**Address:** School of Molecular Sciences

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**Education:** Yale University, New Haven, CT (2009 – 2011)

Postdoctoral Fellowship

Advisors: Gary W. Brudvig and Robert H. Crabtree

Arizona State University, Tempe, AZ (2004 – 2009)

Ph.D. Chemistry and Biochemistry

Advisor: Ana L. Moore

The Evergreen State College, Olympia, WA (1998 – 2004)

B.S. Chemistry

Advisor: Peter J. Pessiki

Employment: Arizona State University, Tempe, AZ

Associate Professor (2020 – present) Assistant Professor (2014 – 2020)

Berkeley Lab, Berkeley, CA

Principal Investigator and Staff Scientist (2011 – 2014)

Internships: Université Paris-Sud, Laboratoire de Chimie Inorganique, Orsay, France

(summer 2005)

University of Pennsylvania, Biochemistry Biophysics, Philadelphia, PA

(summer 2002)

# Fellowships, Awards, and Honors:

(24) National Academy of Sciences (NAS) Kavli Foundation Fellow (2023) (one of 118 faculty nationwide, more than 6,200 young scientists have participated since the program's founding in 1989; to date, 323 participants have been elected to the NAS and 18 have been awarded the Nobel Prize)

(23) Inter-American Photochemical Society (I-APS) Young Investigator Award (2023) (the I-APS Young Investigator Award was established in 2002 to recognize outstanding photoscientific contributions by Society members)

(22) Negative Emission Science Fellow (2021-2023) (sponsored by the Research Corporation for Science Advancement (RSCA) and the Alfred P. Sloan Foundation)

- (21) Department of Energy Early Career Research Award (2020) (one of 76 faculty nationwide)
- (20) Camille Dreyfus Teacher-Scholar Award (2020) (one of 14 faculty nationwide)
- (19) Recognized as an "outstanding chemist with Native American heritage" by the National Science Foundation during the Celebration of Native American Heritage Month (2020)
- (18) ARCS Foundation Exceptional Mentor Award (2018) (one of three doctoral mentors recognized nationally)
- (17) Journal of Materials Chemistry Emerging Investigator (2018)
- (16) ASU Laboratory Safety Innovation Award (2018)
- (15) Electron Donor-Acceptor Interactions GRC Emerging Investigator (2018) (one of three selected junior faculty presentations)
- (14) National Science Foundation CAREER Award (2017) (the NSF CAREER Award offers the National Science Foundation's most prestigious awards in support of early-career faculty)
- (13) Julie Ann Wrigley Global Institute for Sustainability Scholar (2017)
- (12) Photochemistry GRC Emerging Investigator (2017) (one of two selected junior faculty presentations)
- (11) Yale Edward A. Bouchet Honor Society Fellow (2011 present)
- (10) Camille and Henry Dreyfus Foundation Energy Fellow (2009 2011)
- (9) Baruch '60 Center for Solar Energy Research Award (2011)
- (8) Connecticut Clean Energy Award (2011)
- (7) Renewable Energy: Solar Fuels GRC Young Investigator Award (2009)
- (6) ARCS Foundation Scholar (2008 2009)
- (5) Electron Donor-Acceptor Interactions GRC Young Investigator Award (2008)
- (4) Photosynthesis GRC Young Investigator Award (2008)
- (3) Carl Storm Underrepresented Minority Fellow (2006)
- (2) Alliance for Graduate Education and Professoriate Fellow (2006 2009)
- (1) National Science Foundation Fellow (2004 2009)

#### I. Scholarship

Citation Indices (based on Google Scholar)

Citations: 3718 (May 2024); H-index: 30; i10-index: 41

### **Publications**

# A. Journal Articles (55 total)

# As ASU Faculty (35 total):

(55) Nishiori, D. (graduate student); Hensleigh, L. K. (graduate student); Nguyen, N. P. (graduate student); Peterson, I.; Moore, G. F. Shedding More Light on Solar Photochemistry: Wavelength-Resolving How Fluxes of Chemical Substrates, Electrons, and Photons Establish Photoelectrosynthetic Turnover Frequencies. 2024, (under review).

- (54) Nishiori, D. (graduate student); Menzel, J. P. (postdoctoral researcher); Armada, N. (graduate student); Reyes Cruz, E. A. (graduate student); Nannenga, B. L. (professor); Batista, V. S. (professor); Moore, G. F. Breaking a Molecular Scaling Relationship using an Iron-Iron Fused Porphyrin Electrocatalyst for Oxygen Reduction. J. Am. Chem. Soc. 2024, 146, 11622-11633.
- (53) Nguyen, N. P. (graduate student); Hensleigh, L. K. (graduate student); Nishiori, D. (graduate student); Reyes Cruz, E. A. (graduate student); Moore, G. F. Degrade-Repair Cycle of a Fuel-forming Photoelectrode. ACS Appl. Energy Mat. 2022, 5, 13128-13133. (Cover Article) (Impact Factor: 6.024, Contributions: corresponding author and advised students).
- (52) Reyes Cruz, E. A. (graduate student); Nishiori, D. (graduate student); Wadsworth, B. L. (graduate student); Nguyen, N. P. (graduate student); Hensleigh, L. K. (graduate student); Khusnutdinova, D. (graduate student); Beiler, A. M. (graduate student); Moore, G. F. Molecular-Modified Photocathodes for Applications in Artificial Photosynthesis and Solar-to-Fuel Technologies. Chem. Rev. 2022, 122, 16051-16109. (Cover Article) (Impact Factor: 60.62, Contributions: corresponding author and advised students).
- (51) Odella, E. (postdoctoral researcher); Secor, M. (graduate student); Reyes Cruz, E. A. (graduate student); Guerra, W. D. (postdoctoral researcher); Urrita, M. N. (undergraduate student); Liddell, P. A. (academic professional) Moore, T. A. (professor); Moore, G. F.; Hammes-Schiffer, S. (professor); Moore, A. L. (professor). Managing the Redox Potential of PCET in Grotthuss-Type Proton Wires. J. Am. Chem. Soc. 2022, 144, 15672-15679. (Impact Factor: 14.695, Contributions: designed experiments and advised students).
- (50) Nishiori, D. (graduate student); Wadsworth, B. L. (graduate student); Reyes Cruz, E. A. (graduate student); Nguyen, N. P. (graduate student); Hensleigh, L. K. (graduate student); Karcher, T. (academic professional); Moore, G. F. Photoelectrochemistry of Metalloporphyrin-Modified GaP Semiconductors. Photosynth. Res. 2022, 151, 1-10. (Special issue co-edited by Elizabeth Young and Gary F. Moore on "Photochemistry and Electrochemistry of Natural and Artificial Photosynthesis") (Impact Factor: 3.630, Contributions: corresponding author, designed experiments, and advised students).

(49) Moore, G. F.; Young, E. (professor) Preface: to the special issue: photochemistry and electrochemistry of natural and artificial photosynthesis. Photosynth. Res. 2022, 151, 143-144. (Special issue co-edited by Elizabeth Young and Gary F. Moore on "Photochemistry and Electrochemistry of Natural and Artificial Photosynthesis") (Impact Factor: 3.630, Contributions: author).

- (48) Nishiori, D. (graduate student); Wadsworth, B. L. (graduate student); Moore, G. F. Parallels Between Enzyme Catalysis, Electrocatalysis, and Photoelectrosynthesis. Chem Catalysis. 2021, 1, 978-996. (Impact Factor: not available / new Cell Press journal, Contributions: corresponding author).
- (47) Nguyen, N. P. (graduate student); <u>Moore, G. F.</u> Storing Sunlight at Low Temperatures? *Joule.* **2021**, *5*, 2254-2256 (Impact Factor: 41.248, Contributions: corresponding author).
- (46) Reyes Cruz, E. A. (graduate student); Nishiori, D. (graduate student); Wadsworth, B. L. (graduate student); Khusnutdinova, D. (graduate student); Karcher, T. (academic professional); Landrot, G. (staff scientist); Lassalle-Kaiser, B. (staff scientist); Moore, G. F. Six-Electron Chemistry of a Binuclear Fe(III) Fused Porphyrin. ChemElectroChem. 2021, 8, 3614-3620. (Cover Article / Special issue honoring Prof. Jean-Michel Savéant) (Impact Factor: 4.154, Contributions: corresponding author, designed experiments, and advised students).
- (45) Yoneda, Y. (postdoctoral researcher); Mora, S. J. (postdoctoral researcher); Shee, J.; Wadsworth, B. L. (graduate student); Arsenault, E. (graduate student); Hait, D. (graduate student); Kodis, G. (research professor); Gust, D. (professor); Moore, G. F.; Moore, A. L. (professor); Head-Gordon, M. (professor); Moore, T. A. (professor); Fleming, G. (professor). Electron-Nuclear Dynamics Accompanying Proton-Coupled Electron Transfer. J. Am. Chem. Soc. 2021, 143, 3104-3112. (Impact Factor: 14.695, Contributions: corresponding author, designed experiments, and advised students).
- (44) Nguyen, N. P. (graduate student); Wadsworth, B. L. (graduate student); Nishiori, D. (graduate student); Reyes Cruz, E. A. (graduate student); Moore, G. F. Understanding and Controlling the Performance-Limiting Steps of Catalysts-Modified Semiconductors. J. Phys. Chem. Lett. 2021, 12, 199-203. (Impact Factor: 6.71, Contributions: corresponding author, designed experiments, and advised students).
- (43) Guerra, W. D. (postdoctoral researcher); Odella, E. (postdoctoral researcher); Sector, M. (graduate student); Goings, J. J. (graduate student); Wadsworth, B. L. (graduate student); Gervaldo, M. (professor); Sereno, L. E. (professor); Moore, T. A. (professor); Moore, G. F.; Hammes-Schiffer, S. (professor); Moore, A. L. (professor). Role of Intact Hydrogen-Bond Networks in Multiproton-Coupled Electron Transfer. J. Am. Chem. Soc. 2020, 142, 21842-21851. (Impact Factor: 14.695, Contributions: corresponding author, designed experiments, and advised students).

(42) Wadsworth, B. L. (graduate student); Nguyen, N. P. (graduate student); Nishiori, D. (graduate student); Beiler, A. M. (graduate student); Moore, G. F. Addressing the Origin of Photocurrents and Fuel Production Activities in Catalyst-Modified Semiconductor Electrodes. ACS Appl. Energy Mater. 2020, 8, 7512-7519. (Cover article) (Impact Factor: 4.473, Contributions: corresponding author, designed experiments, and advised students).

- (41) Wadsworth, B. L. (graduate student); Nishiori, D. (graduate student); Nguyen, N. P. (graduate student); Nishiori, D. (graduate student); Reyes Cruz, E. A. (graduate student); Moore, G. F. Electrochemistry of Polymeric Cobaloxime-Containing Assemblies in Organic and Aqueous Solvents. ECS J. Solid State Sci. Technol. 2020, 9, 061018. (Invited contribution for a special issue in honor of Karl M. Kadish) (Impact Factor: 1.558, Contributions: corresponding author, designed experiments, and advised students).
- (40) Odella, E. (postdoctoral researcher); Mora, S. J. (postdoctoral researcher); Wadsworth, B. L. (graduate student); Goings, J. J. (graduate student); Gervaldo, M. (professor); Sereno, L. E. (professor); Groy, T. L. (technician); Gust, D. (professor); Moore, T. A. (professor); Moore, G. F.; Hammes-Schiffer, S. (professor); Moore, A. L. (professor). Proton-Coupled Electron Across Benzimidazole Bridges in Bioinspired Proton Wires. Chem. Sci. 2020, 11, 3820-3828. (Impact Factor: 9.556, Contributions: corresponding author, designed experiments, and advised students).
- (39) Wadsworth, B. L. (graduate student); Khusnutdinova, D. (graduate student); Urbine, J. M. (undergraduate student); Reyes, A. (undergraduate student); Moore, G. F. Expanding the Redox Range of Surface-Immobilized Metallocomplexes using Molecular Interfaces. ACS Appl. Mater. Interfaces. 2020, 12, 3903-3911. (Cover article) (Impact Factor: 8.456, Contributions: corresponding author, designed experiments, and advised students).
- (38) Wadsworth, B. L. (graduate student); Beiler, A. M. (graduate student); Khusnutdinova, D. (graduate student); Reyes Cruz, E. A. (graduate student); Moore, G. F. Interplay Between Light Flux, Quantum Efficiency, and Turnover Frequency in Molecular-Modified Photoelectrosynthetic Assemblies. J. Am. Chem. Soc. 2019, 141, 15932-15941. (Cover article) (Impact Factor: 14.695, Contributions: corresponding author, designed experiments, and advised students).
- (37) Odella, E. (postdoctoral researcher); Wadsworth, B. L. (graduate student); Mora, S. J. (postdoctoral researcher); Goings, J. J. (graduate student); Huynh, M. T. (postdoctoral researcher); Gust, D. (professor); Moore, T. A. (professor); Moore, G. F.; Hammes-Schiffer, S. (professor); Moore, A. L. (professor). Proton-Coupled Electron Transfer Drives Long-Range Proton Translocation in Bioinspired Systems. J. Am. Chem. Soc. 2019, 141, 14057-14061. (Cover Article) (Impact Factor: 14.695, Contributions: corresponding author, designed experiments, and advised students).

(36) Khusnutdinova, D. (graduate student); Wadsworth, B. L. (graduate student); Flores, M. (senior research professional); Beiler, A. M. (graduate student); Reyes Cruz, E. A. (graduate student); Zenkov, Y. (undergraduate student); Moore, G. F. Electrocatalytic Properties of Binuclear Cu(II) Fused Porphyrins for Hydrogen Evolution. ACS Catal. 2018, 8, 9888-9898. (Cover article) (Impact Factor: 12.221, Contributions: corresponding author, designed experiments, and advised students).

