

Charles C. L. McCrory, Ph.D.

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Professional Appointments

Professor, University of Michigan

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| - Professor of Chemistry | 2025-present |
| - Associate Chair of Graduate Education, Department of Chemistry | 2025-present |
| - Professor of Macromolecular Science and Engineering | 2025-present |
| - Associate Professor of Chemistry | 2022-2025 |
| - Associate Professor of Macromolecular Science and Engineering | 2022-2025 |
| - Assistant Professor of Chemistry | 2015-2022 |
| - Assistant Professor of Macromolecular Science and Engineering | 2017-2022 |
| - Dow Corning Assistant Professor of Chemistry | 2017-2019 |

Visiting Appointment, Université Grenoble Alpes

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| - Invited Professor, Département de Chimie Moléculaire | 2026.5-2026.6 |
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Scientist, California Institute of Technology

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| - Member of the Professional Staff, Division of Chemistry and Chemical Engineering | 2014-2015 |
| - Lead Scientist, Benchmarking Project, Joint Center for Artificial Photosynthesis | 2014-2015 |
| - Senior Scientist, Benchmarking Project, Joint Center for Artificial Photosynthesis | 2011-2014 |

Academic and Professional Training

Postdoctoral Fellow, California Institute of Technology	2010-2011
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Advisor: Jonas C. Peters, Division of Chemistry and Chemical Engineering

Project: Electrocatalytic Hydrogen Evolution by Molecular Co and Ni Complexes in Homogeneous Solution

Ph.D. in Chemistry, Stanford University	2010
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Advisor: Christopher E. D. Chidsey, Department of Chemistry

Thesis: Electrocatalytic Dioxygen Reduction by Surface-Immobilized Molecular Copper Complexes

B.S. in Chemistry with Distinction and Departmental Honors, Indiana University	2004
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B.S. in Mathematics with Distinction, Indiana University	2004
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Advisor: George E. Ewing, Department of Chemistry

Thesis: Thin Film Water on NaCl(001)

Honors and Awards

Faculty:

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| Stanley C. Israel Award, <i>American Chemical Society, Midwest Region</i> | 2025 |
| John Dewey Award, <i>College of LSA, University of Michigan</i> | 2025 |
| Imes and Moore Mentorship Award, <i>College of LSA, University of Michigan</i> | 2025 |

PACE Fellowship for Graduate Student-Faculty Mentor Pairs, <i>Rackham Graduate School, University of Michigan</i> (with PhD student Faridat Agboola)	2025
LSA LEAD Fellow, <i>College of LSA, University of Michigan</i>	2024
2024 Pioneering Investigator, <i>Chemical Communications</i>	2024
Early-Career and Emerging Researcher in Physical Chemistry, <i>Journal of Physical Chemistry</i>	2023
DOE Early Career Research Program Award, <i>Department of Energy</i>	2021-2026
Scialog Fellow, Negative Emissions Science, <i>Research Corporation for Science Advancement</i>	2020-2022
New Talent: Americas, <i>Dalton Transactions</i>	2020
Cottrell Scholar Award, <i>Research Corporation for Science Advancement</i>	2019-2022
Kavli Fellow, <i>National Academy of Sciences, Kavli Frontiers of Science Program</i>	2019
NSF CAREER Award, <i>National Science Foundation</i>	2018-2023
Nominated for Golden Apple Award, <i>Students of the University of Michigan</i>	2018, 2019
Dow Corning Assistant Professor of Chemistry, <i>University of Michigan</i>	2017-2019

Graduate:

Ford Foundation Dissertation Fellowship, <i>National Research Council</i>	2008
Centennial Teaching Assistant Award, <i>Stanford University</i>	2008
Daniel Cubicciotti Award, Honorable Mention, <i>Electrochemical Society, San Francisco Section</i>	2008
Franklin Veatch Memorial Fellowship, <i>Stanford University</i>	2006

Undergraduate:

Elected to Phi Beta Kappa	2004
Mathers Summer Scholarship, <i>Indiana University</i>	2003
William H. Bell Award in Chemistry, <i>Indiana University</i>	2002
Sigma Xi Undergraduate Researcher Award, <i>Sigma Xi, Indiana University Chapter</i>	2002
Votaw Summer Research Scholarship, <i>Indiana University</i>	2002
Honors Division Summer Research Scholarship, <i>Indiana University</i>	2002
COMAP Mathematical Contest in Modeling, Honorable Mention,	2001, 2002
R. J. Grim Scholarship, <i>Indiana University</i>	2001-2002
Harry G. Day Summer Scholarship, <i>Indiana University</i>	2000
Upjohn & Pharmacia Summer Research Scholarship, <i>Indiana University</i>	2000
Wells Scholarship, <i>Indiana University</i>	1999-2003

Publications

Total citations = 16,188; *h*-index = 31 ([Google Scholar](#))

Publications Based on Work at the University of Michigan

McCrory Lab Undergraduate or REU; McCrory Lab Graduate Student or Postdoc;

[†]Equally Contributing Author; *Corresponding Author

Publications at University of Michigan

56. Cai, X.; Zhang, Z.; Tian, T.; Zhang, L.; McCrory, C .C. L.; Singh, N.; Yao, L.* "Leveraging Spatial Distribution of CO Intermediate for Boosting Methanol Formation via Electrochemical CO₂ Reduction." *ACS Applied Energy Materials*, **2026**, *14*, 9640-9654. DOI: [10.1021/acsaem.6c02002](https://doi.org/10.1021/acsaem.6c02002).

