program
 Heath St. Dennis (January 2025-present): Missouri University of Science and Technology
 Arun Fnu (August 2025-present): Missouri University of Science and Technology
 Varun Saravanan (January 2026-present): Missouri University of Science and Technology
 Yasmin Barazandegan (January 2026-present): Missouri University of Science and Technology

2. Previous Graduate Research Students

Master's degree

Mark Dittman (2003), Trisha Thomas (2003), Nick Akers (2004), Kimia Bahram-ahi (2005), Christine Moore (2004), Sabina Topcagic (2005), Jenny Ulyanova (2005), Jeanne Kerr (2006), Yasmine Ansari (2006), Rodica Duma (2007), Michael Bielke (2007), Janice Wildrick (2010), Zana Zulic (2009), Corey Menius (2009), Kyle Sjolholm (2009), Paul Addo (2010), Stephanie Maltzman (2012), James Davidson (December 2013- August 2014), Boxuan Tan (November 2013-December 2014), Jadee Bodell (July 2014-August 2015), Erika Aoyama (January 2016- May 2017), Megan Stephanz (August 2015-May 2017), Xushuang Liu (January 2017-December 2017), Janki Patel (June 2018-May 2019), Connor Scholes (June 2018-May 2019),

Victoria Russell (January 2016-December 2019), Tammy Pham (January 2018-August 2020).

PhD degree

Becky L. Treu (2008): Associate Professor at Moberly Area Community College
Robert Arechederra (2009): Senior Scientist at BASF
Marguerite Germain Arechederra(2010): Senior Scientist at Pfizer
Michael J. Moehlenbrock (2011): Senior Scientist at Sigma-Aldrich
Nina Zulic Hausman (August 2009 – July 2013): Chemist at Monsanto
Shuai Xu (August 2009 – April 2014): Post-doc at University of Southern California
Fei Wu (September 2011-June 2015): Associate Professor at Institute of Chemistry Chinese Academy of Sciences
Lindsey Pelster (August 2009-December 2015): Chemist at Abbott
Russ Reid (July 2012-December 2015): Assistant Professor at University of North Texas
Dayi Chen (July 2011-January 2016): Post-doc at University of Illinois-Champaign Urbana
Tao Wang (December 2012- March 2017): Post-doc University of Calgary
Rong Cai (December 2015- September 2018): Post-doc Rice University
Mengwei Yuan (December 2016- July 2020): Pharmaceutical company in China
Koun Lim (August 2017-December 2020): Post-doc at University of North Carolina
Yimin Huang (August 2016- August 2020): Post-doc at Chinese Academy of Sciences
Matthew Kummer (January 2017-June 2021): Lecturer at Washington University in St. Louis
Fangyuan Dong (December 2017-June 2021): Industrial scientist
Josey McBrayer (August 2017-June 2022): Post-doctoral fellow at Sandia National Laboratory
Zayn Rhodes (May 2017-July 2022): Industrial scientist in Ogden
Erin Gaffney (December 2017-Sept. 2021): Patent attorney
Samali Weliwatte (March 2020-August 2022): Industrial scientist at Lubrizol
Rokas Gerukis (December 2019-January 2025): Academic postdoc in fuel cells
Kevin Beaver (December 2019-December 2024): Metler Toledo
Ashwini Dantanarayana (December 2020-October 2025): Job search
Miharu Koh (December 2020-October 2025): Spectroscopy Japan

3. Post-doctoral Associates

Robert Arechederra(2009-2011): Senior Scientist at BASF
Fabien Giroud (2012-2014): Associate Professor at University of Grenoble
Garett Lee (2012- 2013): Senior scientist at 3PDx, Inc.
Matthew Meredith (2010-2012): Senior scientist at Huntsman Corporation
Michelle Rasmussen (2011-2015): Associate Professor at Lebanon Valley College
Ganesan Vellachaimy (2010-2011): Professor at Banaharas Hindu University
Mary Arugula (2012-2013): Senior Scientist at CFDRC, Inc.
Ross Milton (2014- 2017): Assistant Professor University of Geneva
Khiem Nguyen (2013- 2015): Assistant Professor at Duy Tan University
David Hickey (2014- 2019): Assistant Professor at Michigan State University
Sofiene Abdellaoui (2014- 2018): Assistant Professor at Université de Reims
Sidney de Aquino Neto (2014-2015): Assistant Professor at University of Sao Paulo

Krysti Knoche (2015- 2017): Assistant Professor position at University of Wisconsin – Eau Claire
 Yaovi Holade (2015-2016): Assistant Professor at ENSCM, France
 Lin Xia (2016- 2016): Associate Professor at Institute of Biophysics Chinese Academy of Sciences
 Matteo Grattieri (2016-2020): Assistant Professor at University of Bari
 Kamrul Hasan (2016-2018): Senior scientist at ApolloDx
 Florika Macazo (2016-2018): Cincinnati Biosensors
 Bassam Alkotiani (2017-2018): Senior scientist at BioFire
 Hui Chen (2018-present): Full professor at Chinese Academy of Sciences
 Primož Jovanovic (2018-2018): unknown
 Kevin Klunder (2018-2019): Post-doc at Colorado State University
 Min Li (2019-2021): Intel
 Jefferson Franco (2019-2020): Post-doc at University of Sao Paulo
 Yoo-Seok Lee (2019-2022): Faculty member at Korean Institute of Science and Technology
 Christian Malapit (2019-2021): Faculty member at Northwestern University
 Olja Simoska (2020-2022): Faculty member at University of South Carolina
 Matt Prater (2020-2021): Faculty member at Southern Utah University
 Dylan Boucher (2021-present): Faculty member at Baylor University
 Rohit Jadhav (2021- present): Missouri University of Science and Technology
 Motuir Mazumder (2022-2024): Faculty members at Utah Tech University
 Wassim El Hosseini (2023-present): Missouri University of Science and Technology
 Monica Brachi (2023-present): Missouri University of Science and Technology
 Jaoa Carlos Perbone de Souza (2024-2025): University of Sao Carlos Brazil
 JJ Intano (2024-present): University of Utah
 Vamshi Kamaja (2024- present) Missouri University of Science and Technology
 Michael Pence (2025-present): Missouri University of Science and Technology
 Nathan Ricks (2025- present): Missouri University of Science and Technology
 Jovica Todorov (2026-present): Missouri University of Science and Technology
 Alexander Robinson (2026-present): Missouri University of Science and Technology