- (35) Wadsworth, B. L. (graduate student); Khusnutdinova, D. (graduate student); Moore, G. F. Polymeric Coatings for Applications in Electrocatalytic and Photoelectrosynthetic Fuel Production. J. Mater. Chem. A. 2018, 6, 21654-21665. (Invited contribution for a special issue on emerging investigators) (Impact Factor: 10.733, Contributions: corresponding author, designed experiments, and advised students).
- (34) Odella, E. (postdoctoral researcher); Mora, S. J. (postdoctoral researcher); Wadsworth, B. L. (graduate student); Huynh, M. T. (postdoctoral researcher); Goings, J. J. (graduate student); Liddell, P. A. (academic professional); Groy, T. L. (technician); Gervaldo, M. (professor); Sereno, L. E. (professor); Gust, D. (professor); Moore, T. A. (professor); Moore, G. F.; Hammes-Schiffer, S. (professor); Moore, A. L. (professor). Controlling Proton-Coupled Electron Transfer in Bioinspired Artificial Photosynthetic Relays. J. Am. Chem. Soc. 2018, 140, 15450-15460. (Impact Factor: 14.695, Contributions: corresponding author, designed experiments, and advised students).
- (33) Khusnutdinova, D. (graduate student); Beiler, A. M. (graduate student); Wadsworth, B. L. (graduate student); Nanyangwe, S. K. (undergraduate student); Moore, G. F. Vibrational Structure Analysis of Cobalt Fluoro-Porphyrin Surface Coatings on Gallium Phosphide.

  J. Porphyrins Phthalocyanines. 2018, 22, 461-466. (Invited research article / Cover article) (Impact Factor: 1.292, Contributions: corresponding author, designed experiments, and advised students).
- (32) Ardo, S.; Rivas, D. F.; Modestino, M.; Greiving, V. S.; Abdi, F.; Llado, E. A.; Artero, V.; Ayers, K.; Battaglia, C.; Becker, J-P.; Bederak, D.; Berger, A.; Buda, F.; Chinello, E.; Dam, B.; Palma, V. D.; Edvinsson, T.; Fujii, K. Gardeniers, H.; Geerlings, H.; Hashemi, M.; Haussener, S.; Houle, F.; Huskens, J.; James, B.; Konrad, K.; Kudo, A.; Kunturu, P. P.; Lohse, D Mei, B.; Miller, E.; Moore, G. F.; Muller, J.; Orchard, K.; Post, R.; Rosser, T.; Saadi, F.; Schüttauf, J-F.; Seger, B.; Sheehan, S.; Spurgeon, J.; Tang, M.; van de Krol, R.; Vesborg, P.; Westerik, P. Pathways to Electrochemical Solar Hydrogen Technologies. Energy Environ. Sci. 2018, 11, 2768-2783. (A report on the Lorentz Center Workshop: Pathways to Solar Hydrogen Technologies) (Impact Factor: 33.250, Contributions: author and meeting participant).
- (31) Mora, S. J. (postdoctoral researcher); Odella, E. (postdoctoral researcher); Gust, D. (professor); Moore, G. F.; Moore T. A. (professor); Moore, A. L. (professor). Proton-Coupled Electron Transfer in Artificial Photosynthetic Systems. Acc. Chem. Res. 2018, 51, 445-453. (Invited review article) (Impact Factor: 21.661, Contributions: contributing author).

(30) Khusnutdinova, D. (graduate student); Flores, M. (Senior Research Professional); Beiler, A. M. (graduate student); Moore, G. F. Synthesis and Characterization of a Cobalt(II) Tetrakis(3-fluorophenyl)porphyrin with a Built-in 4-Vinylphenyl Surface Attachment Moiety. Photosynthetica. 2018, 56, 67-74. (Invited research article) (Impact Factor: 2.365, Contributions: corresponding author, designed experiments, and advised students).

- (29) Beiler, A. M. (graduate student); Moore, G. F. Multi-Electron Transfer Photochemistry: Caught in the Act. Nat. Chem. 2018, 10, 3-4. (Invited news and views article) (Impact Factor: 27.347, Contributions: corresponding author).
- (28) Beiler, A. M. (graduate student); Khusnutdinova, D. (graduate student); Wadsworth, B. L. (graduate student); Moore, G. F. Cobalt Porphyrin-Polypyridyl Surface Coatings for Photoelectrosynthetic Hydrogen Production. Inorg. Chem. 2017, 56, 12178-12185. (Impact Factor: 4.850, Contributions: corresponding author, designed experiments, and advised students).
- (27) Khusnutdinova, D. (graduate student); Beiler, A. M. (graduate student); Wadsworth, B. L. (graduate student); Jacob, S. I. (undergraduate student); Moore, G. F. Metalloporphyrin-Modified Semiconductors for Solar Fuel Production. Chem. Sci. 2017, 8, 253-259. (Impact Factor: 9.556, Contributions: corresponding author, designed experiments, and advised students).
- (26) Wadsworth, B. L. (graduate student); Beiler, A. M. (graduate student); Khusnutdinova, D. (graduate student); Jacob, S. I. (undergraduate student); Moore, G. F. Electrocatalytic and Optical Properties of Cobaloxime Catalysts Immobilized at a Surface-Grafted Polymer Interface. ACS Catal. 2016, 6, 8048-8057. (Impact Factor: 12.221, Contributions: corresponding author, designed experiments, and advised students).
- (25) Beiler, A. M. (graduate student); Khusnutdinova, D. (graduate student); Jacob, S. I. (undergraduate student); Moore, G. F. Solar Hydrogen Production Using Molecular Catalysts Immobilized on Gallium Phosphide (111)A and (111)B Polymer-Modified Photocathodes. ACS Appl. Mater. Interfaces. 2016, 8, 10038-10043. (Impact Factor: 8.456, Contributions: corresponding author, designed experiments, and advised students).
- (24) Beiler, A. M. (graduate student); Khusnutdinova, D. (graduate student); Jacob, S. I. (undergraduate student); Moore, G. F. Chemistry at the Interface: Polymer-Functionalized Semiconductors for Solar Hydrogen Production. Ind. Eng. Chem. Res. 2016, 55, 5306-5314. (Invited Article) (Impact Factor: 3.375, Contributions: corresponding author, designed experiments, and advised students).
- (23) Cedeno, D. (postdoctoral researcher); Krawicz, A. (postdoctoral researcher); Moore, G. F. Hybrid Photocathodes for Solar Fuel: Coupling Molecular Fuel-Production Catalysts with Solid-State Light Harvesting and Conversion Technologies. Interface Focus. 2015, 5, 20140085. (Impact Factor: 3.092 Contributions: This article is based on an invited presentation given at The Royal Society at Chicheley Hall, Buckinghamshire on the themed meeting topic: "Do we need a Global Project on Artificial Photosynthesis?").

(22) Ravensbergen, J. (graduate student); Brown, C. L. (graduate student); Moore, G. F.; Frese R. N. (professor); van Grondelle, R. (professor); Gust, D. (professor); Moore; T. A. (professor); Moore, A. L. (professor); Kennis, J. T. M. (professor). Kinetic Isotope Effect of Proton-Coupled Electron Transfer in a Hydrogen Bonded Phenol-Pyrrolidino[60]fullerene. Photochem. Photobiol. Sci. 2015, 14, 2147-2150. (Impact Factor: 2.408, Contributions: contributing author, designed and performed synthesis and characterization measurements).

(21) Cedeno, D. (postdoctoral researcher); Krawicz, A. (postdoctoral researcher); Doak, P. (graduate student); Yu, M. (postdoctoral researcher); Neaton, J. B. (professor and senior staff scientist); Moore, G. F. Using Molecular Design to Control the Performance of Hydrogen-Producing Polymer-Brush-Modified Photocathodes. J. Phys. Chem. Lett. 2014, 5, 3222-3226. (Impact Factor: 8.709, Contributions: corresponding author, designed experiments, and advised students).

## As a Staff Scientist at Berkeley Lab (9 total):

- (20) Krawicz, A. (postdoctoral researcher); Cedeno, D. (postdoctoral researcher); Moore, G. F. Energetics and Efficiency Analysis of a Cobaloxime-Modified Semiconductor at Simulated Air Mass 1.5 Illumination. *Phys. Chem. Chem. Phys.* 2014, 16, 15818-15824. (Cover article) (Impact Factor: 3.567, Contributions: corresponding author, designed experiments, and advised students).
- (19) Krawicz, A. (postdoctoral researcher); Yang, J.; Anzenberg, E.; Yano, J.; Sharp, I. D.; Moore, G. F. Photofunctional Construct That Interfaces Molecular Cobalt-Based Catalysts for H<sub>2</sub> Production to a Visible-Light-Absorbing Semiconductor. J. Am. Chem. Soc. 2013, 135, 11861-11868. (Impact Factor: 14.695, Contributions: corresponding author, designed experiments, and advised students).
- (18) Faunce, T. A.; Lubitz, W.; Rutherford, A. W.; MacFarlane D.; Moore, G. F.; Yang, P.; Nocera, D. G.; Moore, T. A.; Gregory, D. H.; Fukuzumi, S.; Yoon, K. B.; Armstrong, F. A.; Wasielewski, M. R. Energy and Environment Policy Case for a Global Project on Artificial Photosynthesis. Energy Environ. Sci. 2013, 6, 695-698. (Impact Factor: 33.250, Contributions: coauthored publication and contributed intellectual input on science and policy).
- (17) Moore, G. F.; Sharp, I. D. A Noble-Metal-Free Hydrogen Evolution Catalyst Grafted to Visible Light-Absorbing Semiconductors. J. Phys. Chem. Lett. 2013, 13, 568-572. (Impact Factor: 6.71, Contributions: corresponding author and designed and executed experiments).
- (16) Milot, R. L.; Moore, G. F.; Crabtree, R. H.; Brudvig, G. W.; Schmuttenmaer, C. A. Electron Injection Dynamics from Photoexcited Porphyrin Dyes into SnO<sub>2</sub> and TiO<sub>2</sub> Nanoparticles. J. Phys. Chem. C. 2013, 117, 21662-21670. (Impact Factor: 4.484, Contributions: designed and synthesized synthetic targets for collaborative computational studies).

(15) Ugeda, M.; Yu, M.; Bradley, A.; Doak, P.; Liu, W.; Moore, G. F.; Sharp, I.; Tilley, T. D.; Neaton, J.; Crommie, M. Adsorption and Stability of π-Bonded Ethylene on GaP(110). J. Phys. Chem. C. 2013, *117*, 26091-26096. (Impact Factor: 4.484, Contributions: designed experiments, and advised students).

- (14) Moore, G. F. Molecular and Nanoscale Interfaces for a Global Scale Challenge. European Photochemical Society Newsletter. **2013**, July, 91-92. (Contributions: authored research review and perspective).
- (13) Martini, A. L.; Moore, G. F. Milot, R. L.; Cai, L. Z.; Sheehan, S. W.; Schmuttenmaer, C. A.; Brudvig, G. W.; Crabtree, R. H. Modular Assembly of High-Potential Zinc Porphyrin Photosensitizers Attached to TiO₂ with a Series of Anchoring Groups. J. Phys. Chem. C. 2013, 117, 14526-14533. (Impact Factor: 4.484, Contributions: designed experiments and advised graduate and undergraduate students).
- (12) Najafpour, M. M.; Shen, J.-R.; Barber, J.; <u>Moore, G. F.</u>; Govindjee **Running on Sun**. *Chemistry World.* **2012**, November, 43. ("On the centenary of Giacomo Ciamician's paper predicting a solar-fueled future, five experts discuss the promise and challenges of artificial photosynthesis").

# As a Postdoctoral Fellow at Yale University (5 total):

- (11) Moore, G. F.; Konezny, S. J.; Song, H.; Milot, R. L.; Blakemore; J. D.; Lee, M. L.; Batista, V. S.; Schmuttenmaer, C. A.; Crabtree, R. H.; Brudvig, G. W. Bioinspired High-Potential Porphyrin Photoanodes. J. Phys. Chem. C. 2012, 116, 4892-4509. (Impact Factor: 4.484, Contributions: spearheaded publication, designed and performed synthesis, characterization and performance measurements).
- (10) Moore, G. F.; Ananyev, G. M.; Govindjee Young Research Investigators Honored at 2012 Gordon Research Conference on Photosynthesis. Photosynth. Res. 2012, 114, 137-142. (Impact Factor: 3.091, Contributions: coauthored report on the 2012 Gordon Research Conference on Photosynthesis that focuses on four young investigators who were presented awards during the conference).
- (9) Moore, G. F.; Megiatto, J. D.; Hambourger, M.; Gervaldo, M.; Kodis, G.; Gust, D.; Moore, T. A.; Moore, A. L. Optical and Electrochemical Properties of Hydrogen-Bonded Phenol-Pyrrolidino[60]fullerenes. Photochem. Photobiol. Sci. 2012, 6, 1018-1025. (Impact Factor: 2.408, Contributions: spearheaded publication, designed and performed synthesis and characterization measurements).
- (8) Moore, G. F.; Blakemore, J. D.; Milot, R. L.; Hull, J.; Song, H; Cai, L; Schmuttenmaer, C. A.; Crabtree, R. H.; Brudvig, G. W. A Visible Light Water-Splitting Cell with a Photoanode Formed by Codeposition of a High-Potential Porphyrin and a Homogeneous Iridium Water-Oxidation Catalyst. Energy Environ. Sci. 2011, 4, 2389-2892. (Impact Factor: 33.250, Contributions: spearheaded publication, designed and performed synthesis, characterization and performance measurements).

(7) Moore, G. F.; Brudvig, G. W. Energy Conversion in Photosynthesis: A Paradigm for Solar Fuel Production. Annu. Rev. Condens. Matter Phys. 2011, 2, 303-327. (Impact Factor: 18.588, Contributions: coauthored a comprehensive review on solar energy conversion).

