

Biographical Sketch for Gary F. Moore

Education and Training:

Ph.D., Chemistry and Biochemistry, Arizona State University, June, 2009

B.S., Chemistry, The Evergreen State College, June, 2004

Research and Professional Experience:

Assistant Professor, Arizona State University, 2014–present

Principal Investigator and Staff Scientist, Berkeley Lab, 2011–2014

Camille and Henry Dreyfus Foundation Postdoctoral Fellow, Yale University, 2009–2011

ARCS Foundation Graduate Research Assistant, Arizona State University, 2006–2009

NSF IGERT Graduate Research Assistant, Arizona State University, 2004–2009

NSF REU Undergraduate Research Assistant, The Evergreen State College, 2003–2004

Selected Honors and Awards:

ARCS Foundation Exceptional Mentor Award, 2018

Journal of Materials Chemistry Emerging Investigator, 2018

ASU Laboratory Safety Innovation Award, 2018

Electron Donor-Acceptor Interactions Gordon Research Conference Emerging Investigator, 2018

National Science Foundation CAREER Award, 2017

Photochemistry Gordon Research Conference Emerging Investigator (2017)

Julie Anne Wrigley Global Institute for Sustainability Scholar, 2017

Yale Edwin A. Bouchet Honor Society Fellow, 2011–present

Camille and Henry Dreyfus Foundation Energy Fellow, 2009 – 2011

Achievement Rewards for College Scientist (ARCS) Foundation Scholar, 2008 – 2009

Renewable Energy: Solar Fuels Gordon Research Conference Young Investigator Award, 2009

Electron Donor Acceptor Gordon Research Conference Young Investigator Award, 2008

Photosynthesis Gordon Research Conference Young Investigator Award, 2008

Carl Storm Underrepresented Minority Fellow, 2006

Alliance for Graduate Education and Professoriate Fellow, 2006 – 2009

National Science Foundation Fellow, 2004 – 2009

Ten Selected Publications:

1. “Electrocatalytic Properties of Binuclear Cu(II) Fused Porphyrins for Hydrogen Evolution” D.

Khusnutdinova, B. L. Wadsworth, M. Flores, A. M. Beiler, E. A. Reyes Cruz, Y. Zenkov, G. F. Moore, *ACS Catal.* **2018**, *8*, 9888–9898.

2. “Polymeric Coatings for Applications in Electrocatalytic and Photoelectrosynthetic Fuel Production”

B. L. Wadsworth, D. Khusnutdinova, G. F. Moore, *J. Mater. Chem. A.* **2018** *6*, 21654–21665.

3. “Pathways to Electrochemical Solar-Hydrogen Technologies” S. Ardo, D. F. Rivas, M. Modestino, V. S. Greiving, F. Abdi, E. A. Llado, V. Artero, K. Ayers, C. Battaglia, J-P. Becker, D. Bederak, A. Berger, F. Buda, E. Chinello, B. Dam, V. D. Palma, T. Edvinsson, K. Fujii, H. Gardeniers, H. Geerlings, M. Hashemi, S. Haussener, F. Houle, J. Huskens, B. James, K. Konrad, A. Kudo, P. P. Kunturu, D. Lohse, B. Mei, E. Miller, G. F. Moore, J. Muller, K. Orchard, R. Post, T. Rosser, F. Saadi, J-F. Schüttauf, B. Seger, S. Sheehan, J. Spurgeon, M. Tang, R. van de Krol, P. Vesborg, P. Westerik, *Energy Environ. Sci.* **2018**, *11*, 2768–2783.

4. “Metalloporphyrin-modified Semiconductors for Solar Fuel Production” D. Khusnutdinova, A. M. Beiler, B. L. Wadsworth, S. I. Jacob, and G. F. Moore, *Chem. Science*, **2017**, *8*, 253–259.

5. "Electrocatalytic and Optical Properties of Cobaloxime Catalysts Immobilized at a Surface-Grafted Polymer Interface" Brian. L. Wadsworth, A. M. Beiler, D. Khusnutdinova, S. I. Jacob, and G. F. Moore, *ACS Catal.* **2017**, *6*, 8048-8057.
6. "Solar Hydrogen Production Using Molecular Catalysts Immobilized on Gallium Phosphide (111)A and (111)B Polymer-Modified Photocathodes" A. M. Beiler, D. Khusnutdinova, S. I. Jacob, and G. F. Moore, *Appl. Matter. Interfaces* **2016**, *8*,10038–10048.
7. "Chemistry at the Interface: Polymer-Functionalized GaP Semiconductors for Solar Hydrogen Production" A. M. Beiler, D. Khusnutdinova, S. I. Jacob, and G. F. Moore, *Ind. Eng. Chem. Res.* **2016**, *55*, 5306–5314.
8. "Photofunctional Construct That Interfaces Molecular Cobalt-Based Catalysts for H₂ Production to a Visible-Light-Absorbing Semiconductor" A. Krawicz, J. Yang, E. Anzenberg, J. Yano, I. D. Sharp, and G. F. Moore, *J. Am. Chem. Soc.* **2013**, *135*, 11861–11868.
9. "Energy and Environment Policy Case for a Global Project on Artificial Photosynthesis," T. A. Faunce, W. Lubitz, A. W. Rutherford, P. Yang, D. G. Nocera, T. A. Moore, D. H. Gregory, S. Fukuzumi, K. B. Yoon, F. A. Armstrong, M. R. Wasielewski and S. Styring, *Energy Environ. Sci.* **2013**, *6*, 695–698.
10. "Energy Conversion in Photosynthesis: A Paradigm for Solar Fuel Production," G. F. Moore, and G. W. Brudvig, *Annu. Rev.: Condensed Matter Physics* **2011**, *2*, 303–327.

Selected Synergistic Activities:

- Conference Chair, 2021, Western Photosynthesis Conference
- Conference Chair, 2020, Inter-American Photochemical Society Winter Meeting
- Session Chair, 2015, ACS National Meeting ENV Division
- Session Chair, 2014, Western Photosynthesis Conference
- Session Chair, 2013, Western Photosynthesis Conference
- Conference Chair, 2012, Photosynthesis Gordon Seminar
- Instructor, 2013, DOE Solar Fuels Energy Hub Summer Workshop on Solar Energy Conversion and Surface Science at Berkeley Lab
- Mentor, 2015-Present, American Indian Science & Engineering Society (AISES)
- Invited Panel Discussion Participant, 2016, Lorenz Center Workshop "Pathways to Solar Hydrogen Technologies"
- Grand Judge, 2016, INTEL International Science & Engineering Fair
- Invited Speaker, 2015, Telluride Workshop on "Solar Solutions to Energy and Environmental Problems"
- Invited Lecturer, 2014, Royal Society Workshop: "Do We Need a Global Project on Artificial Photosynthesis"
- Invited Panel Discussion Participant, 2013, Berkeley Lab Film Screening of Switch: Discover the Future of Energy
- Invited Panel Speaker, 2011, Yale Climate and Energy Institute Public Talks: "Technology and our Emerging Energy Crisis"
- Invited Speaker, 2010, NSF Division of Human Resource Development Joint Annual Meeting
- Invited Speaker and Participant, 2010, MGE@MSA Second Annual Faculty Postdoctoral Mentoring Institute