4. Undergraduate Research Students

Sam Brancato (August 2000 – May 2001), Nicholas Torrence (January 2001 – May 2002), Shana Reidy (January 2001 – May 2002), John Eggers (January 2001 – May 2002), Shannon Hopen (January 2001 – May 2003), Sarah Pasek (January 2001 – May 2004), Trisha Thomas (May 2001 – May 2002), Gary Patti (August 2001 – May 2002), Jenny Ulyanova (August 2001 – May 2003), Christine Moore (January 2002 – May 2003), Dave Capretto (January 2002 – May 2004), Kim Galmore (June 2002 – August 2002), Adam Hill (August 2002 – August 2004), Zach Johnson (August 2002 – May 2005), Maria Blandon (January 2003- May 2005), Vito Brandel (January 2003 – May 2004), Katie Helmann (June 2003 – May 2005), Melissa Arning (August 2003 – August 2004), Christopher Hawkins (August 2003-May 2005), Callie Combs (December 2003-May 2004), Anna Kinsella (December 2003-May 2006), Dhara Sheth (December 2003- May 2005), Joe Goldkamp (December 2003- May 2006), Shelley Hingle (August 2004- December 2005), Chris Hesh (August 2004- December 2005), Jessica Anewalt (August 2004- May 2006), Hetal Petal (December 2004- May 2006), Matthew Vestal (January 2005 – May 2007), Tammy Klotzbach (May 2005 – May 2008), Michelle Watts (May 2005 – May 2008), Anne Blackwell (June 2005 – May 2008), Chung Cheung (January 2006- May 2009), Stephanie Shepherd (January 2006 – May 2009), Nimah Jimal (May 2006- May 2008), Sarika Gupta (May 2006-

May 2008), Scott McCarthur (September 2006 – May 2008), Jacob Worsham (January 2007- May 2009), Jeff Steitz (January 2007- May 2009), Lindsay Gebhardt (May 2007 – August 2007), Shaker Sudhanshu (May 2007 – August 2007), Patrick Dupree (May 2007 – May 2009), Cindy Spahn (May 2007 – August 2007), Michael Blouser (May 2007- May 2009), Kevin Boehm (July 2007 – May 2010), Jay Breeden (August 2007-May 2010), Patrick Laughlin (August 2007- May 2010), Ben Corrado (August 2007- May 2009), Brenton Francisco (February 2008-August 2008), Brittany Goodrich (October 2008 – May 2011), Erich Boomgarden (October 2008 – May 2010), Shawn Mazur (October 2008 – May 2011), Timothy Toby (October 2008 – May 2011), Cori Jenkins (January 2009- May 2010), David Wetzel (May 2009 – May 2011), Meghan Moll (May 2009 – May 2010), Eliot Schwartz (May 2009 – August 2010), Christopher Ian Newberry (May 2010 – May 2011), Ben Minden-Birkenmaier (May 2010-August 2010), Daniel Stern (May 2010-August 2010), Vedada Ibisevic (June 2010-August 2010), Emily Suda (July 2011-January 2012), Michael Minson (July 2011-May 2012), Tera Nicolo (October 2011-May 2013), Steven Rose (January 2012-May 2013), Alex Shrier (January 2012-August 2013), Ashley Wingersky (Summer 2014), Alex Crawford (August 2013-May 2014), Koun Lim (January 2015- May 2016), Matt Judge (August 2015-May 2016), Derek Jensen (August 2015-May 2016), Megan Stephanz (August 2015-May 2016), Nate Kester (August 2014-May 2015), Andrew Stephens (Summer 2015), Caitlin Arndt (August 2014-May 2015), Vy Doan (June 2015-May 2017), Sierra Pratt (August 2014-May 2015), Kelan Albertson (January 2013- May 2016), Mengwei Yuan (June 2015- December 2015), Timothy Quah (August 2015- May 2019), Carolina Castra (May 2016- May 2018), Iram Sifat (August 2016- December 2016), Milo Suvira (May 2016- August 2016), Lia Hebert (May 2016- August 2016), Nelson Shivel (August 2016- May 2017), Devin Richie (August 2016-May 2017), Sama Alkilani (August 2016-May 2017), Abhilasha Manadhar (November 2016- May 2018), Cullen Irvine (May 2016- January 2018), Jason Coakley (January 2017-May 2017), Jacob Hudac (August 2016- October 2018), Samantha Tinucci (May 2017- August 2017), Larry Proden (May 2016- August 2017), Terry Park (May 2016- December 2017), Lydia Christian (January 2017- June 2018), Stuart Robertson (May 2017-May 2019), Titus Quah (May 2017-May 2018), Ashlea Patterson (January 2018-May 2019), Sarai Patterson (February 2018-August 2019), Bhibash Neupane (February 2018-May 2019), Shaylee Larson (January 2018-September 2018), Boris Rangelov (August 2018-May 2019), Jeff Copeland (August 2019-present), Erick Lawrence (May 2019- present), Hailee Wright (May 2019-August 2019), Sara Leininger (May 2019-present), Helena Haddadin (August 2019-December 2020), Jennie Pham (June 2019-December 2020), Julia Case (October 2019-June 2021), Angu Wu (January 2020-June 2021), Tommy Primo (January 2020-June 2022), Ryan Smith (January 2020-June 2021), Selma Kadic (January 2020-June 2021), Tanner Stone (January 2020-June 2021), Adriana Payan (January 2020-June 2021), Emily Zhang (January 2022-present), Sophie Downey (January 2022-present), Rachel Muhlstein (January 2022-present), Isaac Guynn (August 2021-September 2022), Tilly Dillon (January 2023-present), Hakan Karipaduc (January 2023-May 2023), Nicholas Manwaring (January 2023-May 2023), Sarah Parker (May 2023- present) Anna Fukishima (May 2022-present), Navi Brar (January 2023-present), and Delaney Miller (January 2023-present), Danielle Lehto (May 2022-August 2022), Ana Zani (October 2022-March 2023), Wesley Beck (May 2021-August 2021), Hossein Libre (August 2024-present).