55. Verma, P. K.; **McCrory, C. C. L.** “Electrochemical Reactive Capture of Carbon Dioxide Using an Amine Sorbent and a Homogeneous Cobalt Electrocatalyst.” *ACS Energy Letters*, **2026**, *11*, 2045-2051. DOI: [10.1021/acsenenergylett.5c03829](https://doi.org/10.1021/acsenenergylett.5c03829).
54. Rani, D.; Dantuluri, R.; Redner, G.; Browne, A.; Goldsmith, B. R.; **McCrory, C. C. L.*** “Electrochemical Nitrate Reduction on CuPd Dilute Alloys: Enhancing Ammonium Selectivity and Activity by Tuning Trace Pd Doping.” *ACS Catalysis*, **2026**, *16*, 11364-11380.
53. Verma, P. K.; **McCrory, C. C. L.*** “Electrochemical Reactive Capture of Carbon Dioxide Using an Amine Sorbent and a Homogeneous Cobalt Electrocatalyst.” *ACS Energy Letters*, **2026**, *11*, 2045-2051. DOI: [10.1021/acsenenergylett.5c03829](https://doi.org/10.1021/acsenenergylett.5c03829).
52. Yao, L.*; Silcox, R.; Rivera-Cruz, K. E.; Bai, J.; **McCrory, C. C. L.**, Bala Chandran, R.*; Singh, N.* “Understanding the Effects of Electrolyzer Geometry and Flow Conditions on Methanol Formation via Gas-Fed Electrochemical CO₂ Reduction.” *ACS Catalysis*, **2025**, *15*, 15162-15171. DOI: [10.1021/acscatal.5c04558](https://doi.org/10.1021/acscatal.5c04558).
51. Brower, R. S.; Wuille Bille, B.; Chiu, S.; Perryman, J. T.; Yao, L.; Agboola, F.; Nagasaki, C. A.; Gomez, R.; Xie, Y.; Kumari, A.; Neumann, E.; Alexandrova, A. N.*; **McCrory, C. C. L.***; Velázquez, J. M.* “Selective Electrochemical Reduction of CO₂ to Metal Oxalates in Non-Aqueous Solutions using Trace Metal Pb on Carbon Supports Enhanced by a Tailored Microenvironment.” *Advanced Energy Materials*, **2025**, *15*, 2501286. DOI: [10.1002/aenm.202501286](https://doi.org/10.1002/aenm.202501286). **Cover Article: Inside Back Cover. **Featured by University of Michigan News article.
50. Bonn, M.*; Domke, K. F.; Sulpizi, M.; **McCrory, C.**, Peng, Z.; “In Situ and Operando Characterization: Advancing our Understanding of Functional Materials.” *Journal of Chemical Physics*, **2025**, 140402. DOI: [10.1063/5.0270688](https://doi.org/10.1063/5.0270688). **Editorial for Special Collection: “In situ and Operando Characterization.”
49. Dean, W. S.; Soucy, T. L.; Rivera-Cruz, K. E.; Filien, L. L.; Terry, B. D.; **McCrory, C. C. L.*** “Mitigating Cobalt Phthalocyanine Aggregation in Electrocatalyst Films through Codeposition with an Axially Coordinating Polymer.” *Small*, **2024**, 2402293. DOI: [10.1002/smll.202402293](https://doi.org/10.1002/smll.202402293). **Invited Contribution to Symposium on Advanced Biological Inorganic Chemistry (SABIC) 2024. **Featured in “Hot Topics in Chemistry and Materials: Carbon Dioxide.”
48. Yao, L.*; Ding, J.; Cai, X.; Liu, L.; Singh, N.; **McCrory, C. C. L.**; Liu, B.* “Unlocking the Potential for Methanol Synthesis via Electrochemical CO₂ Reduction using Molecular Catalysts.” *ACS Nano*, **2024**, *18*, 21623-21632. DOI: [10.1021/acsnano.4c07613](https://doi.org/10.1021/acsnano.4c07613).
47. Verma, P. K.; **McCrory, C. C. L.*** “The Influence of Exogeneous Amines on the Electrochemical CO₂ Reduction Activity of a Cobalt Pyridinediimine Catalyst.” *Chemical Communications*, **2024**, *60*, 8039-8042. DOI: [10.1039/D4CC02709D](https://doi.org/10.1039/D4CC02709D). **Invited Contribution to Themed Collection: “2024 Pioneering Investigators.”
46. Zhou, J. K.[†]; Nie, W.-X.[†]; Tarnopol, D. E.; **McCrory, C. C. L.*** “Co-Co and Co-Zn Bimetallic Complexes for Electrocatalytic CO₂ Reduction: The Role of Interrelated Intramolecular Effects on Activity.” *Chem Catalysis*, **2024**, *4*, 101006. DOI: [10.1016/j.checat.2024.101006](https://doi.org/10.1016/j.checat.2024.101006).
45. Yao, L.[†]; Rivera Cruz, K. E.[†]; Zimmerman, P. M.*; Singh, N.*; **McCrory, C. C. L.*** “Electrochemical CO₂ Reduction to Methanol by Cobalt Phthalocyanine: Quantifying CO₂ and CO Binding Strengths and Their Influence on Methanol Production.” *ACS Catalysis*, **2024**, *14*, 366-372. DOI: [10.1021/acscatal.3c04957](https://doi.org/10.1021/acscatal.3c04957).
44. Askari, M. J.[†]; Kallick, J. D.[†]; **McCrory, C. C. L.*** “Selective Reduction of Aqueous Nitrate to Ammonium with an Electropolymerized Chromium Molecular Catalyst.” *Journal of the American Chemical Society*, **2024**, *146*, 7439-7455. DOI: [10.1021/jacs.3c12783](https://doi.org/10.1021/jacs.3c12783).