# As a Graduate Student at ASU (6 total):

- (6) Moore, G. F.; Hambourger, M.; Kodis, G.; Michl, W.; Gust, D.; Moore, T. A.; Moore, A. L. Effects of Protonation State on a Tyrosine-Histidine Bioinspired Mediator. J. Phys. Chem. B. 2010, 114, 14450-14457. (Impact Factor: 3.146, Contributions: spearheaded publication, designed and performed synthesis, characterization and performance measurements).
- (5) Hambourger, M.; Kodis, G.; Vaugnh, M.; Moore, G. F.; Gust, D.; Moore, A. L.; Moore, T. A. Solar Energy Conversion in a Photoelectrochemical Biofuel Cell. Dalton Transactions. 2009, 45, 9979-9989. (Impact Factor: 4.099, Contributions: coauthored a review on photoelectrochemical biofuel cells).
- (4) Hambourger, M.; Moore, G. F.; Kramer, D. M.; Gust, D.; Moore, A. L.; Moore, T. A. Biology and Technology for Photochemical Fuel Production. *Chem. Soc. Rev.* **2009**, *38*, 25-35. (Impact Factor: 40.443, Contributions: coauthored a comprehensive tutorial review on solar energy conversion).
- (3) Moore, G. F.; Hambourger, M.; Gervaldo, M.; Poluektov, O. G.; Rajh, T.; Gust, D.; Moore, T. A.; Moore, A. L. A Bioinspired Construct that Mimics the Proton Coupled Electron Transfer between P680 and the Tyrz-His190 Pair of Photosystem II. J. Am. Chem. Soc. 2008, 130, 10466-10467. (Impact Factor: 14.695, Contributions: spearheaded publication, designed and performed synthesis and characterization measurements).
- (2) Rizzi, A. C.; van Gastel, M.; Liddell, P. A.; Palacios, R. E.; Moore, G. F.; Kodis, G.; Moore, A. L.; Moore, T. A.; Gust, D.; Braslavsky, S. E. Entropic Changes Control the Charge Separation Process in Triads Mimicking Photosynthetic Charge Separation. J. Phys. Chem. A. 2008, 112, 4215-4223. (Impact Factor: 4.484, Contributions: coauthored publication, performed synthesis and characterization measurements).
- (1) Berera, R.; Moore, G. F.; van Stokkum, I. H. M.; Kodis, G.; Liddell, P. A.; Gervaldo, M.; van Grondelle, R.; Kennis, J. T. M.; Gust, D.; Moore, T. A.; Moore, A. L. Charge Separation and Energy Transfer in a Caroteno-C60 Dyad: Photoinduced Electron Transfer From the Carotenoid Excited States. Photochem. Photobiol. Sci. 2006, 5, 1142-1149. (Cover article) (Impact Factor: 2.408, Contributions: coauthored publication, performed synthesis and characterization measurements).

## B. Invited Book Chapter Publications (1 total)

## As ASU Faculty:

(1) Concluding Remarks and Future Perspectives. Moore, G. F. (2016) in Photosynthesis: Structures, Mechanisms, and Applications Chapter 20 (Harvey J. M. Hou, Mohammad Mahdi Najafpour, Gary F. Moore and Suleyman I. Allakhverdiev, eds.) Springer International Publishing.

## C. Round Table Reports and Factual Documents (2 total)

- (1) Ager, J.; Deutsch, T.; Esposito, D.; Gregoire, J. Hahn, C.; Hammarström, L.; Jaramillo, T. King, L.; King, P.; Miller, D.; Miller-Link, E.; Moore, G.; Mulfort, K.; Neale, N.; Nozik, A.;, Osterloh, F.; Geoff Ozin, D.; Peters, J.; Polyanski, D.; Seefeldt, L.; Smith, W.; Xiang, C.; Yu, J. Factual Document for the Basic Energy Sciences Roundtable on Liquid Solar Fuels. 2023
- (2) Augustyn, V.; Berman, D.; Chen, Q.; Cui, Y.; DeYoreo, J.; Gu, X.; Idrobo, J. C.; Jungjohann, K.; Kourkoutis, L.; Liu, A.; McComb, D.; Moore, G.; Nelson, H.; Ross, F.; Stemmer, S.; Streubel, R.; Wallace, A.; Wang, C.; Yan, H. et al. Report of the Basic Energy Sciences Roundtable on Research Opportunities in the Physical Sciences Enabled by Cryogenic Electron Microscopy. 2021.

# D. Patents (1 total)

### As ASU Faculty (1 total):

(1) **Binuclear iron-fused porphyrin**, Patent number: 11753428, Filed: September 14, 2022, Date of Patent: September 12, 2023, Assignee: Arizona Board of Regents on behalf of Arizona State University, Inventor: Gary F. Moore

# **E. Conference Publications**

## As ASU Faculty (13 total):

- (21) Moore, G. F.; Wadsworth, B. L.; Khusnutdinova, D; Beiler, A. M.; Reyes Cruz, E. A.; Nanyangwe, S. **The Interplay Between Quantum Efficiency, Light Flux, and Turnover Frequency in Molecular-Modified Photocathodes**. *Abstract of Papers, 235<sup>th</sup> Electrochemical Society Meeting*. **2019**, Paper # I03-1638.
- (20) Moore, G. F.; Wadsworth, B. L.; Khusnutdinova, D; Flores, M.; Beiler, A. M.; Reyes Cruz, E. A.; Zenkov, Y.; Urbine, J. Homogeneous and Heterogenous Architectures for Electrocatalysis. Abstract of Papers, 235<sup>th</sup> Electrochemical Society Meeting. 2019, Paper # B08-0931.

(19) Moore, G. F.; Wadsworth, B. L.; Khusnutdinova, D.; Beiler, A. M; Reyes Cruz, E. A. Bioinspired Hard-Soft Matter Interfaces for Applications in Electrocatalysis and Photoelectrosynthesis. Abstract of Papers, Materials Research Society Spring Meeting and Exhibit. 2019, Paper # ES05.04.01.

- (18) Moore, G. F.; Beiler, A. M.; Khusnutdinova, D.; Wadsworth, B. L. **Tetrapyrrolic Surface Coatings for Applications in Photoelectrosynthetic Fuel Production**. *Abstract of Papers,*233<sup>rd</sup> Electrochemical Society Meeting. **2018**, Paper # B08-0972.
- (17) Mora S. J.; Odella, E.; Wadsworth, B. L.; Huynh, M. T.; Moore, G. F.; Hammes-Schiffer, S.; Gust, D.; Moore, T. A.; Moore, A. L. Multiple Proton Transfers Coupled to a Single Electron Transfer in Benzimidazole-Phenol Derivatives. Abstract of Papers, 255<sup>th</sup> American Chemical Society (ACS) Meeting and Exposition. 2018, INOR-1163.
- (16) Beiler, A. M.; Khusnutdinova, D.; Wadsworth, B. L. <u>Moore, G. F.</u> **Bioinspired Surface Coatings for Solar Fuels Production**. *Abstract of Papers, Materials Research Society Spring Meeting and Exhibit*. Phoenix, AZ. **2018**, Paper # EN18.04.16.
- (15) Moore, G. F.; Beiler, A. M; Khusnutdinova, D.; Wadsworth, B. L. Bioinspired Polymeric Surface Coatings for Applications in Photoelectrosynthetic Fuel Production. Abstract of Papers, Materials Research Society Spring Meeting and Exhibit. 2018, Paper # EN18.09.04.
- (14) Khusnutdinova, D.; Beiler, A. M; Wadsworth, B. L.; <u>Moore, G. F.</u> Integrated Photocatalytic Materials for Fuel Production. *Abstract of Papers, Materials Research Society Spring Meeting and Exhibit.* **2018**, Paper # EN18.04.16.
- (13) Wadsworth, B. L.; Khusnutdinova, D.; Beiler, A. M.; <u>Moore, G. F.</u> Polymeric Interfaces for Renewable Fuel Production. *Abstract of Papers, Materials Research Society Spring Meeting and Exhibit.* **2018**, Paper # EN18.15.06.
- (12) Beiler, A. M.; Khusnutdinova, D.; Wadsworth, B. L.; <u>Moore, G. F.</u> Chemistry at the Interface: Hybrid Materials for Solar Fuel Production. Abstract of Papers, Materials Research Society Spring Meeting and Exhibit. 2018, Paper # NM03.12.04.
- (11) Moore, G. F.; Beiler, A. M.; Khusnutdinova, D.; Wadsworth, B. L. Molecular Surface Coatings for Semiconductor Photoelectrochemistry and Photocatalysis. Abstract of Papers, 253<sup>rd</sup> ACS Meeting & Exposition. **2017**, pp CATL-215.
- (10) Moore, G. F. Chemistry at the Interface: Hybrid Materials for Solar Fuel Production.

  Abstract of Papers, Materials Research Society Spring Meeting and Exhibit. 2016, Paper # EE16.1.01.
- (9) Moore, G. F.; Khusnutdinova, D.; Beiler, A. M.; Jacob, S. I.; Skibo, E.; Echeverri, A. **Running** on Sun: Bioinspired Approaches to Achieving Solar Fuels. *Abstract of Papers, 250<sup>th</sup> ACS Meeting & Exposition.* **2015**, pp ENV-332.

## **Before Joining ASU Faculty (8 total):**

(8) Krawicz, A.; <u>Moore, G. F.</u> **GATR-FTIR Characterization of Cobaloxime Modified P-Type Gallium Phosphide Cathodes**. *Prepr. Pap.-Am. Chem. Soc., Div. Energy Fuels.* **2013**, 58 (2), 177-178.

- (7) Milot, R. L.; Moore, G. F.; Richter, C.; Martini, A. L.; Negre, C. A.; Batista, V. S.; Crabtree, R. H.; Brudvig, G. W.; Schmuttenmaer, C. A. Using Time-Resolved THz Spectroscopy to Study Carrier Dynamics and Solar Energy Conversion in TiO₂ Nanotubes and Other Nanostructured Materials. Abstracts of Papers, 246<sup>th</sup> ACS National Meeting & Exposition. 2013, pp COLL-421.
- (6) Milot, R. L.; Richter, C.; Moore, G. F.; Crabtree, R. H.; Brudvig, G. W.; Schmuttenmaer, C. A. Time-Resolved THz Spectroscopy to Study Carrier Injection and Dynamics in TiO₂ and SnO₂. Abstracts of Papers, 243<sup>rd</sup> ACS National Meeting & Exposition. 2012, pp FUEL-466.
- (5) Schmuttenmaer, C. A.; Richter, C.; Milot, R. L.; Moore, G. F.; Brudvig, G. W. Using Time Resolved THz Spectroscopy to Study Carrier Injection and Dynamics in TiO<sub>2</sub> and SnO<sub>2</sub>. Abstracts of Papers, 242<sup>nd</sup> ACS National Meeting. **2011**, pp COMP-69.
- (4) Moore, T. A.; Moore, A. L.; Gust, D.; Hambourger, M.; Moore, G. F.; Keirstead, A.; Gervaldo, M. Artificial Photosynthesis: Combining Technology with Biology for Efficient Solar Energy Conversion. Abstracts of Papers, 235<sup>th</sup> ACS National Meeting. 2008; pp IEC-011.
- (3) Moore, A. L.; Moore, G. F.; Hambourger, M.; Kodis, G.; Gervaldo, M.; Liddell, P. A.; Gust, D.; Moore, T. A. Bioinspired Energy Conversion Schemes. Abstracts of Papers, 233<sup>rd</sup> ACS National Meeting. 2007, pp INOR-088.
- (2) Moore, A. L.; Moore, T. A.; Gust, D.; Moore, G. F.; Kennis, J.; Hambourger, M.; Kodis, G.; Liddell, P. A. **Energy Conversion Involving Carotenoids Polyenes**. *Abstracts of Papers, 230<sup>th</sup> ACS National Meeting.* **2005**, pp PHYS-193.
- (1) Pessiki, P. J.; Moore, G. F. Synthesis and Photochemical Properties of Tetraphenylporphyrins Covalently Attached to Lichen Acids. Abstracts of Papers, 228<sup>th</sup> ACS National Meeting. **2004**, pp ORGN-490.