XII. Current and Previous Funding (Current funding in italics)

1. "Conference: Resilient Supply of Critical Minerals 2026," National Science Foundation, \$49,375, August 1, 2026-7/31/2027.
2. "TEARWISE: Smart Active Ocular Drug Delivery Systems," ARPA-H, Co-PI: Minter, \$17.8M, January 2026-December 2029.
3. "Center: NSF Center for Synthetic Organic Electrochemistry," National Science Foundation, PI: Minter, \$19.8M, September 2025-August 2030.
4. "Ideas Lab: CFIRE: Electricity-Driven Cell-Free Cascades," National Science Foundation, Co-PI: Minter, \$7.8M, April 30, 2025-April 29, 2028.
5. "ECO-SPARK: Enzymatic Conversion of Organic Carbon into Sustainable Power," DARPA, Co-PI: Minter, \$8.4M, May 2025-May 2028.
6. "STTR: Biosynthetic Xylolipid for PFAS Substitution," Fulcrum Biosciences, PI: Minter, \$70K, January 2025-August 2025.
7. "Accelerated Mechanical Promotion of Serpentinization for Hydrogen Production," New England Research, Co-PI: Minter, \$608K, August 2024-December 17, 2026.
8. "Biobattery Prototype," Touchlight Genetics, PI: Minter, \$400K, August 15, 2023 to September 14, 2025.
9. "Jet Fuel Powered Biofuel Cell," Electric Drivetrain Technologies, \$450K, March 1, 2023 to February 28, 2025.
10. "Innovative Bioelectrochemical Approaches for Sustainable Hydrazine (N₂H₂) Synthesis," DARPA, PI: Minter, July 27, 2024 to October 26, 2025.
11. "Electrification of Commodity Chemical Synthesis," Chevron Phillips Chemical, PI: Minter, \$290k, January 1, 2024 to December 31, 2026.
12. "Electrification of Enzyme Cascades," Merck, PI: Minter, \$50K, January 1, 2024 to June 30, 2026.
13. "Biohybrid C-H Functionalizations," Department of Energy, PI: Qun Liu at Brookhaven National Lab, Co-PI: Minter, \$3.2M (\$800K to Minter Lab), September 15, 2022 to September 14, 2026.
14. "Synthetic Biology for Renewable Energy and Carbon Capture," Transformational Energy and Sinclair Oil, PI: Minter, \$245K, September 15, 2022 to February 28, 2025.
15. "Developing Electroanalytical Methods for Enzymology Applications," National Science Foundation, PI: Minter, \$420K, July 1, 2022 to June 30, 2026.
16. "Biosensors for rapid prototyping of functional biomaterials," Office of Naval Research, PI: Ming Hammond, Co-PI: Minter, \$879K, March 11, 2021 to April 10, 2025.
17. "Materials Synthesis via Electromicrobiology with Electrochemical Cofactor Regeneration," Office of Naval Research, PI: Minter, \$451K, January 1, 2021 to December 31, 2023.
18. "NSF Center for Synthetic Organic Electrochemistry Phase II," National Science Foundation, PI: Minter, \$20M, September 1, 2020 to June 30, 2026.
19. "DNA Enabled Biobattery," ONR with Touchlight Genetics, PI Sarah Milsom and CoPI Shelley Minter, \$750K (\$460K to Utah), September 16, 2019 to September 30, 2022.
20. "Collaborative Research: Advancing strategies for in-situ determination and spatial mapping of components within membrane systems for energy conversion," National Science Foundation, PI: Shelley Minter, \$256,062, July 15, 2019 to June 30, 2024.
21. "Joint Center for Energy Storage Research" DOE subcontract from Argonne National Laboratory, PI: Shelley Minter, \$600K per year to Utah, July 1, 2018 to September 30, 2023.
22. "Biologically Inspired Ammonia Production," Department of Energy, Phase II SBIR with Fulcrum Bioscience, \$400K to Utah, September 1, 2018 to December 31, 2020.

23. "Next Generation Breath Biosensors," LifeVantage, \$80K total, September 1, 2018 to August 31, 2020.
24. "Biological Electron Transfer and Catalysis Center," DOE subcontract from Washington State University, \$200K to Utah, August 1, 2018 to July 3, 2020.
25. "Biologically Inspired Ammonia Production," Department of Energy, Phase I SBIR with Fulcrum Bioscience, \$50K to Utah, September 1, 2017 to April 11, 2018.
26. "Nitrogen Fixation," USDA Phase I SBIR with Fulcrum Biosciences, \$33K to Utah, July 1, 2017 to February 28, 2018.
27. "CCI Phase I: Synthetic Organic Electrosynthesis Center," National Science Foundation, \$1.8M, September 1, 2017 to February 28, 2021.
28. "Cell-Free Protein-based Bionanomanufacturing of Metal and Semiconductor Nanoparticles," National Science Foundation, \$300K, July 1, 2016 to June 30, 2020.
29. "Mitochondrial Biohybrid Electron-Transport Chains Supported on Functionalized Graphene Oxide," Air Force Office of Scientific Research with Medgar Evers College, Utah portion \$346K, May 2016 to May 2021.
30. "Joint Center for Energy Storage Research" subcontract from Argonne National Laboratory, PI: Matthew Sigman Co-PI: Shelley Minter, \$750K, December 14, 2015 to June 30, 2018.
31. "Emission-Free, Low-Maintenance and Low-Energy Nitrate Water Remediation Using Microbial Fuel Cell Technology," Proton-OnSite USDA Phase I SBIR, "\$32K, funded May 22, 2015 to January 31, 2016.
32. "Development of Highly Efficient Carbon Conversion and Utilization Technology Based on Nanobiocatalysis," Korea University, \$180K, funded December 1, 2014 to November 30, 2017.
33. "Bio-battery Based Recharging System," CFDRRC AFOSR Phase II STTR, \$50K, funded December 1, 2014 to September 1, 2016.
34. "Bio-inspired Design of Adaptive Catalysis Cascades", Army Research Office, PI: Minter, \$11.25M, funded July 1, 2014 to September 30, 2023.
35. "Bioelectrocatalyzed Nitrogen Fixation under Standard Conditions," Fulcrum Bioscience ARO STTR Phase 2, \$200K, funded from September 30, 2014 to September 29, 2016.
36. "Bionanoelectrocatalysis for Self-Powered Sensing of Arsenic", United States Department of Agriculture, \$469K, funded from November 15, 2013 to November 14, 2018.
37. "Bioelectrocatalyzed Nitrogen Fixation under Standard Conditions," Fulcrum Bioscience ARO STTR Phase 1, \$15K, funded from November 1, 2012 to October 31, 2013.
38. "CFDRRC JP-8 Bio-battery," CFDRRC and Northrop Grumman, \$41K, funded from November 1, 2012 to February 28, 2014.
39. "Microfluidic Biofuel Cells," Giner, Inc. DoD SBIR Phase I, \$40K, funded from June 1, 2012 to February 17, 2013.
40. "3-D Enzymatic Nanomaterial Architectures for Energy Harvesting," Air Force Office of Scientific Research, \$695K to Utah out of \$3.4M total grant, funded April 2012 to April 2016.
41. "Collaborative Research: Supramolecular Bio-nano-architectures in Biosensing Platforms," National Science Foundation, \$200K, funded April 2012 to March 2016.
42. "Ecosystem-on-a-chip," Army Corps of Engineering, \$146K, funded April 2012 to June 2013.
43. "Collaborative Research: Tailoring nano- and micro-porous catalytic surfaces for microfluidic biofuel cells," National Science Foundation, \$279K funded September 2011 to September 2015.