43. Lenef, J. D.; Lee, S. Y.; Fuelling, K. M.; Rivera Cruz, K. E.; Prajapati, A.; Delgado Cornejo, D. O.; Cho, T. H.; Sun, K.; Alvarado, E.; Arthur, T. S.; Roberts, C. A.*; Hahn, C.; **McCrory, C. C. L.**, Dasgupta, N. P.* “Atomic-Layer Deposition of Cu Electrocatalysts on Gas Diffusion Electrodes for CO₂ Reduction.” *Nano Letters*, **2023**, *23*, 10779-10787. DOI: [10.1021/acs.nanolett.3c02917](https://doi.org/10.1021/acs.nanolett.3c02917).
42. Yao, L.; Rivera Cruz, K. E.; Singh, N.*; **McCrory, C. C. L.*** “Challenges and Opportunities in Translating Immobilized Molecular Catalysts for Electrochemical CO₂ Reduction from Aqueous-Phase Batch Cells to Gas-Fed Flow Electrolyzers.” *Current Opinions in Electrochemistry*, **2023**, 101362. DOI: [10.1016/j.coelec.2023.101362](https://doi.org/10.1016/j.coelec.2023.101362). **Invited Contribution to special issue: “Organic and Molecular Electrochemistry.”
41. Soucy, T. L.; Dean, W. S.; Rivera Cruz, K. E.; Eisenberg, J. B.; **McCrory, C. C. L.*** “The Influence of pH and Electrolyte Concentration on Fractional Protonation and CO₂ Reduction Activity in Polymer-Encapsulated Cobalt Phthalocyanine.” *Journal of Physical Chemistry C*, **2023**, *127*, 14041-14052. DOI: [10.1021/acs.jpcc.3c01490](https://doi.org/10.1021/acs.jpcc.3c01490). **Invited Contribution to special issue: “Early-Career and Emerging Researchers in Physical Chemistry Volume 2.”
40. Yao, L., Yin, C.; Rivera Cruz, K. E.; **McCrory, C. C. L.***; Singh, N. R.* “Translating Catalyst-Polymer Composites from Liquid to Gas-Fed CO₂ Electrolysis: A CoPc-P4VP Case Study.” *ACS Applied Materials & Interfaces*, **2023**, *15*, 31438-31448. DOI: [10.1021/acsami.3c04085](https://doi.org/10.1021/acsami.3c04085).
39. Michaud, S. E., Barber, M. M.; Rivera Cruz, K. E.; **McCrory, C. C. L.*** “Electrochemical Oxidation of Primary Alcohols using a Co₂NiO₄ Catalyst: Effects of Alcohol Identity and Electrochemical Bias on Product Distribution.” *ACS Catalysis*, **2023**, *13*, 515-529. DOI: [10.1021/acscatal.2c02923](https://doi.org/10.1021/acscatal.2c02923).
38. Nie, W.-X.*, **McCrory, C. C. L.*** “Strategies for Breaking Molecular Scaling Relationships for the Electrochemical CO₂ Reduction Reaction.” *Dalton Transactions*, **2022**, *51*, 6993-7010. DOI: [10.1039/D2DT00333C](https://doi.org/10.1039/D2DT00333C). **Invited Contribution. **Featured in RSC Themed Collection “Dalton Transactions HOT Articles.”
37. Soucy, T. L.; Dean, W. S.; Zhou, J.; Rivera Cruz, K. E.; **McCrory, C. C. L.*** “Considering the Influence of Polymer-Catalyst Interactions on the Chemical Microenvironment of Electrocatalysts for the CO₂ Reduction Reaction.” *Accounts of Chemical Research*, **2022**, *55*, 252-261. DOI: [10.1021/acs.accounts.1c00633](https://doi.org/10.1021/acs.accounts.1c00633). **Invited Contribution to special issue: “CO₂ Reductions via Photo and Electrochemical Processes.”
36. Soucy, T. L.[†]; Liu, Y.[†]; Eisenberg, J. B.; **McCrory, C. C. L.*** “Enhancing Electrochemical CO₂ Reduction Activity of Polymer-Encapsulated Cobalt Phthalocyanine Films by Modulating the Loading of Catalysts, Polymers, and Carbon Supports.” *ACS Applied Energy Materials*, **2022**, *5*, 159-169. DOI: [10.1021/acsaem.1c02689](https://doi.org/10.1021/acsaem.1c02689).
35. Rivera Cruz, K. E.[†]; Liu, Y.[†]; Soucy, T. L., Zimmerman, P. M.*; **McCrory, C. C. L.*** “Increasing the CO₂ Reduction Activity of a Cobalt Phthalocyanine by Modulating the σ -donor Strength of Axially-Coordinating Ligands.” *ACS Catalysis*, **2021**, *11*, 13203-13216. DOI: [10.1021/acscatal.1c02379](https://doi.org/10.1021/acscatal.1c02379).
34. Nie, W.-X.; Tarnopol, D. E.; **McCrory, C. C. L.*** “Enhancing a Molecular Electrocatalyst’s Activity for CO₂ Reduction by Simultaneously Modulating Three Substituent Effects.” *Journal of the American Chemical Society*, **2021**, *143*, 3764-3778, DOI: [10.1021/jacs.0c09357](https://doi.org/10.1021/jacs.0c09357). **One of the “Most Cited Publications” in JACS: 2020-2021.
33. Nie, W.-X.; Tarnopol, D. E.; **McCrory, C. C. L.*** “The Effect of Extended Conjugation on Electrocatalytic CO₂ Reduction by Molecular Catalysts and Macromolecular Structures.” *Current Opinions in Electrochemistry*, **2021**, *28*, 100716. DOI: [10.1016/j.coelec.2021.100716](https://doi.org/10.1016/j.coelec.2021.100716). **Invited Contribution to themed issue “Innovative Methods in Electrochemistry.”

32. Michaud, S. E.; Riehs, M. T.; Feng, W.-J.; Lin, C.-C.; **McCrory, C. C. L.*** “A CoV₂O₄ Precatalyst for the Oxygen Evolution Reaction: Highlighting the Importance of Postmortem Catalyst Characterization.” *Chemical Communications*, **2021**, 57, 883-886. DOI: [10.1039/D0CC06513G](https://doi.org/10.1039/D0CC06513G). ****Invited Contribution to RSC Themed Collection “(Photo)electrocatalysis for Renewable Energy.”**
31. Kallick, J. K.; Feng, W.-J.; **McCrory, C. C. L.*** “Controlled Growth of Multilayer Films of Discrete Molecular Catalysts using a Layer-by-Layer Growth Mechanism Based on Sequential Click Chemistry.” *ACS Applied Energy Materials*, **2020**, 3, 6222-6231. DOI: [10.1021/acsaem.0c00332](https://doi.org/10.1021/acsaem.0c00332).
30. Liu, Y.†; Deb, A.†; Leung, K. Y.; Nie, W.-X.; Penner-Hahn, J. E.*, **McCrory, C. C. L.*** “Determining the Coordination Environment and Electronic Structure of Polymer-Encapsulated Cobalt Phthalocyanine under Electrocatalytic CO₂ Reduction Conditions using *in situ* X-ray Absorption Spectroscopy.” *Dalton Transactions*, **2020**, 49, 16329-16339. DOI: [10.1039/D0DT01288B](https://doi.org/10.1039/D0DT01288B). ****Invited Contribution to New Talent: America issue. **Featured in RSC Themed Collection “Dalton Transactions HOT Articles.”**
29. Nie, W.-X.; Wang, Y.; Zheng, T.; Ibrahim, A., Xu, Z.; **McCrory, C. C. L.*** “Electrocatalytic CO₂ Reduction by Cobalt Bis(pyridylmonoimine) Complexes: Effect of Ligand Flexibility on Catalytic Activity.” *ACS Catalysis*, **2020**, 10, 4942-4959. DOI: [10.1021/acscatal.9b05513](https://doi.org/10.1021/acscatal.9b05513).
28. Leung, K. Y.; **McCrory, C. C. L.*** “The Effect and Prevention of Trace Ag⁺ Contamination from Ag/AgCl Reference Electrodes on CO₂ Reduction Product Distributions at Polycrystalline Copper Electrodes.” *ACS Applied Energy Materials*, **2019**, 2, 8283-8293. DOI: [10.1021/acsaem.9b01759](https://doi.org/10.1021/acsaem.9b01759).
27. Liu, Y.; Leung, K. Y.; Michaud, S. E.; Soucy, T. L.; **McCrory, C. C. L.*** “Controlled Substrate Transport to Electrocatalyst Active Sites for Enhanced Selectivity in the Carbon Dioxide Reduction Reaction.” *Comments on Inorganic Chemistry*, **2019**, 39, 242-269. DOI: [10.1080/02603594.2019.1628025](https://doi.org/10.1080/02603594.2019.1628025). ****Invited Perspective/Review Article.**
26. Liu, Y.; **McCrory, C. C. L.*** “Modulating the Electrocatalytic Mechanism of Selective CO₂ Reduction by Cobalt Phthalocyanine Through Polymer Coordination and Encapsulation.” *Nature Communications*, **2019**, 10, 1683. DOI: [10.1038/s41467-019-09626-8](https://doi.org/10.1038/s41467-019-09626-8).
25. McMillion, N. D.; Wilson, A. W.; McKenna, G. K.; Chang, M.-C.; Lin, C.-C.; Feng, W.-J.; **Charles, C. C. L.**; Anderson, J. S.* “Imidazole for Pyridine Substitution Leads to Enhanced Activity Under Milder Conditions in Cobalt Water Oxidation Electrocatalysis.” *Inorganic Chemistry*, **2019**, 58, 1391-1397. DOI: [10.1021/acs.inorgchem.8b02942](https://doi.org/10.1021/acs.inorgchem.8b02942).
24. **McCrory, C. C. L.***, Jung, S.; Kallick, J. “Evaluating Electrocatalysts for Solar Water-Splitting Reactions.” In *Integrated Solar Fuels Generators*. Sharp, I; Lewerenz, H. J.; Atwater, H., Eds. Royal Society of Chemistry: London, **2019**, pp. 154-181. DOI: [10.1039/9781788010313-00154](https://doi.org/10.1039/9781788010313-00154). ****Invited Book Chapter.**
23. Nie, W.-X.; **McCrory, C. C. L.*** “Electrocatalytic CO₂ Reduction by a Cobalt Bis (PyridylMonoimine) Complex: Effect of Acid Concentration on Catalyst Activity and Stability.” *Chemical Communications*, **2018**, 54, 1579-1582. DOI: [10.1039/C7CC08546J](https://doi.org/10.1039/C7CC08546J).
22. Lin, C.-C.; **McCrory, C. C. L.*** “Effect of Chromium Doping on Electrochemical Water Oxidation Activity by Co_{3-x}Cr_xO₄ Spinel Catalysts.” *ACS Catalysis*, **2017**, 7, 443-451. DOI: [10.1021/acscatal.6b02170](https://doi.org/10.1021/acscatal.6b02170).