# D. Media Coverage

# As ASU Faculty:

- (30) ASU News: Pathways program provides STEM opportunities for Native American students.
  - https://news.asu.edu/20230926-solutions-pathways-program-provides-stem-opportunities-native-american-students
- (29) ASU News: Fuel for thought: Advancing solar-to-fuel technology. https://news.asu.edu/20221115-fuel-thought-advancing-solartofuel-technology
- (28) ASU News: ASU School of Molecular Sciences professor wins photochemistry award. https://news.asu.edu/20221014-sms-professor-wins-photochemistry-award

(27) ASU News: ASU-Berkeley Lab program seeks to increase the number of Native students pursuing STEM graduate studies.

https://news.asu.edu/20220128-solutions-new-program-creates-pathways-native-american-student-success

- (26) Research Corporation for Science Advancement News: Over \$1.2M Awarded to 8 Scialog: Negative Emissions Science Teams.

  https://rescorp.org/news/news/2022/01/over-1.2m-awarded-to-8-scialog-negative-emissions-science-teams
- (25) **ASU News: New theories and materials aid the transition to clean energy.** https://news.asu.edu/20211014-new-theories-and-materials-aid-transition-clean-energy
- (24) ASU News: New research advances clean energy solutions. https://news.asu.edu/20210903-new-research-advances-clean-energy-solutions
- (23) ASU News: SMS Professor Leads in Energy Research.
  https://news.asu.edu/20210317-asu-researcher-gary-moore-exemplifies-scientific-leadership-through-energy-research
- (22) ASU Now: ASU professor receives Department of Energy Career Award. https://asunow.asu.edu/20200807-asu-professor-receives-department-energy-career-award
- (21) ASU Now: ASU professor recognized nationally with Teacher-Scholar Award. https://asunow.asu.edu/20200507-asu-professor-recognized-nationally-teacher-scholar-award
- (20) ASU Now: Science at the interface: Bioinspired materials reveal useful properties. https://asunow.asu.edu/20200127-science-interface-bioinspired-materials-reveal-useful-properties
- (19) ASU Now: Study offers new insights for sun-gathering technologies. https://news.asu.edu/20181107-arizona-impact-asu-scholars-students-embed-indigenous-communities-research-indian-country
- (18) ASU Now: ASU scholars, students embedded in indigenous communities with research in Indian Country. https://asunow.asu.edu/20181107-arizona-impact-asu-scholars-students-embed-indigenous-communities-research-indian-country
- (17) Biodesign Institute News: ASU research graces Cover of ACS Journal. https://biodesign.asu.edu/news/asu-research-graces-cover-acs-journal
- (16) **ASU Now: Safe, sustainable science earns ASU researcher praise**. https://asunow.asu.edu/20180412-safe-sustainable-science-earns-asu-researcher-praise
- (15) ASU Now: Assistant Professor Gary Moore recognized nationally as exceptional mentor. https://asunow.asu.edu/20180213-asu-associate-professor-gary-moore-recognized-exceptional-mentor

(14) ARCS News: Three Doctoral Advisors Recognized as Exceptional Mentors. https://biodesign.asu.edu/news/asu-biodesign-assistant-professor-gary-moore-recognized-nationally-exceptional-mentor

- (13) ASU Now: Junior faculty in ASU's School of Molecular Sciences receive recognition. https://asunow.asu.edu/20170315-junior-faculty-asus-school-molecular-sciences-receive-recognition
- (12) Biodesign Institute News: Gary Moore receives prestigious NSF CAREER Award. https://biodesign.asu.edu/news/gary-moore-receives-prestigious-nsf-career-award
- (11) ASU Now: ASU Researcher Focuses Energy on Future of Science.

  https://asunow.asu.edu/20170207-discoveries-asu-researcher-focuses-energy-future-science
- (10) Science House: U.S. Researchers Support Solar Fuels Innovation Act. https://science.house.gov/legislation/bills/hr-solar-fuels-innovation-act
- (9) Biodesign Institute News: Energy innovation: Tapping the power of the Sun. https://biodesign.asu.edu/news/energy-innovation-tapping-power-sun
- (8) ARCS News: ARCS Foundation Alumni Joins Arizona State Faculty.

  https://phoenix.arcsfoundation.org/arcs-foundation-phoenix-alum-dr-gary-moore-joins-arizona-state-faculty

# **Before Joining ASU Faculty:**

- (7) **Chemistry World: Running on Sun**. https://www.chemistryworld.com/opinion/running-on-sun/5463.article
- (6) The Daily Californian: Berkeley Lab Researchers Design Bionic Leaf. http://www.dailycal.org/2014/03/11/berkeley-lab-researchers-designing-bionic-leaf/
- (5) Solar Novus Today: Bionic Leaf Photocathode Absorbs Sunlight, Produces Hydrogen Fuel. http://www.solarnovus.com/bionic-leaf-photocathode-absorbs-sunlight-produceshydrogen-fuel\_N7557.html
- (4) Berkeley Lab News Center: Promising News for Solar Fuels. http://newscenter.lbl.gov/2014/03/07/promising-news-for-solar-fuels/
- (3) Today at Berkeley Lab: PBD Researchers Give Photosynthesis Talks at Swedish Renewable Energy Meeting. http://today.lbl.gov/2014/03/28/pbd-researchers-give-photosynthesis-talks-at-swedish-renewable-energy-meeting/
- (2) Berkeley Lab News Center: Hydrogen Fuel from Sunlight. http://newscenter.lbl.gov/2013/08/29/hydrogen-fuel-from-sunlight/
- (1) Yale News: Team Harnessing Power of Photosynthesis to Make Green Fuels. http://news.yale.edu/2010/05/07/team-harnessing-power-photosynthesis-make-green-fuel

#### **Presentations**

#### A. Invited Conference Presentations

## As ASU Faculty (international conferences in italics):

(39) Shedding More Light on Solar Photoelectrochemistry. Gary F. Moore. **2024 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina, Newport, RI. August 5-10, 2024 (Invited Speaker)

- (38) Bond making and breaking in (photo)electrosynthethesis. Gary F. Moore. **Telluride Science Research Center Workshop: Making and Breaking Bonds with Light**. Telluride,
  CO. June 3-7, 2024 (**Invited Speaker**)
- (37) Molecular-modified Materials for (Photo)electrosynthesis. Gary F. Moore. **30**<sup>th</sup> **Winter Inter-American Photochemical Society Conference**. Miramar Beach, FL. January 4-7, 2023
  (Award Speaker)
- (36) Bioinspired Surface Coatings for Solar Fuel Production. Gary F. Moore. **Telluride Science Research Center Workshop: Making and Breaking Bonds with Light**. Telluride, CO. July 12-16, 2022 (Invited Speaker)
- (35) Porphyrinoids for Applications in Electrocatalysis and Photoelectrosynthesis. Gary F. Moore. 11<sup>th</sup> International Conference on Porphyrins and Phthalocyanines. Virtual Meeting, June 28-July 3, 2021 (Invited Speaker)
- (34) Bioinspired Surface Coatings for Solar Fuel Production. Gary F. Moore. Telluride Science Research Center Workshop: Making and Breaking Bonds with Light. Virtual Meeting, Telluride, CO. June 3-August 28, 2020 (Invited Speaker)
- (33) Bioinspired Materials for Sustainable Chemistry. Gary F. Moore. **N.I.C.E. Conference 2020 Nature Inspires Creativity Engineers**. Nice, France. October 12-14, 2020 (**Keynote Speaker**)
- (32) Bridging Heterogeneous, Homogeneous, and Enzymatic Catalysis to Model Kinetics Involving Complex Architectures and Interfaces. Gary F. Moore. **2**<sup>nd</sup> **Frontiers in Photochemistry Conference**. Nassau, Bahamas. February 22-25, 2020 (Invited Speaker)
- (31) Nanoscale Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. Gary F. Moore. **The Sixth International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems**. Island of Corfu (Kerkyra), Greece. June 30-July 3, 2019 (Invited Lecturer)
- (30) The Interplay between Quantum Efficiency, Light Flux, and Turnover Frequency in Molecular-Modified Photocathodes. Gary F. Moore, Brian L. Wadsworth, Anna M. Beiler, Diana Khusnutdinova, Edgar A. Reyes Cruz, Sylvia K. Nanyangwe 235<sup>th</sup> Electrochemical Society Meeting. Dallas, TX. May 26-30, 2019 (Invited Speaker)

(29) Homogeneous and Heterogeneous Porphyrin Architectures for Electrocatalysis. Gary F. Moore, Brian L. Wadsworth, Diana Khusnutdinova, Marco Flores, Anna M. Beiler, Edgar A. Reyes Cruz, Yegor Zenkov, Jennifer Urbine. **235**<sup>th</sup> Electrochemical Society Meeting. Dallas, TX. May 26-30, 2019 (Invited Speaker)

- (28) Bioinspired Hard-soft Matter Interfaces for Applications in Cooperative Electrocatalysis and Photoelectrosynthesis. Gary F. Moore. **2019 Materials Research Society Spring Meeting and Exhibit.** Phoenix, AZ. April 22-26, 2019 (Hot Topic presentation)
- (27) Nature Inspired Surface Coatings for Applications in Photoelectrosynthesis. Gary F. Moore. N.I.C.E. Conference 2018 Nature Inspires Creativity Engineers. Nice, France. October 14-17, 2018 (Invited Speaker)
- (26) Molecular Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. Gary F. Moore. **2018 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina, Newport, RI. August 5-10, 2018 (Selected Short Talk)
- (25) Porphyrin Modified Surfaces. Gary F. Moore. **10**<sup>th</sup> International Conference on Porphyrins and Phthalocyanines. Munich, Germany. July 1-6, 2018 (Invited Speaker)
- (24) Molecular Surface Coatings for Applications in Solar Fuels and Artificial Photosynthesis. Gary F. Moore. First European Congress on Photosynthesis Research, EPS-1. Uppsala, Sweden. June 25-28, 2018 (Invited Speaker)
- (23) Tetrapyrrolic Surface Coatings for Applications in Photoelectrosynthetic Fuel Production. Gary F. Moore. **233**<sup>rd</sup> **Electrochemical Society Meeting**. Seattle, WA. May 13-17, 2018 (Invited Lecturer)
- (22) Molecular Surface Coatings for Applications in Artificial Photosynthesis. Gary F. Moore. **3**<sup>rd</sup> **Molecules and Materials for Artificial Photosynthesis Conference**. Cancún, Mexico.
  March 2-5, 2018 (Invited Lecturer)
- (21) Bioinspired Polymeric Surface Coatings for Applications in Photoelectrosynthetic Fuel Production Gary F. Moore. **2018 Materials Research Society Spring Meeting and Exhibit**. Phoenix, AZ. April 2-6, 2018 (Invited Lecturer)
- (20) Bioinspired Surface Coatings for Applications in Artificial Photosynthesis and Solar Fuels. Gary F. Moore. **27**<sup>th</sup> **Western Photosynthesis Conference**. Tucson, AZ. January 5-8, 2018 (Invited Speaker)
- (19) Photochemical Energy Conversion at Molecular Modified Surfaces. Gary F. Moore. **27**<sup>th</sup> **Winter Inter-American Photochemical Society Conference**. Sarasota, FL. January 2-5, 2018 (Invited Speaker)
- (18) Polymeric Surface Coatings for Semiconductor Photoelectrochemical Fuel Production. Gary F. Moore. **2017 Photochemistry Gordon Research Conference**. Bates College, Lewiston, ME. July 23-28, 2017 (Selected Short Talk)
- (17) Molecular Surface Coatings for Applications in Catalysis and Solar Fuels. Gary F. Moore. **2**<sup>nd</sup> International Solar Fuels Conference. San Diego, CA. July 6-10, 2017 (Selected Flash Presentation)

(16) Bioinspired Surface Coatings for Solar Fuel Production. Gary F. Moore. 2017 Telluride Science Research Center Workshop: Solar Solutions to Energy and Environmental Problems. Telluride, CO. June 26-30, 2017 (Invited Speaker)

- (15) Molecular Coatings for Semiconductor Photoelectrochemistry and Photocatalysis. Gary F. Moore. **253**<sup>rd</sup> **ACS National Meeting**. San Francisco, CA. April 2-6, 2017 (**Invited Lecturer**)
- (14) Molecular-Modified Semiconductors for Artificial Photosynthesis. Gary F. Moore. **26**<sup>th</sup> **Western Photosynthesis Conference**. San Francisco, CA. January 5-8, 2017 (Invited Speaker)
- (13) Hybrid Nanomaterials for Solar Fuel Production. Gary F. Moore. **The Fifth International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems.**Porto Heli, Peloponnese, Greece. June 26-30, 2016 (Invited Lecturer)
- (12) Chemistry at the Interface: Hybrid Materials for Solar Fuel Production. Gary F. Moore. **2016 Materials Research Society Spring Meeting and Exhibit**. Phoenix, AZ. March 28-April 1, 2016 (Invited Lecturer)
- (11) Bioinspired Approaches to Achieving Solar Fuels. Gary F. Moore. **250**<sup>th</sup> **ACS Meeting & Exposition**. Boston, MA. August 16-20, 2015 (Invited Speaker and Best Paper Award)
- (10) Hybrid Photocathodes for Solar Powered H<sub>2</sub> Production and CO<sub>2</sub> Reduction. Gary F. Moore. **2015 Telluride Science Research Center Workshop: Solar Solutions to Energy and Environmental Problems**. Telluride, CO. August 3-7, 2015 (Invited Speaker)
- (9) Controlling Catalysis at Interfaces. Gary F. Moore. **Royal Society Meeting 2014.** The Royal Society at Chicheley Hall, Buckinghamshire, England. July 8-10, 2014 (Invited Speaker)

## **Before Joining ASU Faculty:**

- (8) Coupling of Molecular Catalysts to Surfaces. Gary F. Moore. **The Umeå Renewable Energy Meeting (UREM) 2014**. Chemical Biological Center (KBC), Umeå University, Umeå,
  Sweden. March 17-19, 2014 (Invited Speaker)
- (7) Modular Approaches to Achieving Artificial Photosynthesis. Gary F. Moore. **23**<sup>rd</sup> **Western Photosynthesis Conference**. Pacific Grove, CA. January 2-5, 2014 (Invited Speaker)
- (6) GATR-FTIR Characterization of Cobaloxime-Modified P-Type Gallium Phosphide Cathodes Gary F. Moore. 246<sup>th</sup> ACS National Meeting & Exposition. Indianapolis, IN. September 8-12, 2013 (Invited Speaker)
- (5) Molecular and Nanoscale Interfaces for Artificial Photosynthesis. Gary F. Moore. **22**<sup>nd</sup> **Western Photosynthesis Conference**. Pacific Grove, CA. January 3-6, 2013 (Invited Speaker)
- (4) Molecular and Nanoscale Interfaces for a Global Scale Challenge. Gary F. Moore. 16<sup>th</sup> International Congress of Photosynthesis. St. Louis, MO. August 11-16, 2013 (Invited Speaker)

(3) Taking Inspiration from Biology for Technology. Gary F. Moore. 19<sup>th</sup> International Conference on Photochemical Conversion and Storage of Solar Energy. California Institute of Technology, Pasadena, CA. July 29-August 3, 2012 (Invited Speaker)

- (2) Make Like a Leaf. Gary F. Moore. **2010 Pauling Award Symposium Kick-off**. TESC, Olympia, WA. November 4, 2010 (Invited Seminar Speaker)
- (1) A Visible Light Water-Splitting Photoanode. Gary F. Moore. Yale Climate and Energy Congress Scholars Forum. New Haven, CT. October 12, 2010 (Invited Speaker)

### B. Invited Presentations at Academic Institutions and National Laboratories

# As ASU Faculty:

- (24) Molecular Pathways for Sustainable Energy Transduction. **Inorganic Chemistry Seminar Series at University of California Irvine**. Irvine, CA. May 16, 2024
- (23) Molecular-modified Materials for Electrocatalysis and Photoelectrosynthesis.