44. "RFID IED Sensor for All Nitroaromatic Explosives," Leonard Wood Institute, \$347K, September 2010 to December 2011.
45. "Development of glycerol biobatteries," United Soybean Board, \$85K, funded for September 1, 2010 to February 1, 2012.
46. "High Performance Computing," Department of Defense DURIP, \$259,416, June 2010 – September 2011.
47. "Bioenergy conversion devices," Indo-US Science and Technology Forum, 1,774,800Rupees, joint grant with V. Ganesan – Banaras Hindu University, funded for September 2010 to September 2011.
48. "Employing In Vitro Metabolons in Enzymatic Biofuel Cells," Air Force Research Laboratory, \$100,000, funded for April 2009 to July 2011.
49. "Micellar polymer based enzyme replacement therapy for Morquio A disease," \$75K, St. Louis Institute of Nanomedicine, submitted as Co-PI with Shunji Tomatsu, funded for August 2009 to August 2010.
50. "Quantum Dots to Investigate Neuronal Communications as an Environmental Sensor," \$40K, St. Louis Institute of Nanomedicine, submitted as Co-PI with Amy Harkins (PI) and Rebecca Willits (Co-PI), funded for August 2009 to August 2010.
51. "Aerial Robotic Transformer Roadmap," \$100K (SLU: \$20K), Air Force Research Laboratory, funded for July 2009 to December 2010.
52. "Employing Metabolons in Enzymatic Biofuel Cells," \$100K, Air Force Research Laboratory, funded for July 2009 to December 2010.
53. "Development of More Sensitive and Faster Response Disposable, Self-Powered Explosives Sensors," \$309K, Leonard Wood Institute, funded August 2009 to August 2010.
54. "REU Supplement," National Science Foundation, \$5,995, submitted on February 4, 2009, funded for Summer 2009.
55. "Glycerol Bioelectrocatalysis," Air Force Office of Scientific Research, \$100,000, submitted January 5, 2009, funded for FY2009.
56. "Development of Small, Inexpensive, and Disposable Self-Powered Explosive Sensors," Leonard Wood Institute, \$277,216, funded August 2008 to December 2009.
57. "REU Supplement," National Science Foundation, \$5,995, funded for Summer 2008.
58. "Development of a High Energy Density Glycerol Biobattery," United Soybean Board, \$71,192, funded September 2008 to August 2010.
59. "Microchip Biofuel Cell," Stanford Nanofabrication Facility User Grant, \$3000, October 1, 2007 to January 1, 2009.
60. "Discovery and Utilization of Enzymes for Renewable Biofuels Production," submitted with Washington University, \$4,210,849 (SLU subcontract \$173,409), submitted to Missouri Life Science Trust Fund, funded for January 1, 2008 to December 31, 2009.
61. "Membraneless Ethanol/Oxygen Biofuel Cells," submitted to CIA, \$45,000, funded for July 2007 to January 2009.
62. "Enzymatic Biofuel Cells," Missouri Life Sciences Research Foundation, \$3000, funded for May 15, 2007 to August 15, 2007.
63. "Development of High Energy Density Bio-inspired Power Systems," Air Force Research Laboratory, \$20,000, submitted on March 8, 2007 with University of Missouri-Rolla, funded for November 1, 2007 to November 1, 2008.
64. "Self-Powered Explosive Sensors," National Science Foundation, \$400,000, funded for October 1, 2007 to September 30, 2012.
65. "Biological Catalyst Immobilization Materials," Akermis, Inc., \$244,174.32, funded for March 29, 2007 to March 28, 2008.

66. "Membraneless Ethanol/Oxygen Biofuel Cells," submitted to CIA, \$35,000, funded March 2007 to January 2009.
67. "Acquisition of an Atomic Force Microscope for Biological Materials Research and Training," National Science Foundation, \$193,502, Co-PI with Rebecca Willits as PI, funded October 2006.
68. "Development of High Power Density Bioanodes for Biofuel Cells," Akermin, Inc., \$281,000, funded for October 1, 2005 to March 1, 2007.
69. "Fundamentals and Bioengineering of Enzymatic Fuel Cell," AFOSR MURI, \$5,000,000 (\$614,000 SLU subcontract), Co-PI with Plamen Atanassov, Scott Banta, and Scott Calabrese-Barton, funded for May 2006 to May 2011.
70. "Development of a Soybean Oil Biofuel Cell," United Soybean Board, \$97,019, funded for October 2005 to September 2007.
71. "Membraneless Ethanol/Oxygen Biofuel Cells," CIA, \$149,940, funded for July 11, 2005 to July 10, 2007.
72. "Carbohydrate-Air Fuel Cells As Sustainable Microscale Power Sources," DARPA, \$250,000, funded for May 2005 to June 2006.
73. "Bio-inspired Sources for Long-Lasting and High Energy Density Power Storage with Efficient Conversions," AFRL, \$150,000, Co-PI with Fatih Dogan, Melanie Mormile, Keith Corzine, Matt O'Keefe, Jay Switzer, Mark Prelas, Ruth Ann Mullen, Bruce Monzyk, and Herman Benecke, funded for 8 months.
74. "Magnetically-Enhanced PEM Fuel Cells for Carbon Monoxide Containing Reformates," Army Research Office, \$70,000, submitted with Giner Electrochemical Systems, funded for September 2003 to September 2005.
75. "Employing Quaternary Ammonium Salts to Form Bio-Compatible Nafion Membranes for Use to Immobilize Enzymes at the Anode of Biofuel Cells," Office of Naval Research, \$270,593, funded for January 2003 to March 2006.

XIII. Service

Departmental

- Computer Committee (Fall 2000 – Fall 2002)
- Outcomes Assessment Committee (Fall 2000 – Spring 2002)
- Biochemistry Program Start-Up Committee (Fall 2002 – Fall 2010)
- Food Service Coordinator for the Sigma-Aldrich Lecture Series (2002)
- Organic Faculty Search Committee (Fall 2003)
- Organized a SLU Chemistry Department table at the ACS Graduate School Recruiters' Breakfast in New York, NY (September 2003)
- Analytical Faculty Search Committee Chair (Spring 2004)
- Organic Lab Coordinator Search Committee (Spring 2005)
- Organized a workshop for Sumner High School Students as part of SLU Career and College Exploration (2005)
- Graduate Program Director (Spring 2006-Summer 2011)
- Sigma-Aldrich Lecture Series Chair (2008)
- Wrote proposal for Ph.D. program in Chemistry (2008)
- University of Utah Department of Chemistry Graduate Education Committee (2011-2012)
- University of Utah Department of Materials Science & Engineering ABET Accreditation Representative (2011-2018)
- University of Utah Department of Materials Science & Engineering Chair Search Committee Member (Fall 2011)

- Chair of the University of Utah Department of Chemistry Graduate Recruiting Committee (2012-2014)
- Member of the Chemistry Department Alumni Relations and Development Committee (2013-2016)
- Member of the Chemistry Department Advisory Committee (2013-2016)
- Chair of the MSE RPT Committee (2013-2015)
- Chair of the MSE Curriculum Committee (2013-2019)
- MSE ABET Coordinator (2012-2019)
- Chair of the Chemistry Department RPT Committee (2018-2019)
- Co-Chair of the Chemistry Department Analytical Hiring Committee (2018-2019)
- Associate Chair of Diversity & Inclusion (2019-2023)
- Member of the Chemistry RPT Committee (2019-2020)
- Chair of the Chemistry Department Analytical and Materials Hiring Committee (2019-2020)
- Chair of the Chemistry Department Diversity Inclusion and Equity Committee (2020-2023)
- Co-chair of the Chemistry Department Hiring Committee (2021-2022)
- Chair of the Vitek Endowed Chair Hiring Committee (2023-2024)
- Member of the Castleman Endowed Chair Hiring Committee (2023-2024)
- Member of the Chemistry Department Personnel Committee (2024-2027)
- Member of the Chemistry Department Organic Chemistry Hiring Committee (2024-2025)
- Chair of the Stoffer Endowed Chair Hiring Committee (2026-2027)

College

- Curriculum Committee (Spring 2001, sabbatical replacement for Alexa Serfis)
- Academic Honesty Committee (Fall 2001 – Spring 2005) (Chair for Spring 2004)
- Finance Committee (Fall 2005- Spring 2007)
- Technology Committee (Fall 2005 – Spring 2007)
- Chair of Board of Graduate Education (Fall 2010-Summer 2011)
- Member of the COE ABET Committee (2011-2019)
- Member of the COE RPT Committee (2015-2019)
- Member of COE College Council (2015- 2019)
- College of Science Dean Search (2018-2019)
- College of Science Diversity Equity and Inclusion Committee (2020-2023)
- ACCESS instructor for 2018, 2019, 2020, 2021, and 2022 Chemistry Weeks
- Department of Physics Hiring Search Committee (2020-2021)
- Member of the Biology Chair Hiring Committee (2023-2025)