21. Jung, S.*; Kortlever, R.; Jones, R. J. R.; Lichterman, M. F.; Agapie, T.; **McCrory, C. C. L.***; Peters, J. C.* “Gastight Hydrodynamic Electrochemistry: Design for a Hermetically Sealed Rotating Disk Electrode Cell.” *Analytical Chemistry*, **2017** 89, 581-585. DOI: [10.1021/acs.analchem.6b04228](https://doi.org/10.1021/acs.analchem.6b04228).

Publications Based on Research at the Joint Center for Artificial Photosynthesis

20. Kramer, W. W.; **McCrory, C. C. L.*** “Polymer Coordination Promotes Selective CO₂ Reduction by Cobalt Phthalocyanine.” *Chemical Science*, **2016**, 7, 2506-2515. DOI: [10.1039/C5SC04015A](https://doi.org/10.1039/C5SC04015A). ****Cover Article – Inside Front Cover. **Featured in RSC Themed Collection “Global Energy Challenges: Fossil Fuels.”**
19. Jung, S.*; **McCrory, C. C. L.***; Ferrer, I. M.; Peters, J. C.*; Jaramillo, T. F.* “Benchmarking Nanoparticulate Metal Oxide Electrocatalysts for the Alkaline Water Oxidation Reaction.” *Journal of Materials Chemistry A*, **2016**, 4, 3068-3076. ****Invited contribution for themed issue “Water Splitting and Photocatalysis.” **Featured in RSC Themed Collection “2016 Journal of Materials Chemistry A Most Accessed Manuscripts.”**
18. **McCrory, C. C. L.***; Szymczak, N. K.; Peters, J. C.* “Evaluating Activity for Hydrogen-Evolving Cobalt and Nickel Complexes at Elevated Pressures of Hydrogen and Carbon Dioxide.” *Electrocatalysis*, **2016**, 7, 87-96.
17. **McCrory, C. C. L.***; Jung, S.; Ferrer, I. M.; Chatman, S. M.; Peters, J. C.*; Jaramillo, T. F.* “Benchmarking Hydrogen Evolving Reaction and Oxygen Evolving Reaction Electrocatalysts for Solar Water Splitting Devices.” *Journal of the American Chemical Society*, **2015**, 137, 4347-4357.
16. Rittle, J.; **McCrory, C. C. L.**; Peters, J. C.* “A 10⁶-fold Enhancement in N₂-Binding Affinity of an Fe₂(μ-H)₂ Core upon Reduction to a Mixed-Valent Fe^{II}Fe^I State.” *Journal of the American Chemical Society*, **2014**, 136, 13853-13862.
15. Saadi, F. H.; Carim, A. I.; Velazquez, J. M.; **McCrory, C. C. L.**; Soriaga, M. P.*; Lewis, N. S.* “Operando Synthesis of Macroporous Molybdenum Diselenide Films for the Electrocatalysis for the Hydrogen Evolution Reaction.” *ACS Catalysis*, **2014**, 4, 2866-2873.
14. Lacy, D. C.; **McCrory, C. L.**; Peters, J. C.* “Studies of Cobalt-Mediate CO₂ Reduction using a Redox-Active Ligand.” *Inorganic Chemistry*, **2014**, 53, 4980-4988.
13. Hsieh, C.-H.; Erdem, O. F.; Ding, S.; Crouthers, D. J.; Liu, T.; **McCrory, C. C. L.**; Lubitz, W.; Popescu, C. V.; Reibenspies, J. H.; Hall, M. B.; Darensbourg, M. Y.*; “Redox Active Iron Nitrosyl Units in Proton Reduction Electrocatalysis.” *Nature Communications*, **2014**, 5, 3684.
12. Baricuatro, J. H.; Kim, Y.-G.; Saadi, F.; **McCrory, C. C. L.**; Sanabria-Chinchilla, J.; Crouthers, D.; Darensbourg, M. Y.; Soriaga, M. P.* “Heterogenization of a Water-Insoluble Molecular Complex for Catalysis of the Proton-Reduction Reaction in Highly Acidic Aqueous Solutions.” *Electrocatalysis*, **2014**, 5, 226-228.
11. **McCrory, C. C. L.***; Jung, S.; Peters, J. C.*; Jaramillo T. F.* “Benchmarking Heterogeneous Electrocatalysts for the Oxygen Evolution Reaction.” *Journal of the American Chemical Society*, **2013**, 135, 16977-16987. ****Featured as Editor’s Choice article in Science magazine. **Featured in ACS Select Virtual Issue on “Inorganic Chemistry Driving the Energy Sciences.”**