  Department of Chemistry and Biochemistry Seminar Series at University of Texas

  Arlington. Arlington, TX. November 18, 2022
- (22) Molecular-modified Materials for Electrocatalysis and Photoelectrosynthesis.

  Department of Chemistry Seminar Series at the University of North Carolina Chapel Hill.

  Chapel Hill, NC. September 13, 2022
- (21) Molecular-modified Materials for Electrocatalysis and Photoelectrosynthesis.

  Department of Chemistry Seminar Series at Yale University. New Haven, CT. April 28, 2022
- (20) Molecular Materials for Electrocatalysis and Solar Photochemistry. **Department of Chemistry Seminar Series at the University of New Hampshire**. Durham, NH. October 12, 2021
- (19) Molecular Surface Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. **Department of Chemistry Seminar Series at Yale University**. New Haven, CT. April 7, 2020 (canceled due to COVID)
- (18) Heterogeneous and Homogeneous Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. **Department of Chemistry Seminar Series at Rice University**. Houston, TX. January 30, 2019
- (17) Heterogeneous and Homogeneous Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. **Department of Chemistry Seminar Series at Bowling Green State University**. Bowling Green, OH. December 5, 2018
- (16) Heterogeneous and Homogeneous Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. Inorganic Chemistry Seminar Series at Ohio State University. Columbus, OH. December 4, 2018

(15) Heterogeneous and Homogeneous Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. **Department of Chemistry Seminar Series at Binghamton University**. Binghamton, NY. November 16, 2018

- (14) Heterogeneous and Homogeneous Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. **Department of Chemistry Seminar Series at Université Paris–Sud**. Orsay, France. September 25, 2018
- (13) Molecular Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. Gary F. Moore. Center for Nanotechnology and Nanomaterials Seminar at the Walter Schottky Institute Technical University Munich. Munich, Germany. July 3, 2018
- (12) Hybrid Nanomaterials for Solar Fuel Production. Gary F. Moore. **Department of Physics Nanoscience Seminar Series at Arizona State University**. Tempe, AZ. October 17, 2016
- (11) Hybrid Material Interfaces for Solar Energy Transduction. Gary F. Moore. **Department of Chemistry & Chemical Biology Seminar Series at Rensselaer Polytechnic Institute**. Troy, NY. October 4, 2015 (**Student-Invited Lecturer Award**)
- (10) Running on Sun, All Night Long. Gary F. Moore. **Department of Chemistry Seminar Series** at Portland State University, Portland, OR. May 15, 2015 (Student-Invited Lecturer)

#### **Before Joining ASU Faculty:**

- (9) Hybrid Photocathodes for Solar Fuels Production. **Yale-National University of Singapore**. Singapore, Singapore. April 7, 2014
- (8) Hybrid Photocathodes for Solar Fuels Production. **Pacific Northwest National Laboratory**. Richland, WA. March 28, 2014
- (7) Molecular and Nanoscale Approaches to Solar Energy Conversion. **University of Pennsylvania Department of Chemistry Seminar**. Philadelphia, PA. January 29, 2014
- (6) Molecular and Nanoscale Approaches to Solar Energy Conversion. **Arizona State University Chemistry and Biochemistry Seminar**. Tempe, AZ. January 16, 2014
- (5) Molecular and Nanoscale Approaches to Solar Energy Conversion. **University of California Santa Cruz Department of Chemistry Seminar**. Santa Cruz, CA. January 13, 2014
- (4) Molecular and Nanoscale Approaches to Solar Energy Conversion. Yale University Department of Chemistry Seminar. New Haven, CT. January 8, 2014
- (3) Molecular and Nanoscale Approaches to Solar Energy Conversion. **University of Washington Department of Chemistry Seminar Series**. Seattle, WA. December 3, 2013
- (2) Make Like a Leaf. **Berkeley Lab Physical Bioscience Seminar Series.** Berkeley, CA. November 15, 2012
- (1) Biology and Technology for the Sustainable Production and Use of Fuels. **National University of Río Cuarto Chemistry Seminar**. Río Cuarto, Córdoba, Argentina. March 20, 2009

### C. Invited Presentations at Corporate Institutions

# **Before Joining ASU Faculty:**

(2) Recent Advancements in Artificial Photosynthesis and Solar Fuels. Exxon Mobil Corporation. Annandale, NJ. December 6, 2012 (Invited Speaker and Consultant)

(1) Energy Transduction in Biology and Technology. **Procter and Gamble**. Cincinnati, OH. June 10, 2010

# D. Outreach / Mentoring Workshops and Presentations

# As ASU Faculty:

- (9) Knowledge Enterprise (KE) Research Development (RD) Proposal Development Workshop: Panel session on "Collaboration for Beginners." Tempe, AZ. February 28, 2023 (Invited Presenter and Panel Discussion Participant)
- (8) Fifteenth Annual Arizona Western Alliance to Expand Student Opportunities (WAESO) Student Research Conference. Panel session on "Why you should consider Doctoral education and the Professorate." Tempe, AZ. March 19, 2021 (Invited Speaker and Panel Discussion Participant)
- (7) Fourteenth Annual Arizona Western Alliance to Expand Student Opportunities (WAESO) Student Research Conference. Panel session on "Why you should consider Doctoral education and the Professorate." Tempe, AZ. March 3, 2020 (Invited Speaker and Panel Discussion Participant)
- (6) **Doing Research in Indian County**. Panel session on sustainability with panelist: Dr. Jamie Ritchey, *Director of Tribal Epidemiology*; Violet Mitchell-Enos, *Director, HHS, SRP-MIC*; Gary F. Moore, *School of Molecular Sciences*; and Dr. Dave Wilson, *Tribal Health Research Office*, *NIH*. Tempe, AZ. October 27, 2017 (**Discussion Moderator and Session Chair**)

### **Before Joining ASU Faculty:**

- (5) Switch: Discover the Future of Energy (Berkeley Lab Film Screening). Gary F. Moore, Nitash Balsara, Rich Muller. Berkeley, CA. December 12, 2012 (Invited Panel Discussion Participant)
- (4) **Grand Challenges in Artificial Photosynthesis Panel Discussion**. Gary F. Moore, Gary W. Brudvig, John Golbeck, Ruchira Chatterjee. Rensselaer Polytechnic Institute, Troy, NY. November 4-5, 2011 (Invited Panelist)
- (3) A Panel on Emerging Energy Technologies. Yale Climate and Energy Institute 2<sup>nd</sup> Annual Conference Kick-off. Yale University, New Haven, CT. March 30, 2011 (Invited Panel Discussion Moderator)
- (2) A Panel on Technology and our Emerging Energy Crisis. Yale Climate and Energy Institute 2<sup>nd</sup> Annual Pre-Conference Talks. Yale University, New Haven, CT. March 23, 2011 (Invited Panel Discussion Moderator)

(1) Postdoctoral Mentoring. MGE@MSA Second Annual Faculty Postdoctoral Mentoring Institute. Tempe, AZ. January 28, 2010 (Invited Speaker)

# E. Research Workshops

# As ASU Faculty:

- (16) Telluride Science Research Center Workshop: Breaking and Making Bonds with Light. Telluride, CO. June 10-14, 2024 (Invited Participant)
- (15) Scialog Research Corporation for Scientific Advancement Conference and Workshop on Negative Emission Science. Tucson, AZ. November 15-18, 2023 (Invited Participant)
- (14) Scialog Research Corporation for Scientific Advancement Conference and Workshop on Solar Energy Conversion. Tucson, AZ. November 9-12, 2022 (Invited Participant)
- (13) Scialog Research Corporation for Scientific Advancement Conference and Workshop on Solar Energy Conversion. Virtual Meeting. November 4-5, 2021 (Invited Participant)
- (12) Scialog Research Corporation for Scientific Advancement Conference and Workshop on Solar Energy Conversion. Virtual Meeting. November 5-6, 2020 (Invited Participant)
- (11) 2<sup>nd</sup> Annual Advanced Water Splitting Technology Pathways Benchmarking and Protocols Workshop. Tempe, AZ. October 28-30, 2019 (Invited Participant)
- (10) Cyclic Voltammetry International School (CVIS). Paris, France. April 8-12, 2019 (One of Ten Selected Participants)
- (9) HydroGEN Advanced Water Splitting Technology Pathways Benchmarking and Protocols Workshop. Tempe, AZ. October 24-25, 2018 (Invited Participant)
- (8) U.S. Department of Energy Bioenergy Technology Office Listening Day. San Diego, CA. July 8, 2017 (Invited Participant)
- (7) Telluride Science Research Center Workshop: Solar Solutions to Energy and Environmental Problems. Telluride, CO. June 26-30, 2017 (Invited Participant)
- (6) Faraday Discussion: Artificial Photosynthesis. Kyoto, Japan. February 28-March 2, 2017 (Accepted Participant)
- (5) SBIR/SBTR Defense Innovation Summit: Technology Acceleration Challenges. Austin, TX. November 29-December 1, 2016 (Accepted Participant)
- (4) Lorentz Center Workshop: Pathways to Solar Hydrogen Technologies. Leiden, Netherlands. June 13-16, 2016 (Invited Participant)
- (3) National Science Foundation Chemistry Early Career Award Workshop. Arlington, VA. March 10-11, 2016 (Invited Participant)
- (2) Telluride Science Research Center Workshop: Solar Solutions to Energy and Environmental Problems. Telluride, CO. August 3-7, 2015 (Invited Participant)
- (1) Scialog Research Corporation for Scientific Advancement Conference and Workshop on Solar Energy Conversion. Tucson, AZ. October 14-17, 2016 (Invited Participant)

#### F. Contributed Oral and Poster Presentations

#### As ASU Faculty:

(50) Breaking an Iron Law in Electrocatalysis and Shedding More Light on Solar Photoelectrochemistry. Daiki Nishiori, Nghi Nguyen Edgar A. Reyes Cruz, Lillian K. Hensleigh, Gary F. Moore. 2024 Renewable Energy: Solar Fuels Gordon Research Conference. Ventura Beach Marriott, Ventura, CA. February 4-9, 2024 (Poster)

- (49) Breaking an Iron Law in Electrocatalysis and Shedding More Light on Solar Photoelectrochemistry. Daiki Nishiori, Nghi Nguyen Edgar A. Reyes Cruz, Lillian K. Hensleigh, <u>Gary F. Moore</u>. **2024 Inter-American Photochemical Society Meeting**. Destin, FL. January 3-6, 2024 (**Poster**)
- (48) Molecular-modified Materials for (Photo)electrosynthesis. Gary F. Moore. **2023**Indonesian-American Kavli Frontiers of Science Symposium, Kalimantan, Indonesia.
  August 7-10, 2023 (Poster)
- (47) Breaking an Iron Law in Electrocatalysis and Shedding More Light on Solar Photoelectrochemistry. Daiki Nishiori, Nghi Nguyen Edgar A. Reyes Cruz, Lillian K. Hensleigh, <u>Gary F. Moore</u>. **2023 Photochemistry Gordon Research Conference**. Easton, MA. July 30-August 4, 2023 (**Poster**)
- (46) Parallels Between Enzyme Catalysis, Electrocatalysis, and Photoelectrosynthesis., Daiki Nishiori, Brian L. Wadsworth, <u>Gary F. Moore</u>. **2022 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina, Newport, RI. July 31-August 5, 2022 (**Poster**)
- (45) Homogeneous and Heterogenous Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. Brian L. Wadsworth, Diana Khusnutdinova, Edgar A. Reyes Cruz, Nghi Nguyen, Daiki Nishiori, <u>Gary F. Moore</u>. **2019 Photosynthesis Gordon Research Conference**. Newry, ME. July 21-26, 2019 (**Poster**)
- (44) Homogeneous and Heterogenous Architectures for Applications in Electrocatalysis and Photoelectrosynthesis. Brian L. Wadsworth, Diana Khusnutdinova, Anna M. Beiler, Edgar A. Reyes Cruz, <u>Gary F. Moore</u>. **2019 Photochemistry Gordon Research Conference**. Easton, MA. July 14-19, 2019 (**Poster**)
- (43) Molecular Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. Brian L. Wadsworth, Diana Khusnutdinova, Anna M. Beiler, Edgar A. Reyes Cruz, Jennifer Urbine, <u>Gary F. Moore</u>. **28**<sup>th</sup> **Winter Inter-American Photochemical Society Conference**. Sarasota, FL. January 2-5, 2019 (**Poster**)
- (42) Molecular Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. Brian L. Wadsworth, Diana Khusnutdinova, Anna M. Beiler, Edgar A. Reyes Cruz, <u>Gary F. Moore</u>. Gerischer Electrochemistry Today 2018 Symposium. University of Colorado Boulder, Boulder, CO. August 5-10, 2018 (Poster)

(41) Molecular Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. Brian L. Wadsworth, Diana Khusnutdinova, Anna M. Beiler, Edgar A. Reyes Cruz, <u>Gary F. Moore</u>. **2018 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina, Newport, RI. August 14-16, 2018 (Poster)