University

- Sexual Assault Awareness Committee (Spring 2001 – Spring 2004)
- Faculty Senate (Spring 2002, sabbatical replacement for Alexa Serfis)
- Research Committee of the Graduate School (Fall 2002 – Fall 2003)
- Judge for the 7th, 8th, 10th, 11th, 12th, and 13th Annual Graduate Student Association Research Symposium
- Pre-Health Committee (Fall 2002 – Spring 2005)
- 1818 Coordinator for Chemistry (Fall 2003 – Fall 2008)

- 1818 Advisory Board Member (Spring 2005- Fall 2008)
- Provost's Committee on Conflict of Commitment Policy (Fall 2003- Fall 2004)
- New Faculty Orientation Panelist (Fall 2003)
- Equity Policy Review Committee (Summer 2004 – Fall 2006)
- Graduate Assistantship Orientation Panelist (Fall 2004)
- Organized workshop for new faculty orientation (Fall 2004)
- Academic Welcome Speaker for SLU 101 (Summer 2004)
- Homecoming Court Judge (Fall 2004 and Fall 2005)
- Undergraduate Summit Poster Presenter (Spring 2005)
- Corporate and Foundation Relations Grants Development Specialist Search Committee (Fall 2005)
- Graduate Assistant Orientation Speaker (Fall 2005)
- Coordinated the Freshman Orientation/Summer Reading Speaker (Fall 2005)
- Faculty Liason to Board of Trustees Technology Committee (Fall 2005- Fall 2007)
- New Faculty Orientation II Speaker (October 2005)
- ITS Academic Technology Advisory Committee (Fall 2005- Fall 2007)
- IT Strategic Leadership Team (Fall 2005 – Fall 2008)
- Speaker for Center for Teaching Excellence on “Becoming a Total University Citizen” (March 2006)
- Retention Management Committee (Summer 2006- Fall 2008)
- Faculty Senate Development Committee (Fall 2006 – May 2008)
- Women's Commission Speaker on “Finding Your Voice at Saint Louis University”
- Summer Research Award Review Panel (2008)
- Last Lecture Series Speaker (March 27, 2008) on Energy Sustainability
- Center for Teaching Excellence speaker on Balancing Life, Love, and Graduate School (December 4, 2008)
- Conflict of Interest Committee (2008-2011)
- Provost's Research Task Force (2009- 2010)
- President's Research Fund Review Panelists (December 2009)
- Learning Community Taskforce (January 2010- 2011)
- Board of Trustees Research Committee (2007-2010)
- Provost's Strategic Planning Think Tank Member (2010)
- Chair of the USTAR Alternative Energy Junior Faculty Search (2011)
- Chair of the USTAR Alternative Energy Junior Faculty Search (2012)
- University Research Committee (2012-2015)
- Member of the MRSEC Faculty Search Committee (2013-2015)
- Member of the MRSEC Executive Committee (2015-2017)
- Senate Academic Freedom and Faculty Rights Committee (2013-2023; Chair for 2015-2016 academic year and the 2016-2017 academic year)
- Speaker for the Postdoc Lunch & Learn Series (2017 and 2019 and 2020)
- Member of Academic Senate Special Committee on Postdoc Policy (2020-2021)
- Chair of the University of Utah Graduate School Dean Search (2022-2023)
- Member of the Faculty Advisory Committee for the Engineering Research Laboratory Renovation and Expansion (2023-present)
- Member of the Research Council (2023-present)

- Chair of the Associate Vice Chancellor of Research and Innovation Hiring Committee (2024-2026)
- Member of the Provost Search Committee (2024-2025)
- Chancellor's Task Force on PhD Recruitment and Enrollment (2025-2026)
- Bio-Innovation Planning Committee (2026-present)
- BioPlex Planning Committee (2026- present)
- ERC Space Allocation Committee (2026-present)
- Facilities Planning Committee (2025-present)
- Environmental Health and Safety Committee (2026- present)

Community

- Volunteer for Community Science Day at the Science Center
- Volunteer for National Chemistry Week at the Science Center
- Demonstrator at Bristol Elementary Science Night
- Demonstrator at Rockwood School District Science Night
- Career Panelist for Expanding Your Horizons in Mathematics and Science Conference (2002)
- Science Fair Judge for the Illinois Junior Academy of Science Region 12 Science Fair (2002)
- Job Shadow Host for the Salem High School Groundhog Day Job Shadow Program (2003)
- Expanding Your Horizons in Mathematics and Science 2003-2010 Board Member
- Coordinated a SLU sponsored workshop on Slime at the 2004 Expanding Your Horizons in Mathematics and Science Conference
- Mentored 4 Incarnate Word Academy students for their science fair project (2003)
- Mentored a student from St. Charles West for her science fair project (2003-2004)
- Program Chair for Expanding Your Horizons Conference (2005, 2006, 2007, and 2008)
- Science Fair Judge for the Illinois Junior Academy of Science Region 12 Science Fair (2005)
- Science Fair Judge for the St. Charles/Lincoln County Science and Engineering Fair (2005)
- Mentored 2 students as part of the 2005 ASCEND Summer Program
- Workshop presenter for Future Trek 2005 at the St. Louis Science Center
- Research group organized and hosted a Junior Academy of Science laboratory demonstration on the Chemistry of Cosmetics (2006)
- Workshop presenter for Future Quest 2007 at the St. Louis Science Center
- Judge for Regional FIRST Robotics Competition, St. Charles, MO (March 2-3, 2007)
- Scientists at the Center on June 2, 2007 (St. Louis Science Center)
- Judge for the Regional FIRST Robotics Competition, St. Charles, MO (February 29 – March 1, 2008)
- Hosted and organized Missouri Junior Academy of Science (March 8, 2008)
- Mentored one student (Chanel Watkins) for Clyde Miller Career Academy
- Scientists at the Center on July 26, 2008 (St. Louis Science Center)

- Gave a presentation on Energy Conversion for the 21st Century to the St. Louis Wednesday Club (November 12, 2008)
- Chemistry Lab Demonstrations for K-6 Grade students at Rohan Woods School (Spring 2009)
- Hosted and organized Missouri Junior Academy of Science (March 7, 2009)
- Co-Program Chair for Expanding Your Horizons Conference (March 2009 and March 2010)
- Gave a presentation on Careers in Chemistry and Biochemistry for the Kirkwood High School Science Series (May 7, 2009)
- Research group organized a booth at SciFest09 at the St. Louis Science Center (October 7, 2009)
- Review panelist for Academy of Science of St. Louis 2010 Awards
- Workshop presenter for Green Your Future –An Interactive and Eco-friendly Science Careers Program at the Missouri Botanical Garden (February 5, 2010)
- Hosted and organized Missouri Junior Academy of Science (March 13, 2010)
- Site Co-Chair for Expanding Your Horizons Conference (March 2010)
- Member of the Board of Directors of the Academy of Science of St. Louis (2010-2011)
- Workshop organizer and presenter for Expanding Your Horizons Conference (March 2013)
- Research group organized electrochemistry laboratories for Riverton High School (May 8-9, 2013)
- High school research project mentor (2014-present)
- Utah Project SEED Coordinator (2017-2019)
- Outreach at local Senior Centers on more environmentally friendly pharmaceutical production (2018-2019)
- Workshop organizer and presenter for Expanding Your Horizons Conference (March 2019)
- St. Louis City Museum Saturdays with a Scientist (2024)
- Co-organizer for the Missouri S&T/ReNEW Missouri Energy Conference (September 20, 2025)