10. Suseno, S.; **McCrory, C. C. L.**; Tran, R.; Gul, S.; Yano, J.; Agapie, T.* “Molecular Mixed-Metal Manganese Oxido Cubanes as Precursors to Heterogeneous Oxygen Evolution Catalysts.” *Chemistry, a European Journal*, **2015**, *21*, 13420-13430.
9. Luca, O. R.*; **McCrory, C. C. L.**; Dalleska, N. F.; Koval, C. A.* “The Selective Electrochemical Conversion of Preactivated CO₂ to Methane.” *Journal of the Electrochemical Society*, **2015**, *162*, H473-H476.
8. Soriaga, M. P.*; Baricuatro, J. H.; Cummins, K. D.; Kim, Y.-G.; Saadi, F. H.; Sun, G.; **McCrory, C. C. L.**; McKone, J. R.; Velazquez, J. M.; Ferrer, I. M.; Carim, A. I.; Javier, A.; Chmielowiec, B.; Lacy, D. C.; Gregoire, J. M.; Sanabria-Chinchilla, J.; Amashukeli, X.; Royea, W. T.; Brunschwig, B. S.; Hemminger, J. C.; Lewis, N. S.; Stickney, J. L.; “Electrochemical Surface Science Twenty Years Later. Expeditions into the Electrocatalysis of Reactions at the Core of Artificial Photosynthesis.” *Surface Science*, **2015**, *641*, 285-294.
7. Ni, K.-Y.; Lin, F.; Jung, S.*; Fang, L.; Nordlund, D.; **McCrory, C. C. L.**; Weng, T.-C.; Ercius, P.; Doeff, M. M.; Zheng, H.*; “Tuning Complex Transition Metal Hydroxide Nanostructures as Active Catalysts for Water Oxidation by a Laser-Chemical Route.” *Nano Letters*, **2015**, *15*, 2498-2503.

Publications Based on Postdoctoral, Graduate, and Undergraduate Research

6. Brownell, K.; **McCrory, C. C. L.**; Chidsey, C. E. D.; Perry, R. H.; Zare, R. N.*; Waymouth, R. M.* “Electrooxidation of Alcohols Catalyzed by Amino Alcohol Ligated Ruthenium Complexes.” *Journal of the American Chemical Society*, **2013**, *135*, 14299-14305.
5. **McCrory, C. C. L.**; Uyeda, C.; Peters, J. C.* “Electrocatalytic Hydrogen Evolution in Acidic Water with Molecular Cobalt Tetraazamacrocycles.” *Journal of the American Chemical Society*, **2012**, *134*, 3164-3170.
4. **McCrory, C. C. L.**; Devadoss, A.; Ottenwaelde, X.; Lowe, R. D.; Stack, T. D. P.*; Chidsey, C. E. D.* “Electrocatalytic O₂ Reduction by Covalently Immobilized Copper(I) Complexes: Evidence for a Binuclear Cu₂O₂ Intermediate.” *Journal of the American Chemical Society*, **2011**, *133*, 3696-3699.
3. **McCrory, C. C. L.**; Ottenwaelde, X.; Stack, T. D. P.*; Chidsey, C. E. D.*; “Mechanistic and Kinetic Studies of the Electrocatalytic Reduction of O₂ to H₂O with Mononuclear Cu Complexes of Substituted 1,10-Phenanthroline.” *Journal of Physical Chemistry A*, **2007**, *111*, 12641-12650. ****Invited Article: Giacinto Scole Festschrift**
2. Conley, N. R.; Pearson, D. M.; Labios, L. A.; **McCrory, C. C. L.**; Waymouth, R. M.* “Aerobic Alcohol Oxidation with a Cationic Palladium Complex: Insights into Catalyst Design and Decomposition.” *Organometallics*, **2007**, *26*, 5447-5453.
1. Cantrell, W.; **McCrory, C.**; Ewing, G. E.*; “Nucleated Deliquescence of Salt.” *Journal of Chemical Physics*, **2002**, *116*, 2116-2120.

United States Patents

McCrory, C.; Jung, S.; Jones, R. J. R.; Rotating Disk Electrode Cell, U.S. Patent 10,451,580 B2, Oct. 22, 2019.

Presentations

75 Total *Invited* Seminars and Conference Presentations as Faculty at U-M (71 delivered, 4 upcoming)

Invited Departmental Seminars and Related Seminars:

As Faculty Member at UM (45 delivered, 1 upcoming)

- | | | |
|-----|---|------------|
| 46. | University of Virginia, Catalysis Initiative for Clean Energy & Chemicals, Charlottesville, VA (<i>upcoming</i>) | Oct. 2026 |
| 45. | Commissariat à l'Énergie Atomique et Énergies Alternatives (CEA) Grenoble, Grenoble, France | June 2026 |
| 44. | Université Grenoble Alpes, Grenoble, France | May 2026 |
| 43. | University of Nevada, LV, Department of Chemistry, Las Vegas, NV | Feb. 2026 |
| 42. | University of Washington, Department of Chemistry, Seattle, WA | March 2025 |
| 41. | University of Cincinnati, Department of Chemistry, Cincinnati, OH | Sep. 2024 |
| 40. | Michigan State University, Department of Chemistry, East Lansing, MI | March 2024 |
| 39. | Boston University, Department of Chemistry, Boston, MA | Feb. 2024 |
| 38. | Mississippi State University, Department of Chemistry, Starkville, MS | Feb. 2024 |
| 37. | University of Rochester, Department of Chemical Engineering, Rochester, NY | Jan. 2024 |
| 36. | University of Buffalo, Department of Chemistry, Buffalo, NY | March 2023 |
| 35. | University of California Irvine, Department of Chemistry, Irvine, CA | Feb. 2023 |
| 34. | ACS Division of Inorganic Chemistry Periodic Table Talk | Jan. 2023 |
| 33. | University of Wisconsin, Department of Chemistry, Madison, WI | Dec. 2022 |
| 32. | Purdue University, Department of Chemistry, West Lafayette, IN | Nov. 2022 |
| 31. | Virginia Clean Energy and Catalysis Club
University of Virginia, Virginia Tech, and Virginia Commonwealth University | May 2022 |
| 30. | Stonybrook University, Department of Chemistry, Stony Brook, NY | March 2022 |
| 29. | Iowa State University, Department of Chemistry, Ames, IA | Oct. 2021 |
| 28. | California Institute of Technology, Division of Chemistry and Chemical Engineering, Pasadena, CA | Sep. 2021 |
| 27. | University of Southern California, Department of Chemistry, Los Angeles, CA | Sep. 2021 |

