

Curriculum Vita

Shelley D. Minter

a. Education and Training

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

b. Employment History

July 2019-present	Dale and Susan Poulter Endowed Chair of Biological Chemistry, University of Utah
July 2019-present	Associate Chair of Chemistry, University of Utah
July 2011 – June 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

c. Honors and Awards

2022 Bruno Breyer Medal of the Royal Australian Chemical Institute
2021 The Analytical Scientist Power List of Top 100 Most Influential People
2020 Bioelectrochemistry Prize of the International Society of Electrochemistry
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 American Chemical Society Analytical Division Electrochemistry Award
2018 Chinese Academy of Science President's International Distinguished Fellow
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
2006 U.S. Department of Defense Okaloosa Award
2006 Missouri Inventor of the Year Award

2006 Saint Louis Business Journal Under 40 Award
2005 Academy of Science of St. Louis Innovation Award

d. Recent Publications

1. Y.S. Lee, A. Ruff, R. Cai, K. Lim, W. Schuhmann, and S.D. Minteer, "Electroenzymatic Nitrogen Fixation Using an Organic Redox Polymer-Immobilized MoFe Protein System," *Angewandte Chemie*, 2020, 59, 16511-16516.
2. F. Dong, Y.S. Lee, E.M. Gaffney, M. Grattieri, H. Haddadin, S.D. Minteer, 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.
3. M. Kummer, Y.S. Lee, M. Yuan, B. Alkotaini, J. Zhao, E. Blumenthal, and S.D. Minteer, "Substrate Channeling by a Rational Designed Fusion Protein in a Biocatalytic Cascades," *JACS Au*, 2021, 1, 1187-1197.
4. E. Gaffney and S.D. Minteer, "A silver assist for microbial fuel cell power," *Science*, 2021, 373, 1308-1309.
5. H. Chen, O. Simoska, K. Lim, M. Grattieri, M. Yuan, F. Dong, Y.S. Lee, K. Beaver, S. Weliwatte, E. Gaffney, and S.D. Minteer, "Fundamentals, Applications, and Future Directions of Bioelectrocatalysis," *Chemical Reviews*, 2020, 120, 23, 12903–12993.
6. H. Chen, F. Dong, and S.D. Minteer, "The progress and outlook of bioelectrocatalysis for the production of chemicals, fuels, and materials," *Nature Catalysis*, 2020, 3, 225–244.
7. B. Bulutoglu, F. Macao, J. Bale, N. King, D. Baker, S.D. Minteer, 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.