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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 (2014 – present)

**Assistant Professor** 

**Berkeley Lab**, Berkeley, CA (2011 – 2014) Principal Investigator and Staff Scientist

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:

(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 Gordon Research Conference Emerging Investigator (2018) (one of three selected junior faculty presentations)
- (14) National Science Foundation CAREER Award (2017)

- (13) Julie Ann Wrigley Global Institute for Sustainability Scholar (2017)
- (12) Photochemistry Gordon Research Conference 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 Gordon Research Conference Young Investigator Award (2009)
- (6) ARCS Foundation Scholar (2008 2009)
- (5) Electron Donor-Acceptor Interactions Gordon Research Conference Young Investigator Award (2008)
- (4) Photosynthesis Gordon Research Conference 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: 2003 (August, 2019); H-index: 22; i10-index: 27

### **Publications**

## A. Journal Articles (37 total)

## As ASU Faculty (18 total):

(38) Wadsworth, B. L. (graduate student); Beiler, A. M. (graduate student); Khusnutdinova, D. (graduate student); Reyes Cruz, E. A. (graduate student); Moore, G. F. The Interplay Between Light flux, Quantum Efficiency, and Turnover Frequency in Molecular-modified Photoelectrosynthetic Assemblies. J. Am. Chem. Soc. 2019, doi.org/10.1021/jacs.9b07295 (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 Longrange Proton Translocation in Bioinspired Systems. J. Am. Chem. Soc. 2019, doi.org/10.1021/jacs.9b06978 (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).
- (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).
- (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. (technician); 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); Sylvia K. Nanyangwe (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).
- (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); Odell, 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 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); <u>Moore, G. F. Energetics and Efficiency Analysis of a Cobaloxime-Modified Semiconductor at Simulated Air Mass 1.5 Illumination</u>. *Phys. Chem. Chem. Phys.* **2014**, *16*, 15818-15824. (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: 8.709, Contributions: corresponding author as well as 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  $\pi$ -Bonded Ethylene on GaP(110). J. Phys. Chem. C. **2013**, *117*, 26091-26096. (Impact Factor: 4.484).
- (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.: Condensed Matter Physics. 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.; <u>Moore, G. F.</u>; 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**

## As ASU Faculty:

(1) Concluding Remarks and Future Perspectives. <u>Gary F. Moore</u> (2016) in <u>Photosynthesis:</u> <u>Structures, Mechanisms, and Applications</u> Chapter 20 (Harvey J. M. Hou, Mohammad Mahdi Najafpour, <u>Gary F. Moore</u> and Suleyman I. Allakhverdiev, eds.) Publishers, New York, in press.

#### **C. Conference Publications**

- (21) <u>Moore, G. F.</u>; Wadsworth, B. L.; Khusnutdinova, D; Beiler, A. M.; Reyes Cruz, E. A.; Nanyangwe, S. **The Interplay Between Quantum Efficiency, Light Flux, and Turnover in Molecular-modified Photocathodes**. *Abstract of Papers, 235<sup>th</sup> Electrochemical Society Meeting*. **2019**, Paper # 103-1638.
- (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 Electrocatalyis**. *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 and 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, 255th 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 and 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 and 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 and 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 and Research Society Spring Meeting and Exhibit.* **2018**, Paper # EN18.15.06.

- (12) Beiler, A. M.; Khusnutdinova, D.; Wadsworth, B. L.; Moore, G. F. Chemistry at the Interface: Hybrid Materials for Solar Fuel Production. Abstract of Papers, Materials and 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) <u>Moore, G. F.</u> Chemistry at the Interface: Hybrid Materials for Solar Fuel Production.

  Abstract of Papers, Materials and 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.