26. Stanford University, Department of Chemistry, Stanford, CA May 2021
25. University of Zurich, Department of Chemistry, Zurich, Switzerland May 2021
24. University of Utah, Salt Lake City, UT April 2021
23. University of Rochester, Department of Chemistry, Rochester, NY April 2021
22. University of Illinois at Urbana-Champaign, Department of Chemistry, Urbana, IL April 2021
21. University of Illinois at Chicago, Chicago, IL March 2021
20. Yale University, Department of Chemistry, New Haven, CT March 2021
19. University of California Berkeley, College of Chemistry, Berkeley, CA Jan. 2021
18. University of Chicago, Department of Chemistry, Chicago, IL Jan. 2021
17. Virginia Tech University, Department of Chemistry, Blacksburg, VA Dec. 2020
16. University of Texas at Austin, Department of Chemistry, Austin, TX Oct. 2020
15. Texas A&M University, Department of Chemistry, College Station, TX Oct. 2020
14. Andrews University, Department of Chemistry and Biochemistry, Berrien, MI
Dwain L Ford Guest Lecture Series Feb. 2020
13. Notre Dame University, Department of Chemistry, South Bend, IN Nov. 2020
12. Illinois Institute of Technology, Department of Chemistry, Chicago, IL Oct. 2019
11. Wayne State University, Department of Chemistry, Detroit, MI Oct. 2019
10. Michigan State University, Center of Research Excellence in Complex Materials,
East Lansing, MI, Renewable Energy Storage Seminar Series Oct. 2019
9. University of North Carolina Chapel Hill, Department of Chemistry, Chapel Hill, NC Sep. 2019
8. California Institute of Technology, Joint Center for Artificial Photosynthesis,
Pasadena, CA July 2018
7. Dow Chemical Company, Midland, MI Oct. 2017
6. Shanghai Jiao Tong University, School of Chemistry and Chemical Engineering,
Shanghai, China May 2017
5. University of Science and Technology of China, School of Chemistry and Materials,
Hefei, China May 2017
4. Nanjing University, School of Chemistry and Chemical Engineering, Nanjing, China May 2017

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| 3. | Nankai University, College of Chemistry, Tianjin, China | May 2017 |
| 2. | University of the South, Department of Chemistry, Sewanee, TN | Dec. 2016 |
| 1. | Muhlenberg College, Department of Chemistry, Allentown, PA | Sep. 2015 |

Invited Departmental Seminars Prior to UM

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|---|-----------|
| Pennsylvania State University, Department of Chemistry, State College, PA | Jan. 2015 |
| University of Illinois at Chicago, Department of Chemistry, Chicago, IL | Dec. 2014 |
| University of Michigan, Department of Chemistry, Ann Arbor, MI | Dec. 2014 |

Invited Conference Talks and Symposia:

As Faculty Member at UM (29 delivered)

- | | | |
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| 29. | IPCC-14: 14 th International Conference on Porphyrins and Phthalocyanines, Kyoto, Japan
Catalytic Activation of CO ₂ : From Fuels to Complex Molecules | June 2026 |
| 28. | ACS Spring 2026 National Meeting, Atlanta, GA
Joint Symposium in Honor of 2026 Award Recipients Jonas C. Peters and John S. Anderson | March 2026 |
| 27. | Pacificchem 2025: the International Chemical Congress of Pacific Basin Societies 2025, Honolulu, HI
Electrocatalysis for Sustainable Processes Symposium | Dec. 2025 |
| 26. | ACS Spring 2025 National Meeting, San Diego, CA
CO ₂ Conversion & Utilization-II: Electrochemical CO ₂ Conversion to Fuels and Valuable Chemicals | March 2025 |
| 25. | IPS-24/ICARP2024 YOUNG: Pre-Symposium of the 24 th International Conference on Photochemical Conversion of Light/International Conference on Artificial Photosynthesis 2024, Hiroshima, Japan | July 2024 |
| 24. | 2024 Gordon Research Conference on Organometallics, Newport, RI | July 2024 |
| 23. | 2024 Gordon Research Conference on Metallocofactors, Easton, MA | June 2024 |
| 22. | 45 th Annual Spring Symposium of the Michigan Chapter of the North American Catalysis Society, Ann Arbor, MI | May 2024 |
| 21. | 6 th Symposium on Advanced Biological Inorganic Chemistry, Kolkata, India | Jan. 2024 |
| 20. | Telluride Science Research Center Workshop, Telluride, CO
Molecule Transformation through Proton-Coupled Electron Transfer for Energy Storage and Conversion | July 2023 |
| 19. | 265 th ACS National Meeting, Indianapolis, IN
Theoretical and Experimental Approaches to Catalyst Development Symposium | March 2023 |

18. Telluride Science Research Center Workshop, Telluride, CO
Platinum Group Metals and PGM-free Electrocatalysts: Catalyst/Ionomer Interactions March 2023
17. 2022 Southeast Regional Meeting of the American Chemical Society (SERMACS), San Juan, Puerto Rico
The Chemistry of Solar Fuels Symposium Oct. 2022
16. 2022 Department of Energy, Basic Energy Sciences, Solar Photochemistry PI Meeting, Virtual June 2022
15. 263rd ACS National Meeting, San Diego, CA
The Role of Fundamental Interfacial Processes in Electrocatalysis March 2022
14. 2021 Department of Energy, Basic Energy Sciences, Catalysis Science PI Meeting, Virtual Sep 2021
13. 262nd ACS National Meeting, Atlanta, GA
New Methods in Nanocatalyst Development Aug. 2021
12. Telluride Science Research Center Workshop, Telluride, CO
Platinum Group Metal-free and Advanced Platinum Group Metal Electrocatalysts Small Molecules Activation and Conversion Jan. 2020
11. 258th ACS National Meeting, San Diego, CA
Charge and Substrate Transport in 3D Electrocatalytic Materials Aug. 2019
10. 2019 Cottrell Scholars Conference, Tucson, AZ July 2019
9. Telluride Science Research Center Workshop, Telluride, CO
Platinum Group Metal-free Electrocatalysts: Structure-to-Property Relations, Materials Synthesis and Integration in Catalyst Layers June 2019
8. 257th ACS National Meeting, Orlando, FL
Sustainable Energy Conversion via Innovative Electrocatalysis and Photocatalysis Symposium April 2019
7. Telluride Science Research Center Workshop, Telluride, CO
Interfacial Chemistry and Charge Transfer in Energy Storage and Conversion July 2018
6. CCI-Solar Fuels Capstone Meeting, Ventura, CA July 2018
5. 2018 Gordon Research Conference on Electrochemistry, Ventura, CA
Next Generation Electrocatalysts Session Jan. 2018
4. 254th ACS National Meeting, Washington, DC
Innovative Chemistry & Electrocatalysis for Low-Carbon Energy and Fuels Symposium Aug. 2017
3. ACS Central Regional Meeting, Dearborn, MI
Catalysis by Metal Complexes and Nanomaterials Symposium June 2017
2. 253rd ACS National Meeting, San Francisco, CA
ACS Sustainability in Electrocatalytic Fuel and Chemical Production Symposium April 2017
1. 253rd ACS National Meeting, San Francisco, CA
Synthesis & Characterization of Materials for Energy Applications Symposium April 2017