Professional

- Reviewer for Journal of the American Chemical Society, Nature Biotechnology, Nature Nanotechnology, Biochemical Engineering Journal, Journal of Electroceramics, Chemical Engineering Communications, AIChE Journal, Food Chemistry, Applied Materials & Interfaces, Journal of Scientific and Industrial Research, Langmuir, Polymer, Spectroscopy Letters, Journal of Materials Chemistry, International Journal of Molecular Sciences, Letters in Organic Chemistry, Journal of Physical Chemistry Letters, Lab-on-a-Chip, Journal of Renewable and Sustainable Energy, Journal of Scientific and Industrial Research, Analytical Chemistry, Australian Journal of Chemistry, Polymer Letters, ECS Transactions, Talanta, Enzyme and Microbial Technology, Journal of Sulfur Chemistry, Journal of Chemical Technology & Biotechnology, Journal of Physical Chemistry, Journal of Membrane Science, Electrophoresis, Biofuels, Journal of Medicinal Plants Research, European Polymer Journal, Biotechnology and Bioengineering, Bioelectrochemistry, Angewandte Chemie, Chemical Society Reviews, Biosensors and Bioelectronics, Bioenergy Research, Journal of the Electrochemical Society, Journal of Electroanalytical Chemistry, Journal of

Polymer Research, International Journal of Molecular Sciences, Sensors and Actuators: B. Chemical, Electroanalysis, Synthetic Metals, Journal of the Iranian Chemical Society, Journal of Molecular Catalysis A: Chemical, Analyst, Electrochimica Acta, Journal of Chemical Technology and Biotechnology, Environmental Science and Technology, Analytica Chimica Acta, Journal of Sol-Gel Science and Technology, International Journal of Global Energy Issues, IUPAC Journal, Recent Patents on Engineering, Electrochemical and Solid State Letters, Baird/Gloffke's Chemistry In Your Life textbook, General Chemistry for the 21st Century (by Petra van Koppen and Richard Watts) textbook, and Kotz/Trieichel's Chemistry and Chemical Reactivity textbook.

- Reviewer for Army Research Office (2006, 2018-2021), Research Corporation (2007), and Petroleum Research Fund (2007)
- Review Panelist for Department of Energy Basic Research for the Hydrogen Fuel Initiative (March 2007) and Department of Energy Solar Fuels Initiative Management Review (July 2021)
- Chemistry Editor for the Journal of Undergraduate Study and Independent Research (2001-2003)
- NIH Special Emphasis Panelist for National Institute of Diabetes and Digestive and Kidney Diseases
- DOE Review Panelist for SBIR/STTR (2002-2005, 2008)
- NSF Review Panelist for SBIR/STTR on Biofuels (2007), Marine and Aquatic Biotechnology (2010), Catalysis: Fuel Cell Applications (2002, 2004), Biomedical Engineering (2004), Environmental Sensors (2004), Optical Based Sensors (2006), Catalysis (2005), Biotechnology Manufacturing (2009), Bioseparations (2009), Diagnostic Assays (2010), Medical Imaging Technologies (2011), Instrumentation (2011), Bioinstrumentation I: Microscopy and Spectroscopy (2011), Scientific Instrumentation (2011), and Biosensors (2003)
- NSF Review Panelist for MPS (Summer 2021)
- NIH Devices and Detection Systems Small Business Special Emphasis Panel (2009, 2010, and Spring and Summer 2011)
- NIH Biological Chemistry and Biophysics Study Section (2010)
- NSF Review Panelist for Energy for Sustainability (2007 and 2009) and BRIGE: Broadening Participation in Engineering (2008), CCI (2018), Nanomanufacturing (2018), and Chemical Catalysis (2012, 2018)
- Co-Chaired and Co-organized a symposium on Bioanalysis at the National ACS Meeting in Boston (August 2002)
- Co-Chaired a symposium on Novel Polymeric Materials at the National ACS Meeting in New Orleans (March 2003)
- Co-Chaired and Co-organized a symposium on Materials for Biocathodes at the 204th Meeting of the Electrochemical Society in Orlando (October 2003)
- Program Chair for the St. Louis Section of the American Chemical Society (2002-2008)
- Scientific Advisory Board Member for Springdale Capital Corporation (2003-present)
- Co-Chaired a symposium on Transport in Complex Media at the Electrochemical Society Meeting in San Antonio (May 2004)
- Proofed Chapter 5 problems for the Brown, Lemay, and Burnstein Solution Manual
- Executive Committee of the Physical Electrochemistry Division of the Electrochemical Society (2005-2007)

- Hosted a Scanning Probe Microscopy Workshop (May 2005)
- Organized and chaired a symposium on Modeling Electrochemical Systems for the Denver ECS Meeting (May 2006)
- Organized and chaired a symposium on Biofuel Cells at the Denver ECS Meeting (May 2006)
- Chaired a symposium on New Concepts in Bio-Related Materials at the National ACS Meeting in San Diego (March 2005)
- Co-Organized and Chaired a symposium on Nanoparticles for Fuel Applications at the Atlanta ACS Meeting (March 2006)
- Steering Committee of the St. Louis Section of the American Chemical Society (2005)
- Summit on Sustainability (Washington DC, June 2006)
- Electrochemical Society Honors & Awards Committee Member (2006-2010)
- Thesis committee for Jason He at Washington University Department of Chemical Engineering (2005- 2008)
- Electrochemical Society Chair of Carl Wagner Award Committee(2007-2009)
- Electrochemical Society Physical and Analytical Electrochemistry Secretary/Treasurer (2007-2009)
- “The Secret of Her Success” Panelist for AWIS (2007)
- Organized and Chaired a symposium on Microfluidics for Electrochemical Sensors at the Washington DC ECS Meeting (October 2007)
- External Reviewer for Erik Kjeang at University of Victoria Department of Mechanical Engineering (November 2007)
- Chaired a session on Biological Applications at the 2008 Gordon Research Conference in Electrochemistry (January 2008)
- Co-Edited an issue of ECS Transactions on Electrochemistry of Novel Electrode Materials for Energy Conversion and Storage (2008, 6(25))
- Reviewer for Springer Scientific Publishing’s book proposals on electrochemistry (2008)
- Panelist for Washington University School of Medicine St. Louis Biotech Symposium (March 28, 2008)
- Organized and Chaired a symposium on Biofuel Cells at the Phoenix ECS Meeting (May 2008)
- Organized a symposium on Exploiting Magnets and Magnetic Fields in Electrochemical Systems and Devices at the Phoenix ECS Meeting (May 2008)
- Chaired a symposium on Physical and Analytical Electrochemistry at the Phoenix ECS Meeting (May 2008)
- Editorial Advisory Board of Recent Patents on Engineering (June 2008 – present)
- Organized and Chaired a symposium on Bioelectroanalysis at the Honolulu ECS Meeting (October 2008)
- Chaired a symposium on solar energy conversion for Portable Energy 2009, Orlando, FL (May 6, 2009)
- Advisory Panel for Analytical Chemistry (January 1, 2009 – December 31, 2011)
- Society of Electroanalytical Chemists Board of Directors Member (January 1, 2009 –January 1, 2014)
- Organized and Chaired a symposium on Novel Electrode Materials at the San Francisco ECS Meeting (May 2009)
- Co-Chaired a symposium on Physical and Analytical Electrochemistry: Spectroscopy and Applications at the San Francisco ECS Meeting (May 2009)