- (40) Molecular Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. Brian L. Wadsworth, Diana Khusnutdinova, Anna M. Beiler, Edgar A. Reyes Cruz, Gary F. Moore. 2018 Renewable Energy: Solar Fuels Gordon Research Conference. Ventura Beach Marriott, Ventura, CA. January 28-February 2, 2018 (Poster)
- (39) Polymeric Surface Coatings for Semiconductor Photoelectrochemical Fuel Production. Anna M. Beiler, Diana Khusnutdinova, Brian L. Wadsworth, <u>Gary F. Moore</u>. **2017 Photochemistry Gordon Research Conference**. Bates College, Lewiston, ME. July 23-28, 2017 (**Poster**)
- (38) SUNCROPS: Solar-Fuels Using Nanoscale Catalysts Reacting On Polymer Modified Semiconductors. Diana Khusnutdinova, Anna M. Beiler, Brian L. Wadsworth, Samuel I. Jacob, <u>Gary F. Moore</u>. **2016 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina University, Newport, RI. February 28-March 4, 2016 (**Poster**)
- (37) Chemistry at the Interface Molecular Modified Semiconductors for Solar Fuel Production and Attachment of Catalytic Nanomaterial to Semiconductor Surfaces. Diana Khusnutdinova, Anna M. Beiler, Samuel I. Jacob, <u>Gary F. Moore</u>. **2016 Renewable Energy:**Solar Fuels Gordon Research Symposium. Lucca (Barga), Italy. May 13-18, 2016 (Poster)
- (36) Molecular-Modified Semiconductors for Photochemical CO<sub>2</sub> Reduction. Diana Khusnutdinova, Anna M. Beiler, Samuel I. Jacob, <u>Gary F. Moore</u>. **2015 Photochemistry Gordon Research Conference**. Stonehill College, Easton, MA. July 19-24, 2015 (**Poster**)
- (35) Molecular-Modified Semiconductors for Artificial Photosynthesis. Diana Khusnutdinova, Anna M. Beiler, Samuel I. Jacob <u>Gary F. Moore</u>. **2015 Photosynthesis Gordon Research Conference**. Bentley University, Waltham, MA. June 28-July 3, 2015 (**Poster**)
- (34) Direct Electron Transfer via Unnatural Amino Acids in Plant-type [2Fe-2S] Ferredoxin. Anna M. Beiler, Michael Vaughn, Kathryn Enderle, Thomas A. Moore, <u>Gary F. Moore</u>. 24<sup>th</sup> Western Photosynthesis Conference. Pacific Grove, CA. January 8-11, 2015 (Poster)
- (33) Molecular Scale Approaches to a Global Scale Challenge. <u>Gary F. Moore</u>. **2014 Photosynthesis Gordon Research Conference**. Mount Snow Resort, West Dove, VT. August 10-15, 2014 (**Oral and Poster**)
- (32) Controlling Solar Fuels Catalysis at the Interface using Molecular Design. Diana Cedeno, Alexandra Krawicz, <u>Gary F. Moore</u>. **2014 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina University, Newport, RI. August 3-8, 2014 (**Poster**)
- (31) Using Molecular Design to Control the Performance of Hydrogen-Producing Polymer-Brush-Modified Photocathodes. Diana Cedeno, Alexandra Krawicz, Peter Doak, Min Yu, Jeffery B. Neaton, <u>Gary F. Moore</u>. **2014 Renewable Energy: Solar Fuels Gordon Research Conference**. Four Points Sheraton, Ventura, CA. January 19-24, 2014 (**Poster**)

## **Before Joining ASU Faculty:**

(30) Energetics and Efficiency Evaluation of a Cobaloxime-Modified Semiconductor. Alexandra Krawicz, <u>Gary F. Moore</u>. **2013 Photochemistry Gordon Research Conference**. Easton, MA. July 14-19, 2013 (**Poster**)

- (29) Developing New Photocathode Materials. <u>Gary F. Moore</u>, Ian D. Sharp. **2012 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina University,
  Newport, RI. August 5-10, 2012 (**Poster**)
- (28) Hydrogenase Active Site Mimics Immobilized on p-Type Silicon. <u>Gary F. Moore</u>, Ian D. Sharp. **2012 Photosynthesis Gordon Research Conference**. Davidson College, Davidson, NC. July 8-13, 2012 (**Poster**)
- (27) Covalent Attachment of Catalytic Nanomaterial to Semiconductor Surfaces. <u>Gary F. Moore</u>, Ian D. Sharp. **2012 Renewable Energy: Solar Fuels Gordon Research Symposium**. Lucca (Barga), Italy. May 13-18, 2012 (**Poster**)
- (26) Hybrid Photoanodes Materials for Visible Light Induced Water Oxidation. <u>Gary F. Moore</u>, James D. Blakemore, Rebecca L. Milot, Hee-eun Song, Lawrence Cai, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **2011 Photosynthesis Gordon Research Conference**. Davidson College, Davidson, NC. June 12-17, 2011 (**Poster**)
- (25) High Potential Photoanodes for Applications in Photoelectrochemical Cells. <u>Gary F. Moore</u>, James D. Blakemore, Hee-eun Song, Rebecca L. Milot, Victor S. Batista, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **2011 Renewable Energy: Solar Fuels Gordon Research Conference**. Ventura Beach Marriott, Ventura, CA. January 16-21, 2011 (Poster)
- (24) High Potential Photoanodes for Applications in Photoelectrochemical Cells. <u>Gary F. Moore</u>, James D. Blakemore, Hee-eun Song, Rebeca L. Milot, Victor S. Batista, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **2011 Renewable Energy: Solar Fuels Gordon Research Symposium**. Four Points Sheraton, Ventura, CA. January 15-16, 2011 (**Oral**)
- (23) Bioinspired Approaches to Solar Fuels. <u>Gary F. Moore</u>, James D. Blakemore, Hee-eun Song, Rebeca L. Milot, Victor S. Batista, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **20**<sup>th</sup> **Western Photosynthesis Conference**. Pacific Grove, CA. January 6-9, 2011 (**Oral and Poster**)
- (22) High Potential Photoanodes. <u>Gary F. Moore</u>, James D. Blakemore, Hee-eun Song, Rebecca L. Milot, Victor S. Batista, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **Zing Solar Fuels / Photochemistry Conference**. Cancún, Mexico. December 1-2, 2010 (Oral)
- (21) Thermodynamics of Electron Transfer in High Potential Photoanodes. <u>Gary F. Moore,</u> James D. Blakemore, Hee-eun Song, Rebecca L. Milot, Victor S. Batista, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **2010 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina University, Newport, RI. August 8-13, 2010 (**Poster**)

(20) Development of High Potential Photoanodes. <u>Gary F. Moore</u>, James D. Blakemore, Heeeun Song, Rebecca L. Milot, Victor S. Batista, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **27**<sup>th</sup> Eastern Regional Photosynthesis Conference. Woods Hall, MA. April 16-18, 2010 (Poster)

- (19) Tetrapyrrolic-carboxylate and Acetylacetonate Linkers for Roboust Functionalization of TiO<sub>2</sub> and SnO<sub>2</sub> in Dye-Sensitized Solar Cells. <u>Gary F. Moore</u>, James D. Blakemore, Hee-eun Song, Rebecca L. Milot, Victor S. Batista, Charles A. Schmuttenmaer, Robert H. Crabtree, Gary W. Brudvig. **19th Western Photosynthesis Conference and Arnon Centennial Symposium**. Pacific Grove, CA. January 7-10, 2010 (**Poster**)
- (18) Bioinspired Mediators for Solar Energy Transduction. <u>Gary F. Moore</u>, Michael Hambourger, Gerdenis Kodis, Weston Michl, Devens Gust, Thomas A. Moore, Ana L. Moore. **2009 Photosynthesis Gordon Research Conference**. Bryant University Smithfield, RI. June 28-July 3, 2009 (**Poster**)
- (17) Bioinspired Mediators: "Probing the Effects of Nanostructure on Redox Behavior". <u>Gary F. Moore</u>, Michael Hambourger, Weston Michl, Devens Gust, Thomas A. Moore, Ana L. Moore. **2009 International Center for Materials US-Argentina Workshop on Nanomaterials**. Hotel Amancay, Bariloche, Argentina. March 15-17, 2009 (**Poster**)
- (16) Understanding the Role of TyrZ-His190 Pair in Water Oxidation. <u>Gary F. Moore</u>, Michael Hambourger, Weston Michl, Devens Gust, Thomas A. Moore, Ana L. Moore. Renewable Energy: **2009 Renewable Energy: Solar Fuels Gordon Research Conference**. Four Points Sheraton / Holiday Inn Express, Ventura, CA. February 1-6, 2009 (**Oral and Poster**)
- (15) Understanding the Role of TyrZ-His190 Pair in Water Oxidation. <u>Gary F. Moore</u>, Michael Hambourger, Weston Michl, Devens Gust, Thomas A. Moore, Ana L. Moore. **2009 enewable Energy: Solar Fuels Gordon Research Symposium**. Ventura Beach Marriott, Ventura, CA. January 31-February 1, 2009 (**Poster**)
- (14) Proton Coupled Electron Transfer in Bioinspired Mediators. <u>Gary F. Moore</u>, Michael Hambourger, Weston Michl, Devens Gust, Thomas A. Moore, Ana L. Moore. **18**<sup>th</sup> **Western Photosynthesis Conference**. Pacific Grove, CA. January 8-11, 2009 (**Oral and Poster**)
- (13) Electron Transfer in a Bioinspired Hybrid System. <u>Gary F. Moore</u>, Michael Hambourger, Miguel Gervaldo, Oleg G. Poluektov, Tijana Rajh, Devens Gust, Thomas A. Moore, Ana L. Moore. **2008 Electron-Donor Acceptor Interactions Gordon Research Conference**. Salve Regina University, Newport, RI. August 3-8, 2008 (**Oral and Poster**)
- (12) A Bioinspired Construct that Mimics the Proton Coupled Electron Transfer between P680<sup>+</sup> and Tyrosine Z in Photosystem II. <u>Gary F. Moore</u>, Michael Hambourger, Miguel Gervaldo, Oleg G. Poluektov, Tijana Rajh, Devens Gust, Thomas A. Moore, Ana L. Moore. **2008 Photosynthesis Gordon Research Conference**. Mount Holyoke College, South Hadley, MA. June 22-27, 2008 (**Oral and Poster**)

(11) A Bioinspired Construct that Mimics the Proton Coupled Electron Transfer Between P680\*\* and Tyrosine Z in Photosystem II. <u>Gary F. Moore</u>, Michael Hambourger, Miguel Gervaldo, Oleg G. Poluektov, Tijana Rajh, Devens Gust, Thomas A. Moore, Ana L. Moore. **2008 Photosynthesis and Bioenergy Gordon Research Symposium**. Mount Holyoke College, South Hadley, MA. June 21-22, 2008 (**Oral and Poster**)

- (10) Bioinspired Constructs that Mimic the Electron Transfer Between P680\*\* and Tyrosine Z in Photosystem II. <u>Gary F. Moore</u>, Michael Hambourger, Gerdenis Kodis, Amy Keirstead, Miguel Gervaldo, Devens Gust, Ana L. Moore, Thomas A. Moore. **17**<sup>th</sup> **Western Photosynthesis Conference**. Pacific Grove, CA. January 3-6, 2008 (**Poster**)
- (9) Donor-side Mimics of the Electron Transfer in PSII. <u>Gary F. Moore</u>, Michael Hambourger, Gerdenis Kodis, Miguel Gervaldo, Devens Gust, Thomas A. Moore, Ana L. Moore. **2007** Renewable Energy: Solar Fuels Gordon Research Conference. Ventura Beach Marriott, Ventura, CA. January 21-26, 2007 (Poster)
- (8) Charge Separation and Energy Transfer in a Caroteno-C<sub>60</sub> dyad: Photoinduced Electron Transfer from the Carotenoid Excited States. <u>Gary F. Moore</u>, Rudi Berera, Ivo H. M. van Stokkum, Gerdenis Kodis, Paul A. Liddell, Miguel Gervaldo, Rienk van Grondelle, John T. M. Kennis, Devens Gust, Thomas A. Moore, Ana L. Moore. **16**<sup>th</sup> Western Photosynthesis Conference. Pacific Grove, CA. January 4-7, 2007 (Poster)
- (7) Biomimetic Modeling of the Electron Transfer between P680 and Tyrosine Z in PS II. <u>Gary F. Moore</u>, Michael Hambourger, Gerdenis Kodis, Miguel Gervaldo, Devens Gust, Thomas A. Moore, Ana L. Moore. **2006 Electron Donor-Acceptor Interactions Gordon Research Conference**. Salve Regina University. Newport, RI. August 13-18, 2006 (Poster)
- (6) Synthesis and Characterization of Biomimetic Models for the Electron Transfer Between P680 and Tyrosine Z. <u>Gary F. Moore</u>, Michael Hambourger, Gerdenis Kodis, Devens Gust, Thomas A. Moore, Ana L. Moore. **15<sup>th</sup> Western Photosynthesis Conference**. Pacific Grove, CA. January 5-8, 2006 (**Oral and Poster**)
- (5) Synthesis and Photochemical Properties of Lichen Acids Porphyrin Dyads. <u>Gary F. Moore</u>, Peter J. Pessiki. **228**<sup>th</sup> American Chemical Society National Meeting, Philadelphia, PA. August 22-26, 2004 (Poster)
- (4) Lichen Acid Porphyrin Dyads. <u>Gary F. Moore</u>, Peter J. Pessiki. **6**<sup>th</sup> **Annual UW Undergraduate Research Symposium**, University of Washington, Seattle, WA. May 16, 2003 (**Oral and Poster**)
- (3) Synthesis and Characterization of Metal Chelating Porphyrins. <u>Gary F. Moore</u>, Peter J. Pessiki. American Chemical Society Student Affiliate Symposium of the Puget Sound Section of the American Chemical Society, Seattle University, Seattle, WA. May 10, 2003 (Oral and Poster)
- (2) Metal Chelating Porphyrins: Strategies and Progress. <u>Gary F. Moore</u>, Peter J. Pessiki **American Chemical Society 57**<sup>th</sup> **Northwest Regional Meeting**, Spokane, WA. June 20-21, 2002 (**Poster**)