Invited Conference Talks and Symposia Prior to UM

AIChE Annual Meeting, Pittsburgh, PA Electrokinetics and Electrocatalysis Tutorial Session	Oct. 2012
Europe-US Strategic Meeting - Solar Fuels: Light Capture and Electron Flow, Prague, Czech Republic	May 2011
Electrochemical Society, San Francisco Section, Berkeley, CA Award Presentation - Daniel Cubicciotti Award Honorable Mention	April 2008

Contributed Talks (2 as Faculty Member at UM, 7 total)

75 th Annual Meeting of the International Society of Electrochemistry, Montreal, Canada	Aug. 2024
IPS-24/ICARP2024: 24 th International Conference on Photochemical Conversion of Light/International Conference on Artificial Photosynthesis 2024, Hiroshima, Japan	July 2024
251 st ACS National Meeting, San Diego, CA	March 2016
1 st International Solar Fuels Conference (ISF-1), Uppsala, Sweden	May 2015
245 th ACS National Meeting, New Orleans, LA	April 2013
241 st ACS National Meeting, Anaheim, CA	March 2011
Gordon Research Seminar, Renewable Energy: Solar Fuels	Jan. 2011
215 th ECS National Meeting, San Francisco, CA	May 2009
2008 Conference of Ford Fellows, Washington, D.C.	Sep. 2008

Teaching Experience at University of Michigan

Term	Course	Course Title	Enrollment
WN26	CHEM 516	Professional Development in Chemistry	60
FA26	CHEM 242	Introduction to Chemical Analysis Lab	36
WN25	CHEM 649	Electrochemistry	35
FA24	CHEM 302	Inorganic Chemistry: Molecules, Materials, and Applications in Energy	33
WN24	CHEM 649	Electrochemistry	30
FA23	CHEM 302	Inorganic Chemistry: Molecules, Materials, and Applications in Energy	39
WN22	CHEM 649	Electrochemistry	15
FA21	CHEM 130 (Section 200)	General Chemistry: Macroscopic Investigations and Reaction Principles	402
	CHEM 130 (Section 300)	General Chemistry: Macroscopic Investigations and Reaction Principles	319
	CHEM 130 Course Coordinator	General Chemistry: Macroscopic Investigations and Reaction Principles	1520
WN21	CHEM 130	General Chemistry: Macroscopic Investigations and Reaction Principles	140
WN20	CHEM 130	General Chemistry: Macroscopic Investigations and Reaction Principles	354
WN19	CHEM 130	General Chemistry: Macroscopic Investigations and Reaction Principles	308
FA18	CHEM 511	Materials Chemistry	32
WN18	CHEM 130	General Chemistry: Macroscopic Investigations and Reaction Principles	299
FA17	CHEM 511	Materials Chemistry	28
WN17	CHEM 130	General Chemistry: Macroscopic Investigations and Reaction Principles	328
FA16	CHEM 511	Materials Chemistry	46
FA15	CHEM 511	Materials Chemistry	33

Research Support

- Department of Energy, Early Career Research Program, Basic Energy Sciences 2021-2027
Building from Discrete Molecular Electrocatalysts to Macromolecular Catalyst Architectures: The Effects of Charge Delocalization and Electronic Coupling on Electrocatalytic Activity
Role: PI
- Department of Energy: Energy Frontier Research Center 2022-2026
4C: Center for Closing the Carbon Cycle
Role: CoPI and Thrust Leader
- Keck Foundation Science & Engineering Program 2024-2026
Repurposing Waste: Fertilizer Production from Carbon Dioxide and Nitrate
Role: CoPI
- Cottrell Scholars Collaborative, Research Corporation for Science Advancement (Non-Research Funding)
Reimagining Community, Relationality, and Belonging for RCSA Scholars
Role: CoPI

Mentoring and Outreach Activities

Faculty Advisor for Student Groups at U-M:

- NOBCCHE, U-M Chapter:** *National Organization for the Professional Advancement of Black Chemists and Chemical Engineers, University of Michigan Chapter* (2020-2023, 2025-present)
- commUNITY,** *a student group focused on social and professional development of BIPOC students, faculty and staff at U-M* (2020-2023, 2024-2025)
- ACS Polymer Division,** *University of Michigan Chapter* (2020-present)

Faculty Advisor for 2023 ACS National Graduate Polymer Research Conference (NGPRC), *University of Michigan Macro Program,* (2021-2023)

Faculty Mentor for M-CORE: Michigan chemistry Opportunities for Research and Education, *visit weekend to U-M Chemistry Department for senior undergraduate students from underrepresented groups featuring 1-on-1 meetings with faculty mentors and advising on graduate school applications.* (Fall 2015, 2016, 2018, 2019, 2020, 2022-2024)

Faculty Mentor for D-Rise, *10-week paid summer research internship for underprivileged students at Cass Tech High School in Detroit, MI.* (2018-2019, 2022-present)

Science Café, UM Museum of Natural History, *March 2023*

“Renewable Energy Storage” discussion as part of UMMNH Science Café

Permanent Museum Exhibit, UM Museum of Natural History, *2021-2023*

“Renewable Energy Storage” exhibit as part of the “People and the Planet” permanent collection. Debuted 12/2022 and expected to run for ~10 years. Includes multimedia and interactives on different storage technologies: water splitting, pumped hydrostorage, and intercalation batteries.

Distinctive Voices in Science Forum, National Academy of Sciences, Irvine, CA, Sep. 2022

“Designing Catalysts that Use Green Electricity to Convert Carbon Dioxide into Useful Chemicals and Fuels.”
Seminar series that invites internationally recognized researchers to the Beckman Center to present their research areas to the general public.

Informal Mentoring/Advising of Students from Underrepresented Groups (2016-present)

Informal discussions with students from underrepresented groups about topics such as maintaining motivation, coping with “Imposter Syndrome” and “Survivor Guilt,” learning from research failures, time management, handling (micro)aggressions, and effectively communicating with faculty mentors.

Faculty Panelist for Newnan’s Student Engagement Committee Workshop

Letters of Recommendation Workshop (March 2021)

Discussion on how students can build relationships with professors in virtual environments, especially for minoritized and/or traditionally marginalized students.

Faculty Presenter for NOBCCHE, U-M Chapter Meeting

Navigating through Challenges as a Student in STEM (Dec. 2020)

Discussion based on my experiences as a student, postdoc, staff scientist, and educator, and focused on how to cope with feelings of isolation and “otherness” as a BIPOC student at primarily white institutions; strategies for coping with imposter syndrome; how to constructively handle (micro)aggressions, etc.