# **Prior to Joining ASU Faculty:**

- (8) Krawicz, A.; Moore, G. F. 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 TiO₂ and SnO₂. 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

- (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

## **Prior to 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):

- (32) The Interplay between Quantum Efficiency, Light Flux, and Turnover Frequency in Porphyrin-Modified Photocathodes. Gary F. Moore. 11<sup>th</sup> International Conference on Porphyrins and Phthalocyanines. New York, USA June 28-July 3, 2020 (Invited Speaker)
- (31) Nanoscale Architectures for Applications in Electrocatalysis and Photoelectrosyntesis. 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 and 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. 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**. Cancun, Mexico.
  March 2-5, 2018 (Invited Lecturer)
- (21) Bioinspired Polymeric Surface Coatings for Applications in Photoelectrosynthetic Fuel Production Gary F. Moore. **2018 Materials and 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. **Photochemistry Gordon Research Conference**. Bates College, Lewiston, ME. July 23-July 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. **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 and 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. 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)

## **Prior to 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

- (19) Molecular Surface Coatings for Applications in Electrocatalysis and Photoelectrosynthesis. **Department of Chemistry Seminar Series at Yale University**. New Haven, CT. April 7, 2020
- (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 Nanomaterilas 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)

## **Prior to Joining ASU Faculty:**

(9) Hybrid Photocathodes for Solar Fuels Production. **Yale-National University of Singapore**. April 7, 2014

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

### C. Invited Presentations at Corporate Institutions

#### **Prior to Joining ASU Faculty:**

- (2) Recent Advancements in Artificial Photosynthesis and Solar Fuels. Gary F. Moore. Exxon Mobil Corporation. Annandale, NJ. December 6, 2012 (Invited Speaker and Consultant)
- (1) Energy Transduction in Biology and Technology. Gary F. Moore. **Procter and Gamble**. Cincinnati, OH. June 10, 2010

## D. Outreach / Mentoring Workshops and Presentations

## As ASU Faculty:

(6) **Doing Research in Indian County**. Panel session on sustainability with panelist: Dr. Jamie Ritchey, *Director of Tribal Epidemology*; 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**)

## **Prior to 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. Gary F. Moore. Yale Climate and Energy Institute 2<sup>nd</sup> Annual Conference Kick-off. Yale University, NewHaven, CT. March 30, 2011 (Invited Panel Discussion Moderator)
- (2) A Panel on Technology and our Emerging Energy Crisis. Gary F. Moore. 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. Gary F. Moore. MGE@MSA Second Annual Faculty Postdoctoral Mentoring Institute. Tempe, AZ. January 28, 2010 (Invited Speaker)

## E. Research Workshops

- (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

- (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 Photocheistry 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>. 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. 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>. **Photochemistry Gordon Research Conference**. Bates College, Lewiston, ME. July 23-July 28, 2017 (**Poster**)
- (38) SUNCROPS: Solar-Fuels Using Nanaoscale Catalysts Reacting On Polymer Modified Semiconductors. Diana Khusnutdinova, Anna M. Beiler, Brian L. Wadsworth, Samuel I. Jacob, <u>Gary F. Moore</u>. **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 Semconductors 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>. **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>. **Photochemistry Gordon Research Conference**. Stonehill College, Easton, MA. July 19-24, 2015 (**Poster**)
- (35) Molecular-Modified Semiconductors for Artifical Photosynthesis. Diana Khusnutdinova, Anna M. Beiler, Samuel I. Jacob <u>Gary F. Moore</u>. **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>. **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>. **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>. **Renewable Energy: Solar Fuels Gordon Research Conference**. Four Points Sheraton, Ventura, CA. January 19-24, 2014 (**Poster**)

## **Prior to Joining ASU Faculty:**

- (30) Energetics and Efficiency Evaluation of a Cobaloxime-Modified Semiconductor. Alexandra Krawicz, <u>Gary F. Moore</u>. **Photochemistry Gordon Research Conference**. Easton, MA. July 14-19, 2013 (**Poster**)
- (29) Developing New Photocathode Materials. <u>Gary F. Moore</u>, Ian D. Sharp. **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. **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. **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. **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. **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. **Renewable Energy: Solar Fuels Gordon Research Symposium**. Four Points Sheraton, Ventura, CA. January 15-16, 2011 (**Oral**)
- (23) Bioinspired Approches 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**. Cancun, 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. **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. **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. <u>International Center for Materials US-Argentina Workshop on Nanomaterials</u>. 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: **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. **Renewable 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. **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. **Photosynthesis Gordon Research Conference**. Mont 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. **Photosynthesis and Bioenergy Gordon Research Symposium**. Mont 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. **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, 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. <u>Electron Donor-Acceptor Interactions Gordon Research Conference</u>. 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. **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**)