(1) Lichen Acids Covalently Attached to Porphyrins. <u>Gary F. Moore</u>, Lalita M. Calabria, Peter J. Pessiki. **American Chemical Society Undergraduate Research Symposium**, University of Washington, Seattle, WA. May 4, 2002 (**Oral and Poster**)

#### PhD Dissertations of Mentees

(5) Molecular-Modified Materials for Solar Fuels Generation by Nghi Nguyen (2023 / a dissertation completed in partial fulfillment for the degree Doctor of Philosophy)

An electronic copy is available at:

https://www.proquest.com/openview/df3b344a06838632bb6d2555f01af86a/1?pq-origsite=gscholar&cbl=18750&diss=y&casa\_token=9z9UjSZsvpAAAAAA:nEYurCLywylGx6uf9rnG5WDuY4CLhchuL8EMLzrh18VbAdOS1R4UYpD2y-VwvuPoXuNXO9Yx

(4) Molecular Approaches to Solar Fuel Production by Edgar A. Reyes Cruz (2023 / a dissertation completed in partial fulfillment for the degree Doctor of Philosophy)

An electronic copy is available at:

https://www.proquest.com/docview/2851750808?pq-

(3) Hybrid Materials and Interfaces for Artificial Photosynthetic Assemblies by Brian L. Wadsworth (2020 / a dissertation completed in partial fulfillment for the degree Doctor of Philosophy)

An electronic copy is available at:

https://search.proquest.com/openview/e307ae8b90ac7ac92c14a85a07a7f14e/1?pq-origsite=gscholar&cbl=51922&diss=y

(2) Electrocatalytic and Photoelectrosynthetic Hydrogen Production using Metalloporphyrins and Molecular-modified Gallium Phosphide Photocathodes by Diana Khusnutdinova (2019 / a dissertation completed in partial fulfillment for the degree Doctor of Philosophy)

An electronic copy is available at:

https://search.proquest.com/openview/ba3f4bed7bfa278a4ede470c1222c754/1.pdf?pqorigsite=gscholar&cbl=18750&diss=y

(1) Structural and Photoelectrochemical Characterization of Gallium Phosphide Semiconductors Modified with Molecular Cobalt Catalysts by Anna M. Beiler (2018 / a dissertation completed in partial fulfillment for the degree Doctor of Philosophy) An electronic copy is available at:

https://search.proquest.com/openview/bc15893e2f19e9b7456017d1692c7711/1?pqorigsitef=gscholar&cbl=18750&diss=y

### Honors Awarded to Students in the G. F. Moore Research Group

### As ASU Faculty:

(46) 2023 Achievement Rewards for College Scientists (ARCS) / Lillian Hensleigh (graduate student)

(45) 2023-2024 Graduate College Completion Fellowship / Daiki Nishiori (current graduate student)

- (44) 2022-2023 Graduate College Completion Fellowship / Nghi P. Nguyen (graduate student / defended 2023)
- (43) **2022 Outstanding Graduate Student Research Assistant Award** / Nghi P. Nguyen (graduate student / defended 2023)
- (42) **2022 George Yuen Memorial Award** / Edgar A. Reyes Cruz (graduate student / defended 2023)
- (41) **2021 SAACS Organic Achievement Award**/ Ahlea Reyes (undergraduate student / graduated 2021)
- (40) SMS Innovation Award 2021 / Nghi P. Nguyen (graduate student / defended 2023)
- (39) **2021 Outstanding Graduate Research Assistant Award** / Lillian K. Hensleigh (current graduate student)
- (38) **2020 ACS Applied Materials and Interfaces Best Presentation Award** (Presented at 29<sup>th</sup> Inter-American Photochemical Society Winter Conference in Sarasota, FL) / Brian L. Wadsworth (graduate student / defended 2020)
- (37) 2020 George Yuen Memorial Award / Nghi Nguyen (graduate student / defended 2023)
- (36) 2020 Outstanding Graduate Research Assistant Award / Daiki Nishiori (current graduate student)
- (35) **2020 Outstanding Graduate Research Assistant Award** / Brian L. Wadsworth (graduate student/ defended 2020)
- (34) Selected Oral Presentation at the 2019 Photosynthesis Gordon Research Conference / Brian L. Wadsworth (graduate student / defended 2020)
- (33) **2019 ASU Outstanding Graduate to be Honored at Commencement Ceremony** / Diana Khusnutdinova (graduate student / defended 2019)
- (32) **2019 George Yuen Memorial Award** / Brian L. Wadsworth (graduate student / defended 2020)
- (31) **2019 Distinguished Teaching Assistant Award** / Edgar A. Reyes Cruz (graduate student / defended 2023)
- (30) **2019 Achievement Rewards for College Scientists (ARCS)** / Brian L. Wadsworth (graduate student / defended 2020)
- (29) Invited Session Chair for the 2019 Gordon Research Symposium on Photosynthesis / Brian L. Wadsworth (graduate student / defended 2020)
- (28) Recipient of a Swedish Olle Engkvist Foundation Postdoctoral Fellowship at Uppsala / Anna M. Beiler (graduate student / defended 2018)
- (27) 2018 Running on Sun Summer Internship Award / Bruno Rergis (Phoenix Preparatory

- Academy high school student intern)
- (26) **2018 Leroy Eyring Memorial Fellowship** / Diana Khusnutdinova (graduate student / defended 2019)
- (25) **2018 Graduate College Fellowship** / Brian L. Wadsworth (graduate student / supported 2020)
- (24) **2018 Outstanding Graduate Research Assistant Award** / Brian L. Wadsworth (graduate student / defended 2020)
- (23) Selected at the 2018 Solar Fuel Gordon Research Conference on Renewable Energy: Solar Fuels to Chair the 2020 Symposium / Anna M. Beiler (graduate student / defended 2018)
- (22) Invited Session Chair for the 2018 Gordon Research Symposium on Solar Fuels: Renewable Energy / Anna M. Beiler (graduate student / defended 2018)
- (21) **2017 Philanthropic Education Organization (PEO) Fellowship** / Anna M. Beiler (graduate student / defended 2018)
- (20) **2017 Leroy Eyring Memorial Fellowship** / Brian L. Wadsworth (graduate student / defended 2020)
- (19) **2017 George Yuen Memorial Award** / Diana Khusnutdinova (graduate student / defended 2019)
- (18) 2017 Achievement Rewards for College Scientists (ARCS) / Anna M. Beiler (graduate student / defended 2018)
- (17) **2017 Science Fusion Award** / Diana Khusnutdinova (graduate student / defended 2019)
- (16) **2017 Marie Curie Award** for Best Use of Chemistry / Anna M. Beiler (graduate student / defended 2018)
- (15) **2017 Distinguished Teaching Assistant Award** / Diana Khusnutdinova (graduate student / defended 2019)
- (14) Invitation to Speak at the 2017 Photochemistry Gordon Research Symposium / Anna M. Beiler (graduate student / defended 2018)
- (13) **2017 Flash Presentation Award** / G. F. Moore Group at the 2017 International Solar Fuels Conference in San Diego, CA.
- (12) **2017 Bidstrup Undergraduate Fellowship** / Sylvia K. Nanyangwe (undergraduate student / graduated 2018)
- (11) **2017 Running on Sun Summer Internship Award** / Ahlea Reyes (former Phoenix Preparatory Academy high school student intern / current ASU undergraduate student)
- (10) **2016 Student Affiliates of the American Chemical Society Award** / Samuel I. Jacob (undergraduate student and co-author on four peer-reviewed publications in high-impact journals / graduated 2016)

(9) **2016 George Yuen Memorial Award** / Diana Khusnutdinova, (graduate student / defended 2019)

- (8) **2016 Material Research Society (MRD) Poster Presentation Award** / Anna M. Beiler (graduate student / defended 2018)
- (7) **2015 Undergraduate Summer Enrichment Award** / Samuel I. Jacob (undergraduate student / graduated 2016)
- (6) **2015 ACS Best Presentation in Session** / G. F. Moore Group at the 2015 National ACS Conference in Boston, MA.
- (5) National Science Foundation IGERT-SUN Fellow / Brian L. Wadsworth (graduate student / defended 2020)
- (4) National Science Foundation IGERT-SUN Fellow / Anna M. Beiler (graduate student / defended 2018)

In addition to these awards, graduate students in Prof Moore's group have been invited to chair Gordon Research Symposium sessions and organize sessions at the Materials Research Society Meetings.

# **Before Joining ASU Faculty:**

- (3) 2014 Photochemistry Gordon Research Conference Young Investigator Award / Alexandra Krawicz (postdoctoral student)
- (2) Western Photosynthesis Conference Best Poster Presentation Award (2014) / Alexandra Krawicz (postdoctoral student)
- (1) Invitation to Speak at the 2014 Electron Donor-Acceptor Interactions Gordon Research Symposium / Diana Cedeno (postdoctoral student)

#### II. TEACHING EXPERIENCE

#### A. Courses Taught

### **Courses Taught at ASU:**

- (29) CHM 598 Solar Energy Conversion / 3 credits / 100% taught (Fall 2023)
- (28) CHM 234 General Organic Chemistry II / 3 credits / 100% taught (Spring 2023)
- (27) CHM 598 Introduction to Photochemistry / 3 credits / 100% taught (Fall 2022)
- (26) CHM 234 General Organic Chemistry II / 3 credits / 100% taught (Spring 2022)
- (25) CHM 598 Solar Energy Conversion / 3 credits / 100% taught (Fall 2021)
- (24) CHM 234 General Organic Chemistry II / 3 credits / 100% taught (Spring 2021)
- (23) **CHM 598 Photochemistry** / 3 credits / 100% taught (Fall 2020)
- (22) CHM 234 General Organic Chemistry II / 3 credits / 100% taught (Spring 2020)

- (21) CHM 531 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2019)
- (20) CHM 433 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2019)
- (19) CHM 598 Solar Energy Conversion / 3 credits / 100% taught (Spring 2019)
- (18) CHM 598 Solar Energy Conversion / 3 credits / 100% taught (Spring 2018)
- (17) CHM 531 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2017)
- (16) CHM 433 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2017)
- (15) CHM 598 Solar Energy Conversion / 3 credits / 100% taught (Spring 2017)
- (14) CHM 531 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2016)
- (13) CHM 433 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2016)
- (12) CHM 501 Organic Chemistry / 3 credits / 100% taught (Spring 2016)
- (11) **BCH 392 Introduction to Research Techniques** / 3 credits / 100% taught (Spring 2016)
- (10) CHM 233 General Organic Chemistry / 3 credits / 100% taught (Spring 2016)
- (9) **BCH 392 Introduction to Research Techniques** / 3 credits / 100% taught (Fall 2015)
- (8) CHM 531 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2015)
- (7) CHM 433 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2015)
- (6) CHM 493 Honors Thesis / 3 credits / 100% taught (Spring 2015)
- (5) CHM 392 Introduction to Research Techniques / 3 credits / 100% taught (Spring 2015)
- (4) BCH 392 Introduction to Research Techniques / 3 credits / 100% taught (Spring 2015)
- (3) CHM 598 Solar Energy Conversion / 3 credits / 100% taught (Fall 2014)

## Courses Taught at Berkeley Labs:

- (2) Joint Center for Artificial Photosynthesis **Summer School on Surface Science** (Summer 2013)
- (1) Joint Center for Artificial Photosynthesis Winter School on Solar Energy Conversion (Winter 2012)

#### **B. Student Mentoring**

**Students Currently Mentored at ASU** (For further information on members of the G. F. Moore research group as well as a brief description of their research and other interests, please visit the following web link: <a href="http://www.gfmoorelab.com/people.html">http://www.gfmoorelab.com/people.html</a>):

- (29) Nicholas Armada (2023 current / Graduate Student)
- (28) Ian Peterson (2023 current / Undergraduate Student Non-Research Credit)
- (27) Lillian K. Hensleigh (2020 current / Graduate Student)

(26) **Daiki Nishiori** (2018 – current / Graduate Student)

## **Students Formerly Mentored at ASU:**

- (25) **Nghi Nguyen** (2018 2023 / Graduate Student / Currently at Solestial)
- (24) Edgar A. Reyes Cruz (2016 2023 / Graduate Student)
- (23) Ahlea Reyes (2018 2022 / Undergraduate Student Non-Research Credit)
- (22) Kristina West (summer 2022 / Phoenix Preparatory Academy Highschool Intern)
- (21) Yegor Zenkov (2017 2021 / Undergraduate Student Non-Research Credit)
- (20) **Angel Nyarko** (summer 2021 / Phoenix Preparatory Academy High School Intern)
- (19) Saraia Lolly (summer 2021 / Phoenix Preparatory Academy High School Intern)
- (18) **Bridger Johnson** (2019 2020 / Undergraduate Student / Barrett, the Honors College)
- (17) Brian L. Wadsworth (2015 2020 / Graduate Student / Currently at INTEL)
- (16) **Diana Khusnutdinova** (2014 2019 / Graduate Student / Currently at INTEL)
- (15) **Bruno Rergis** (summer 2018 / Phoenix Preparatory Academy High School Intern/ Currently at Columbia University)
- (14) **Jennifer Urbine** (2017 2019 / Undergraduate Student Non-Research Credit / currently a Chemistry PhD candidate at the University of California Irvine)
- (13) **Anna M. Beiler** (2014 2018 / Graduate Student / Currently at Institut Català d'Investigació Química)
- (12) **Gabriela Gorosics** (2014 2018 / Visiting Researcher / North Point Prep High School Teacher, Robotics Competition Team Captain)
- (11) **Sylvia K. Nanyangwe** (2015 2018 / Undergraduate Student Research Credit / Barrett, the Honors College / MasterCard Fellow)
- (10) **Ahlea Reyes** (summer 2017 / Phoenix Preparatory Academy High School Intern / Currently at Arizona State University)
- (9) Christian Huber (2015 2017 / Undergraduate Student Non-Research Credit)
- (8) **Edward Skibo** (2014 2016 / Undergraduate Student Barrett, the Honors College)
- (7) **Samuel I. Jacob** (2014 2016 / Undergraduate Student Research Credit / 2015 SAACS Undergraduate Research Award / PhD at U.C. Santa Barbara)
- (6) Avraham Echeverri (2014 2015 / Undergraduate Student Research Credit)
- (5) Mathew Cash (2014 2016 / Undergraduate Student Non-Research Credit)
- (4) Nhu Mac (2014 2015 / Undergraduate Student Non-Research Credit)