- Chaired a symposium on Role of Electrochemistry in Addressing Climate Change at the San Francisco ECS Meeting (May 2009)
- Advisor for United States Department of Homeland Security (Spring 2009)
- Vice-Chair of the ECS Physical and Analytical Electrochemistry Divisions (Spring 2009- Spring 2011)
- Organized and Chaired a symposium entitled “Tutorials in Nanotechnology: Focus on Physical and Analytical Electrochemistry” at the Vienna Electrochemical Society Meeting (October 2009)
- Organized and Chaired a symposium entitled “Physical, Electroanalytical, and Bioanalytical Electrochemistry” at the Vienna Electrochemical Society Meeting (October 2009)
- Chair Elect of the St. Louis Section of the American Chemical Society (2009)
- Co-organized and Co-chaired a symposium entitled “Innovative Chemistry for the Enhancement and Production of Energy” at the Midwest Regional American Chemical Society Meeting in Iowa City, IA (October 2009)
- Editorial Advisory Board Member for Polymers (October 2009-2013)
- Chair of the St. Louis Section of the American Chemical Society (2010)
- Session Chair and Discussion Leader for Bioelectrochemical Energy Transduction at the 2010 Gordon Research Conference in Electrochemistry (January 2010)
- Activities Chair for the Society of Electroanalytical Chemists (2009-2014)
- Organized and chaired Physical and Analytical Electrochemistry Session at the Vancouver Electrochemical Society Meeting (April 2010)
- Co-organized and co-chaired Biofuel Cells 4 Symposium at the Vancouver Electrochemical Society Meeting (April 2010)
- Co-organized and co-chaired Chemistry, Production, and Use of Green Fuels at the National American Chemical Society Meeting (August 2010)
- Chaired a symposium on Enzymes and Microbes for Energy Production in Biofuel Cells and Microbial Fuel Cells at the Annual International Society of Electrochemistry meeting in Nice France (September 29, 2010)
- Organized and chaired a symposium on Physical and Analytical Electrochemistry at the Electrochemical Society Meeting in Las Vegas, NV (October 11-12, 2010)
- External Reviewer and Committee Member for Rosalba Rincon’s PhD defense (University of New Mexico, November 3, 2010)
- Organized and chaired a symposium on Physical and Analytical Electrochemistry at the Electrochemical Society Meeting in Montreal, CA (May 2011)
- Chair of the Physical and Analytical Electrochemistry Division of the Electrochemical Society (Spring 2011- Spring 2013)
- Member of the Board of Directors of the Electrochemical Society (October 2011- Spring 2013)
- Organized and chaired a symposium on Bioelectroanalysis at the Electrochemical society Meeting in Boston, MA (October 12, 2011)
- Chaired a symposium on Physical and Analytical Electrochemistry at the Electrochemical Society Meeting in Boston, MA (October 10, 2011)
- Editorial Advisory Board of Electroanalysis (January 2012- December 2019)
- PhD Dissertation Opponent for Muhammad Nadeem Zafar (Lund University, October 28, 2011)
- Editorial Advisory Board of ISRN Chemical Engineering (December 2011 – present)

- Editorial Advisory Board of Biosensors and Bioelectronics (2011-2015)
- PhD Dissertation Opponent for Xiaoju Wang (Abo Akademi, Finland, February 17, 2012)
- New Technology Subcommittee of Electrochemical Society (April 2012-April 2015)
- Organized and Chaired Biofuel Cells V at the Electrochemical Society Meeting in Seattle, WA (May 2012)
- Organized and Chaired Fuel Cells and Batteries at North American Membrane Society Annual Meeting in New Orleans, LA (June 2012)
- Organized and Chaired Bioelectroanalysis and Bioelectrocatalysis at the Electrochemical Society Meeting in Honolulu, HI (October 2012)
- Technical Editor for the Journal of the Electrochemical Society (December 2012 to June 2016)
- Editorial Advisory Board of Frontiers in Bioenergy and Biofuels (October 2013-present)
- National Science Foundation BMAT HMC Proposal Review Panel (2014)
- Discussion Leader for the Bioelectrochemistry Session of the Electrochemistry Gordon Research Conference (2014)
- Discussion Leader and Faculty Mentor for the Bioelectrochemistry and Fuel Cells Session of the Electrochemistry Gordon Research Seminar (2014)
- US Organizer for the Indo-US Workshop on Electrocatalytic Materials for Fuel and Biofuel Cells (February 2013)
- National Science Foundation Energy & Environment AIR Review Panel (2013)
- Editorial Advisory Board for Sustainable Chemical Processes (June 2013- June 2016)
- National Science Foundation CBET Energy for Sustainability Proposal Review Panel (2014)
- Organized and Chaired Biofuel Fuel Cells VI at the Electrochemical Society Meeting in Orlando, FL (May 2014)
- Organized and Chaired Energy-Water Nexus symposium at the Electrochemical Society Meeting in Cancun, Mexico (October 2014)
- President Elect of the Society of Electroanalytical Chemistry (July 2014-July 2015)
- President of the Society of Electroanalytical Chemistry (July 2015 – June 2017)
- Vice-Chair of the Electrochemistry Gordon Research Conference (January 2016)
- Organized and Chaired Bard Award Symposium at the Electrochemical Society Meeting in Chicago, IL (May 2015)
- Organized and Chaired Electrocatalysis Symposium at the Electrochemical Society Meeting in Chicago, IL (May 2015)
- Co-organized and chaired Nature-Inspired Electrochemical Systems Symposium at the Electrochemical Society Meeting in Chicago, IL (May 2015)
- Taught a short course on Nanotechnology for Bioenergy: Biofuels to Fuel Cells at the Electrochemical Society Meeting in Chicago, IL (May 2015)
- Taught a one-day workshop at the University of Sao Paulo on biofuel cells (August 2015)
- Editorial Advisory Board Member for Analytical Chemistry (2016-2019)
- Co-organized a symposium and Direct and Mediated Bioelectrocatalysis at Pacifichem 2015 (December 2015)