Faculty Panelist for commUNITY Workshop

Remote Learning & Success: Facilitated by U-M Counseling and Psychological Services (Nov. 2020)

Discussion on strategies for staying motivated during online learning, engaging with instructors and research advisors, accepting lower productivity due to the pandemic, and when and how to ask for help.

Presenter/Facilitator for UM Student Chapter of the American Chemical Society Workshop

Chemistry Graduate Student Admissions Workshop (Feb. 2020)

Focus of presentation was on addressing six general questions: “(1) Should I pursue a Ph.D.?; (2) How do I prepare now for grad school later?; (3) Where should I apply to Grad School?; (4) What’s included in graduate applications?; (5) How and when (and from whom) do I request recommendation letters?; and (6) How are applications evaluated and what does ‘holistic’ review really mean?”

Faculty Mentor/Panelist for U-M NextProf Science, *multiday professional development workshop for senior graduate students and postdocs throughout the US from underrepresented background interested in faculty careers in STEM fields.*

Faculty Mentor in Chemistry including 1-on-1 meetings with participants, feedback and advice on research and teaching statements (Winter 2019, Winter 2020)

Panelist for Chemistry Career Discussion Panel (Winter 2016)

Poster Judge at Annual Biomedical Research Conference for Minority Student (ABRCMS) (Nov. 2019)**University of Michigan Museum of Natural History – Scientist Spotlight**

McCrory Lab Interactive Exhibit: “Ready, Shine, Bubble!” (Oct. 2019)

Panelist at NSF CAREER Program Proposal Workshop at U-M, *focused on providing practical guidance to U-M early faculty on successfully applying to for the NSF CAREER Award.* (March 2018, March 2019)

Faculty Organizer for CHEM 801: Analytical Student Seminar Series (Fall 2018)

Faculty Mentor/Grader for MACRO 800: Research Seminars

Derek Frank, Matzger Group, Faculty Grader (June 2019)

Taesu Kim, Goodson Group, Faculty Mentor (Jan-March 2019)

Taeyong Ahn, Banaszak Holl Group, Faculty Mentor (May-July 2018)

Forsythe Young Scientists' Expo featuring U-M Science Spotlight

McCrory Lab Interactive Exhibit: "Electrochemical Water Splitting" (March 2018)

Ann Arbor Hands-On Museum — Science for the Public Event

McCrory Lab Interactive Exhibit: "Will it Bubble" (April 2017)

Faculty Speaker for U-M Applied Physics Seminar (AP 514):

"Increasing Electrocatalytic Activity and Selectivity of Molecular Systems for Small Molecule Transformations." (March 2018)

"Electrocatalytic Transformations of Small Molecules for Renewable Energy Applications." (Oct. 2015)

Interview with MiSciWriters Blog: "Water Splitting Part II: Research at U-M." (Feb. 2016)

Speaker at Lightning Session for Water@Michigan Symposium

"Electrochemical Reduction of Groundwater Pollutants for Wastewater Remediation." (Jan. 2016)

Academic Service

Manuscript Reviewer: (> 300 reviews)

Publishing Service (2023-present)

Guest Editor, *Journal of Materials Chemistry A*, upcoming Special Issue.

Guest Editor, *Journal of Chemical Physics*, "In Situ and Operando Characterization" Special Issue, 2023

Guest Editor, *ACS Organic and Inorganic Au*, "Electrochemical Explorations in Organic & Inorganic Chemistry" Special Issue, 2024.

Editorial Advisory Board, *Journal of Coordination Chemistry*, 2023-present.

Proposal, Award, and Program Reviewer (2017-present)

ACS National Award Selection Committee, American Chemical Society, 2024-2025 Award Cycles

Department of Energy, Bioenergy Technologies Office (BETO), CO₂ Utilization Technology Area: 2023

Lead Peer Review Panelist, 2021 Peer Review Panelist

Reviewer/Panelist for National Science Foundation, US Department of Energy, American Chemical Society Petroleum Research Fund, Research Corporation for Science Advancement, among others.

Symposium Organizing/Planning/Service:

- 2026 Gordon Research Conference on Solar Fuels, Lucca, Italy, *Catalytic Systems and Catalyst Integration*, Discussion Leader, May 2026
- National Meeting, San Diego, CA, *The Role of Fundamental Interfacial Processes in Electrocatalysis*, Symposium Organizer, March 2025
- ACS Spring 2025 National Meeting, San Diego, CA, *The Role of Fundamental Interfacial Processes in Electrocatalysis*, Symposium Organizer, March 2025
- 2023 Materials Research Society Fall Meeting & Exhibit, Boston, MA, *Emerging Electrocatalytic Materials and Devices for Clean Energy and Environmental Applications*, Symposium Organizer, November 2023
- 4th Japanese-American-German Kavli Frontiers of Science Symposium, Dresden, Germany, *Quantum Science and Technology*, Planning Group Member, October 2023
- 2022 Department of Energy, Basic Energy Sciences, Solar Photochemistry PI Meeting, Rockville, MD, *Electrocatalysis for Solar Fuels Generation*, Session Chair, May 2023
- 3rd Japanese-American-German Kavli Frontiers of Science Symposium, Irvine, CA, *Small Molecule Transformations with Inorganic Compounds and Materials*, Planning Group Member, September 2022
- 2022 Department of Energy, Basic Energy Sciences, Catalysis Science PI Meeting, Virtual, *Opportunities in Catalysis Research for Carbon-Neutral H₂ Generation*, Scribe, September 2022
- 258th ACS National Meeting, San Diego, CA, *Charge and Substrate Transport in 3-D Electrocatalytic Materials*, Division of Inorganic Chemistry, Symposium Organizer, August 2019

University of Michigan/Departmental Service

- LSA Carbon Neutrality Working Group—Facilities and Operations (2021-2022)
- Michigan Materials Characterization Center (MC)² Advisory Council (2019-2020)
- Chemistry Department Associate Chair of Graduate Education (2025-present)
- Chemistry Graduate Committee (Chair 2025-present, Member 2024-2025)
- Chemistry Department Executive Committee (2022-2024, 2025-2026)
- Chemistry Graduate Student Admissions Committee (2016-2019, 2023-2024)
- Chemistry Safety Strategy Committee (2020-2021, 2022-2023)
- Chemistry Recruiting Committee (2015-2016, 2019-2020, 2022-2023, 2024-2025)
- Chemistry Diversity Committee (2016-2017, 2020-2022)
- Chemistry Undergraduate Advising Committee (2019-2022)
- Chemistry Faculty Search Committee (2018-2019)