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

- (34) Selected Oral Presentation at the 2019 Photosynthesis Gordon Research Conference / Brian L. Wadsworth (current graduate student)
- (33) **2019 ASU Outstanding Graduate to be Honored at Commencement Ceremony** / Diana Khusnutdinova (former graduate student / defended 2019)
- (32) **2019 George Yuen Memorial Award** / Brian L. Wadsworth (current graduate student)
- (31) **2019 Distinguished Teaching Assistant Award** / Edgar A. Reyes Cruz (current graduate student)

(30) **2019 Achievement Rewards for College Scientists (ARCS)** / Brian L. Wadsworth (current graduate student)

- (29) Invited Session Chair for the 2019 Gordon Research Symposium on Photosynthesis / Brian L. Wadsworth (current graduate student)
- (28) Recipient of a Swedish Olle Engkvist Foundation Postdoctoral Fellowship at Uppsala / Anna M. Beiler (former 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 (former graduate student / defended 2019)
- (25) 2018 Graduate College Fellowship / Brian L. Wadsworth (current graduate student)
- (24) **2018 Outstanding Research Assistant Award** / Brian L. Wadsworth (current graduate student)
- (23) Selected at the 2018 Solar Fuel Gordon Research Conference on Renewable Energy: Solar Fuels to Chair the 2020 Symposium / Anna M. Beiler (former graduate student / defended 2018)
- (22) Invited Session Chair for the 2018 Gordon Research Symposium on Solar Fuels: Renewable Energy / Anna M. Beiler (former graduate student / defended 2018)
- (21) **2017 Philanthropic Education Organization (PEO) Fellowship** / Anna M. Beiler (former graduate student / defended 2018)
- (20) **2017 Leroy Eyring Memorial Fellowship** / Brian L. Wadsworth (current graduate student)
- (19) **2017 George Yuen Memorial Award** / Diana Khusnutdinova (former graduate student / defended 2019)
- (18) **2017** Achievement Rewards for College Scientists (ARCS) Anna M. Beiler (former graduate student / defended 2018)
- (17) **2017 Science Fusion Award** / Diana Khusnutdinova (former graduate student / defended 2019)
- (16) **2017 Marie Curie Award** for Best Use of Chemistry / Anna M. Beiler (former graduate student / defended 2018)
- (15) **2017 Distinguished Teaching Assistant Award** / Diana Khusnutdinova (former graduate student / defended 2019)
- (14) Invitation to Speak at the 2017 Photochemistry Gordon Research Symposium / Anna M. Beiler (former graduate student / defended 2018)
- (13) **2017 Flash Presentation Award** / G. F. Moore Group at the 2017 International Solar Fuels Conference in San Diego.

(12) **2017 Bidstrup Undergraduate Fellowship** / Sylvia K. Nanyangwe (former 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** / Presented to undergraduate Student Samuel I. Jacob (former undergraduate student and co-author on four peer-reviewed publications in high-impact journals / graduated 2016)
- (9) **2016 George Yuen Memorial Award** / Presented to Diana Khusnutdinova, (former graduate student / defended 2019)
- (8) **2016 Material Research Society (MRD) Poster Presentation Award** / Awarded to Anna M. Beiler (former graduate student / defended 2018)
- (7) **2015 Undergraduate Summer Enrichment Award** / Awarded to Samuel I. Jacob (former undergraduate student / graduated 2016)
- (6) **2015 ACS Best Presentation in Session** / Awarded to the G. F. Moore Group at the 2015 National ACS Conference in Boston
- (5) **National Science Foundation IGERT-SUN Fellow** / Awarded to Brian L. Wadsworth (current graduate student)
- (4) National Science Foundation IGERT-SUN Fellow / Awarded to Anna M. Beiler (former graduate student / graduated 2018)
  - In addition to these awards, graduate students in Prof Moore's group have been invited to chair Gordon Research Symposium sessions as well as organize sessions at the Materials Research Society Meetings.