### Students Formerly Mentored at Berkeley Lab:

(3) Alexandra Krawicz (2012 – 2014 / Postdoctoral Scholar / 2014 Photochemistry Gordon

- Research Conference Young Investigator Awardee / Western Photosynthesis Conference Best Poster Presentation Award / Currently Employed at EMI Electronics, USA)
- (2) **Diana Cedeno** (2012 2014 / Postdoctoral Scholar / Invited Speaker to 2014 Electron Donor-Acceptor Interactions Gordon Research Symposium / Currently Employed at PTRL West-Evans Analytical Group, USA)
- (1) **Jesse Jenkins** (2012 2013 / Graduate Student / Co-advised with Prof. Don Tilley / Currently at Hedron LLC 3D-Printing and Prototyping Services)

# C. Completed Courses and Training on Teaching and Mentoring:

(1) Fundamentals of Teaching in the Sciences (Yale University, Fall 2012)

#### III. SERVICE

#### A. Professional Service

# **Conference Organization**

# As ASU Faculty:

- (3) **30**<sup>th</sup> Western Photosynthesis Conference. January 2<sup>nd</sup> and 9<sup>th</sup>, 2021 (Chair)
- (2) **29**<sup>th</sup> Inter-American Photochemical Society Winter Conference. Sarasota, FL. January 2-5, 2020 (Co-Chair)

### **Before ASU:**

(1) Photosynthesis, Bioenergy and Artificial Photosynthesis. **The 2012 Gordon Research Seminar on Photosynthesis**. Davidson College, Davidson, NC. July 7-8, 2012 (Chair)

### **Discussion Sessions Leadership**

# As ASU Faculty:

(1) "A novel approach to separate and utilize charge carriers is..." **2**<sup>nd</sup> **Gerisher Elctrochistry Today Symposium** "Semiconductor Electrochemistry: From Gerischer to Lewerenz and Beyond." Colorado State University, Fort Collins, CO, August 6-8, 2024 (Discussion Leader)

# **Conference Sessions Chaired and Organized**

### As ASU Faculty:

- (7) New Horizons in Spectroelectrochemistry and Photoelectrochemistry. **247th ECS Meeting**, Montréal, Canada, May 18-22, 2025 (Session Co-Organizer)
- (6) Session 6, Poster Awards, and the 2024 Nicholas J. Turro Award (Presented to Peter Ford with Introduction from Claudia Turro). 26<sup>th</sup> Winter Inter-American Photochemical Society Conference. Destin, FL. January 3-6, 2024 (Session Chair)

(5) The GRC Power-Hour<sup>TM</sup> Session. **The 2019 Gordon Research Conference on Photosynthesis**. Newry, ME. July 21-26, 2019 (Session Chair)

- (4) Synthetic Photochemistry Session. **26<sup>th</sup> Winter Inter-American Photochemical Society Conference**. Sarasota, FL. January 2-5, 2017 (Session Chair)
- (3) Bioinspired Energy Conversion Session, ENVR Division. **250**<sup>th</sup> **ACS Meeting & Exposition**. Boston, MA. August 16-20, 2015 (Session Chair)

# **Before Joining ASU Faculty:**

- (2) Artificial Photosynthesis Session. **21**<sup>st</sup> **Western Photosynthesis Conference**. Pacific Grove, CA. January 3-5, 2013 (Session Chair)
- (1) Artificial Photosynthesis Session. **22**<sup>nd</sup> **Western Photosynthesis Conference**. Pacific Grove, CA. January 5-8, 2012 (Session Chair)

**Associate Editor of the Following Journal** (handling manuscripts with topics in Artificial Photosynthesis, Solar Fuels, and Green Chemistry):

(1) Photosynthetic Research / Impact Factor: 3.091)

# **Reviewer of the Following Representative Journals** (reviewing ~3 manuscripts per month):

- (18) Nature Materials (Impact Factor: 38.887)
- (17) Energy and Environmental Science (Impact Factor: 33.250)
- (16) Journal of the American Chemical Society (Impact Factor: 14.695)
- (15) ACS Catalysis (Impact Factor: 12.221)
- (14) Nature Communications (Impact Factor: 11.880)
- (13) Proceedings of the National Academy of Science (Impact Factor: 9.580)
- (12) Chemical Science (Impact Factor: 9.556)
- (11) Journal of Physical Chemistry Letters (Impact Factor: 8.709)
- (10) Applied Materials and Interfaces (Impact Factor: 8.456)
- (9) Inorganic Chemistry (Impact Factor: 4.850)
- (8) Journal of Physical Chemistry C (Impact Factor: 4.484)
- (7) Physical Chemistry Chemical Physics (Impact Factor: 3.567)
- (6) International Journal of Hydrogen Energy (Impact Factor: 4.229)
- (5) Journal of Physical Chemistry B (Impact Factor: 3.146)
- (4) Interface Focus (Impact Factor: 3.092)
- (3) Photochemistry and Photobiology (Impact Factor: 2.214)
- (2) ACS Energy Letters (Impact Factor: 19.05)

(1) ACS Applied Energy Materials (Impact Factor: 5.76)

## **Professional Organization Memberships:**

- (9) American Indian Science and Engineering Society
- (8) Inter-American Photochemical Society
- (7) Society of Porphyrins and Phthalocyanines
- (6) The Electrochemical Society
- (5) American Chemical Society (Energy Science Division)
- (4) American Chemical Society (Environmental Chemistry Division)
- (3) Materials Research Society
- (2) International Society of Photosynthesis Research
- (1) Yale University Edward A. Bouchet Honor Society

# **B.** Departmental Service

## **Comprehensive Exam Committees:**

- (20) Rose McDonough (2023)
- (19) Nicholas Armada (2023)
- (18) Hoda Behbahani (2022)
- (17) Zhen Da (2021)
- (16) Alexandria Layton (2021)
- (15) Anuja Sharma (2021)
- (14) Garrett Shaver (2019)
- (13) Aerial Pratt (2019)
- (12) **Thao Nguyen** (2019)
- (11) Tania Miguel Trabajo (2019)
- (10) Jin Li (2019)
- (9) Jesse Granstrom (2019)
- (8) Michele Costantino (2019)
- (7) Mikayla Carlson (2019)
- (6) Julio Benal-Chanchavac (2019)
- (5) **Zachary Dobson** (2017)
- (4) Nicholas Halloran (2015)

- (3) Patrick Wallace (2015)
- (2) Samuel Williams (2015)
- (1) Zahra B. Dizicheh (2014)

## **Comprehensive Exam Committee Chair:**

- (2) Logan Hessefort (2022)
- (1) Abhishek Debnath (2015)

### **Masters Defense Committees:**

(1) **Brandon Blass** (2019)

## **Doctoral Thesis Defense Committees:**

- (5) Natalie Click (2024)
- (4) Anuja Sharma (2024)
- (3) Zachory Dobson (2022)
- (2) Matthew Gilliam (2020)
- (1) Dayn Sommer (2016)

#### **Doctoral Thesis Defense Committee Chair:**

- (5) Nghi Nguyen (2023)
- (4) Edgar A. Reyes Cruz (2023)
- (3) Brian L. Wadsworth (2020)
- (2) Diana Khusnutdinova (2019)
- (1) Anna M. Beiler (2018)

### Other Committees and Services at Arizona State University:

- (22) **Diversity, Equity, and Inclusion Committee** (Spring 2023)
- (21) Organizing SMS Organic Chemistry Faculty Teaching Assignment (Fall 2022)
- (21) Diversity, Equity, and Inclusion Committee (Fall 2022)
- (20) Diversity Cluster Search Committee (Spring 2022)
- (19) **Personnel and Budget Committee** (Spring 2022)
- (18) Personnel and Budget Committee (Fall 2021)
- (17) Personnel and Budget Committee (Spring 2021)
- (16) Personnel and Budget Committee (Fall 2020)

- (15) School of Molecular Sciences Leadership Committee (Spring 2019 Spring 2020)
- (14) Oral Exam Committee (Spring 2019)
- (13) Graduate Student Committee (Spring 2019)
- (12) School of Molecular Sciences Leadership Committee (Fall 2019)
- (11) Oral Exam Committee (Fall 2019)
- (10) Graduate Student Committee (Fall 2019)
- (9) Graduate Student Awards Committee (Spring 2019)
- (8) Graduate Student Committee (Fall 2018)
- (7) Center for Bioenergy and Photosynthesis Seminar Committee (Fall 2016 Spring 2018)
- (6) School of Molecular Sciences Seminar Committee (Fall 2016 Spring 2018)
- (5) School of Molecular Sciences Recruitment Committee (Fall 2016 and Spring 2017)
- (4) School of Molecular Sciences Recruitment Committee (Fall 2015 and Spring 2016)
- (3) XFEL Faculty Search Committee (Fall 2015 and Spring 2016)
- (2) Chemistry and Biochemistry Recruitment Committee (Fall 2014 Spring 2015)
- (1) **Photosynthesis Faculty Search Committee** / Joint search with the School of Life Sciences and Chemistry and Biochemistry (Fall 2014 and Spring 2015)

## **External Review Service for the following Institutions:**

- (4) Frederick Gardner Cottrell Foundation (2019)
- (3) Petroleum Research Foundation (2019-2020)
- (2) Department of Energy (2017-2020)
- (1) National Science Foundation External (2017-current)

#### **Committees and Service at Berkeley Labs:**

- (6) Berkeley Lab's Energy Cross-Divisional Implementation Team (2013 2014)
- (5) Staff Scientist Hiring Committee (2013 2014)
- (4) Joint Integration Team (2012 2014)
- (3) Building Emergency Team (2012 2014)
- (2) Lab Manager Hiring Committee (2012 2014)
- (1) Coordinator for acquisition and installation of DOE Solar-Energy Hub capital research equipment, including a \$1M NMR spectrophotometer (2011)

#### C. Outreach Activities

#### **Outreach Activities as ASU Faculty:**

(19) Principal Investigator for the ASU-Berkeley Lab STEM Pathways Program funded by the Alfred P. Sloan Foundation (2022 – 2024)

- (18) Invited speaker and panelist at the Fifteenth Annual Arizona Western Alliance to Expand Student Opportunities (WAESO) Student Research Conference. Panel session on "Why you should consider Doctoral education and the Professorate (2021)
- (17) Invited speaker and panelist at the Fourteenth Annual Arizona Western Alliance to Expand Student Opportunities (WAESO) Student Research Conference. Panel session on "Why you should consider Doctoral education and the Professorate (2020)
- (16) Discussion moderator and session chair at the ASU 2017 Doing Research in Indian County Workshop panel session on sustainability with panelists: Dr. Jamie Ritchey, *Director of Tribal Epidemiology*; Violet Mitchell-Enos, *Director, HHS, SRP-MIC*; and Dr. Dave Wilson, *Tribal Health Research Office, NIH* (2017)
- (15) Worked with the Tempe Center for the Arts and local Arizona artist Jose Benavides on a project regarding bioinspired research and the use of art to convey scientific concepts to the public (2017)
- (14) Initiated and hosted the Running on Sun Internship (ROSI) program at ASU, an NSF-sponsored project that provides high school internships for developing scientists through the Phoenix Preparatory Academy, which is composed almost entirely of underserved groups (2017 current)
- (13) Mentor undergraduate students in ASU's Barrett, the Honors College (2015 current)
- (12) Coach local high school students participating in the Arizona Science and Engineering Fair (AzSEF) (2015 – current)
- (11) Mentor for *students affiliated with the* American Indian Science & Engineering Society (AISES) at ASU (current)
- (10) Grand Judge for the INTEL International Science & Engineering Fair (2016)
- (9) Presenter at the Telluride Workshop on "Solar Solutions to Energy and Environmental Problems" (2015)
- (8) Session Chair for Bioinspired Energy Conversion Session, ENVR Division at the 250<sup>th</sup> ACS Meeting & Exposition (2015)
- (7) Mentor North Point Preparatory Academy High School teacher Gabriela Gorosics (2015 2018)
- (6) Invited Lecturer at the Royal Society at Chicheley Hall "Do We Need a Global Project on Artificial Photosynthesis" workshop (2014)

### **Outreach Activities at Berkeley Labs:**

- (5) Panel Discussion Participant to Berkeley Lab Film Screening of *Switch: Discover the Future of Energy* (2013)
- (4) Instructor for a Surface Science Summer School Outreach Program (2013)

(3) Participant in the Berkeley Lab Open House Outreach Program: Ask a Scientist (2013)

- (2) Instructor for a Solar Energy Conversion Winter School Outreach Program (2012)
- (1) Participant in the Berkeley Lab Open House Outreach Program: Make Like a Leaf (2012)