- Associate Editor for the Journal of the American Chemical Society (July 2016-December 2020)
- Organized and Chaired Biological Fuel Cell Symposium at the Electrochemical Society Meeting in San Diego (May 2016)
- Panelist in the Materials for Energy Storage Panel of the Southwest Regional Energy Innovation Forum in Albuquerque, NM (July 2016)
- Editorial Advisory Board Member for ACS Catalysis (2017-2023)
- Editorial Advisory Board Member for ACS Energy Letters (2017-2023)
- Organized and Chaired K01 Organic and Biological Electrochemistry Symposium at the PRIME Electrochemical Society Meeting, Honolulu, HI, October 2016
- International Society of Electrochemistry Regional Representative (2017-2019)
- Organizing Committee for the 68th Annual Meeting of the International Society of Electrochemistry, Rhode Island, USA, August 2017.
- Panelist for Women in Physics & Astronomy Event (January 2017)
- Mini-course on Biological Fuel Cells at SIBEE Simposio Brasileiro de Electroquímica e Eletroanalítica, Natal, Brazil, August 17, 2017
- Tutorial on Biological Fuel Cells at the Universitat Autònoma de Barcelona, Barcelona, Spain, June 26, 2017.
- Organized and Chaired Materials to Modulate Ionic Transport in Biological Systems Symposium at the 21st International Conference on Solid State Ionics, Padua, Italy, June 20, 2017.
- Organized and Chaired Bioelectrochemistry without Borders at the Annual International Society of Electrochemistry Meeting in Providence, RI, August 27-September 1, 2017.
- Member of the Organizing Committee of the Annual International Society of Electrochemistry Meeting in Providence, RI, August 27-September 1, 2017 – responsible for finding organizing for each of the 19 symposia.
- Organized and Chaired Bioelectroanalysis Symposium at the Electrochemical Society National Meeting in National Harbor, MD, October 4, 2017.
- Chair of the 2018 Electrochemistry Gordon Research Conference (January 2018)
- External opponent for Elena Gonzalez PhD thesis defense at Malmo University, April 2018
- Tutorial on Biological Fuel Cells for the ECS Calgary Student Chapter, Calgary, Canada, on June 8, 2018.
- Organized and Chaired Biofuels Cells 8 at Seattle ECS Meeting, May 2018
- External examiner for Xinxin Xiao PhD thesis defense at University of Limerick, June 2018
- Organizing committee and session chair for the Faraday Discussion on Electrochemistry at Nano-Interfaces (June 2018)
- Organized and Chaired Physicochemical Modeling of Novel Components and Devices for Energy Storage: from Atomistic Level to Macroscopic Processes at the Electrochemical Society Meeting in Cancun (October 2018)
- Editorial Advisory Board Member for ChemElectroChem (2017- present)
- Editorial Advisory Board Member for Joule (2018-present)
- Chair of the ECS Honors and Awards Committee (2019-2023)
- Organized ECS ECEE 2019 meeting on Bioelectrochemistry and Energy Storage with Martin Winter (July 2019)

- Local host for Active Learning in Analytical Chemistry Workshop (November 2019)
- Co-organizing of Utah Energy Symposium (2018-present)
- Organized and Chaired Bioelectrocatalysis symposium at ECS Prime Meeting (October 2020)
- Editor in chief of ACS Measurement Science Au, ACS Materials Au, ACS Engineering Au, ACS Physical Chemistry Au, ACS Organic & Inorganic Au, ACS Bio & Med Chem Au, ACS Nanoscience Au, ACS Engineering Au, and ACS Polymers Au (November 2020- present)
- Organized and Chaired Pharmaceutical Organic and Biological Electrochemistry symposium at ECS Chicago Virtual Meeting (June 2021)
- Women in Nanotechnology Career Panelist (July 29, 2021)
- National Academies of Science, Engineering & Medicine Board on Chemical Sciences and Technology Member (2021-2024)
- Department of Energy Basic Energy Sciences Council on Chemical Sciences, Geosciences, and Bioscience Member (2021-2024)
- Chaired Hydrogenase Session of the RSC Chemical Science Symposium 2021 (September 14, 2021)
- Panelist for the Royal Society of Chemistry COP26 Panel on Chemistry and Climate Change (October 11, 2021)
- Panelist for the ACS Open Access Week 2021 (October 26, 2021)
- Bioelectrochemical Society Council Elected Member (2021-2023)
- Organizing Committee for the World Congress on Biosensors (2021-2025)
- Panelist for ACS St. Louis Local Section Career Panel (March 2022)
- Vice president of the International Society of Electrochemistry (elected for 2023-2025)
- Chaired a session for EuroBIC16 on bioorganic electrocatalysis (July 2022)
- Chaired a Division of Organic Chemistry session of the American Chemical Society on Electrochemistry for Organic Synthesis (August 2022)
- Organized and Chaired ACS Publications Summit Series on Polymer Chemistry (Mainz, Germany), Measurement Science (Barcelona, Spain), and Biological and Medicinal Chemistry (London, England) (September 2022)
- Poster judge at Electrochemistry 2022 in Berlin, Germany (September 2022)
- Organized and chaired a session on Bioelectrocatalysis and bioelectroanalysis at ECS meeting (Atlanta, GA) (October 2022)
- Organized a symposium in honor of Saveant on Organic Electrochemistry at ECS meeting (Atlanta, GA) (October 2022)
- Presented a talk on “Fostering Diversity, Equity, Inclusion, and Respect within the Research Ecosystem,” NIH Virtual Scholar Symposium, October 19, 2022. (invited)
- Beckman Young Investigator Review Panel (2022-2023)
- Colorado State University Department of Chemistry 7-year External Review (November 2022)
- External examiner for Wassim Hosseini’s thesis defense (November 2022)
- Co-organized and co-chaired a NASEM Open Forum on Alternative Chemistries for Advanced Batteries (November 2022)
- Organizing committee for 2024 Annual International Society of Electrochemistry Meeting in Montreal
- Chair of the 2022 ACS Editor’s Conference (January 2023, Miami, FL)

- External Advisory Board Member for NSF Center for Computer Assisted Synthesis (2022-present)
- External Advisory Board Member for DOE Center for Soft PhotoElectroChemical Systems (2022-present)
- Career panelist for Iowa Section of the ACS YCC Academic Chemistry Career Panel (February 2023)
- ACS Chem & Bio Engineering journal editorial advisory board member (2023-2025)
- Organized, chaired, and hosted the 1st International Workshop of the Bioelectrochemical Society in Salt Lake City, UT (June 2023)
- Elected Chair of the Organic and Biological Electrochemistry Division of the Electrochemical Society (2023-2025)
- Elected Member of the Board of Directors of the Electrochemical Society (2023-2025)
- Member of the Symposium Planning Advisory Board of the Electrochemical Society (2023-2025)
- Organized and chair of Faraday Discussion on Electrosynthesis, Edinburgh, UK (July 12-14, 2023)
- Scientific Advisory Board Member for Novo Nordisk Biocatalysts Interactions with Gases (BIG) Center
- Professional Development Presentation on the Peer Review Process at the National American Chemical Society Meeting in San Francisco, CA (August 16, 2023)
- Member of the ACS Sustainable Futures Initiative Committee (2023-present)
- Member of the Electrochimica Acta Advisory Board (2024-present)
- Member of the Chemistry Membership Panel of the American Academy of Arts and Sciences (2024-present)
- Biosensors 2025 Lisbon Member of the Organizing Committee and Symposium Organizer and Chair (2024-2025)
- External examiner for Amira Ben Abderrahmane at University of Montpellier (December 2025)
- Society of Electroanalytical Chemistry Awards Committee Chair (2024-present)