#### **Prior to Joining ASU Faculty:**

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

#### II. TEACHING EXPERIENCE

## A. Courses Taught

## **Courses Taught at ASU:**

(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 Enegry Conversion / 3 credits / 100% taught (Spring 2019)
- (18) CHM 598 Solar Enegry Conversion / 3 credits / 100% taught (Spring 2018)
- (17) CHM 433 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2017)
- (16) CHM 531 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2017)
- (15) CHM 598 Solar Enegry Conversion / 3 credits / 100% taught (Spring 2017)
- (14) CHM 433 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2016)
- (13) CHM 531 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 433 Advanced Organic Chemistry / 3 credits / 100% taught (Fall 2015)
- (7) CHM 531 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 Artifical Photosynthesis **Summer School on Surface Science** (Summer 2013)
- (1) Joint Center for Artifical 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>):

- (23) **Bridger Johnson** (2019 current / Undergradute Student / Barrett, the Honors College)
- (22) **Nghi Nguyen** (2018 current / Graduate Student)
- (21) Daiki Nishiori (2018 current / Graduate Student)
- (20) Ahlea Reyes (2018 current / Undergraduate Student Non-Research Credit)
- (19) Yegor Zenkov (2017 current / Undergraduate Student Non-Research Credit)

- (18) Edgar A. Reyes Cruz (2016 current / Graduate Student)
- (17) Brian L. Wadsworth (2015 current / Graduate Student)

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

- (16) Diana Khusnutdinova (2014 2019 / Graduate Student / Currently at INTEL)
- (15) **Bruno Rergis** (summer 2018 / Phoenix Preparatory Academy High School Intern/ Currenty at Columbia University)
- (14) **Jennifer Urbine** (2017 2019 / Undergraduate Student Non-Research Credit / Currently a Chemistry PhD candidate at University of California Irvine)
- (13) **Anna M. Beiler** (2014 2018 / Graduate Student / Currently a Swedish Postdoctoral Fellow at Upsalla University)
- (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 a Arizona State Universisty)
- (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 / Currently a Chemistry PhD candidate 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 / Posdoctoral 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)

(2)

## 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) 30th Western Photosynthesis Conference. January 5-8, 2021 (Chair)
- (2) **29**<sup>th</sup> **Inter-American Photochemical Society Winter Conference**. Sarasota, FA. January 2-5, 2020 (Co-Chair)

#### Prior to ASU:

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

### **Conference Sessions Chaired**

# As ASU Faculty:

- (5) The GRC Power-Hour<sup>TM</sup> Session. **The 2019 Gordon Research Conference on Photosynthesis**. Newry, ME July 21-26, 2019
- (4) Synthetic Photochemistry Session. **26<sup>th</sup> Winter Inter-American Photochemical Society Conference**. Sarasota, FL January 2-5, 2017
- (3) Bioinspired Energy Conversion Session, ENVR Division. **250**<sup>th</sup> **ACS Meeting & Exposition**. Boston, MA August 16-20, 2015

## **Prior to 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** (Handeling 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 ~4 manuscripts per month since 2014):

(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 (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: NA new journal /Partial Impact Factor: 12.277)
- (1) ACS Applied Energy Materials (Impact Factor: NA new journal)

# **Professional Organization Memberships:**

- (9) American Indian Science and Engineering Society
- (8) Inter-American Photochemical Society
- (7) Society of Porphyrins and Phthalocyanines
- (6) The Electrochemical Socieity
- (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:**

(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:**

(1) Abhishek Debnath (2015)

#### **Masters Defense Committees:**

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

### **Doctoral Thesis Defense Committees:**

(1) **Dayn Sommer** (2016)

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

- (2) Diana Khusnutdinova (2019)
- (1) Anna M. Beiler (2018)

## Other Committees and Service at Arizona State University:

- (11) School of Molecular Sciences Leadership 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 Student Recruitment Committee** (Fall 2015 and Spring 2016)
- (3) XFEL Faculty Search Committee (Fall 2015 and Spring 2016)
- (2) Chemistry and Biochemistry Graduate Student Recruitment Committee (Fall 2014 Spring 2015)
- (1) **Photosynthesis Faculty Search Committee** / Joint search with School of Life Sciences and Chemistry and Biochemistry (Fall 2014 and Spring 2015)

# **External Committees and Service while at Arizona State University:**

- (3) Department of Energy External Independent Reviewer (2017)
- (2) National Science Foundation On-site Panel Reviewer (2017)

(1) National Science Foundation External Independent Reviewer (2017)

# **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:**

- (16) Discussion moderator and session chair at the ASU 2017 Doing Research in Indian County Workshop panel session on sustainability with panelist: Dr. Jamie Ritchey, *Director of Tribal Epidemology*; 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 general public (2017)
- (14) Initiated and host 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)