

Address: School of Molecular Sciences
Arizona State University
Tempe, AZ 85297-1604, U.S.A.

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Email: Nghi.Nguyen@asu.edu

Education: **Arizona State University**, Tempe, AZ (2018 – now)

Graduate Student in Chemistry

Advisor: Gary F. Moore

University of Sciences, Ho Chi Minh City, Viet Nam (2013 – 2017)

B.S. in Chemistry

Advisor: Dr. Phuong T. Nguyen and Dr. Nhan P. B. Nguyen

Employment: **Arizona State University**, Tempe, AZ (2018-now)

Research and Teaching Assistant

ALT IELTS English School, Ho Chi Minh City, Viet Nam (2017-2018)

English Teacher

Fellowships, Awards, and Honors:

- (12) Conference Travel Award, from The Graduate College, Arizona State University (2022).
- (11) Completion Fellowship, from The Graduate College, Arizona State University (2022).
- (10) Outstanding Graduate Research Assistant Award, from School of Molecular Sciences, Arizona State University (2022).
- (9) Trophy and Medal from the American Chemical Society – Energy and Fuels Division (2021).
- (8) “SMS Innovation Award”, from School of Molecular Sciences, Arizona State University (2021).
- (7) “George U. Yuen Memorial Graduate Award” from School of Molecular Sciences, Arizona State University (2020).
- (6) “International Week Vienna” participant, Conference at Austrian Federal Economic Chamber from Vienna University of Economics and Business (2017)

CURRICULUM VITAE

- (5) Outstanding Student of University of Sciences Title (2014-2017) with “Encouragement Scholarship” from University of Sciences, Ho Chi Minh City (2014-2017)
- (4) “Education USA Standardized GRE” Scholarship from American Center, Consulate General of the United States – Ho Chi Minh city (2016)
- (3) YOLA Scholars 2016 for Young Leaders scholarship from Yola Institute (2016)
- (2) “Speak your mind” first prize English speaking contest – HCMUS (2016)
- (1) First runner-up “Ho Chi Minh University of Science Ambassador” (2015).

Journal Publications

At Arizona State University:

- (9) Nguyen, N. P.; Hensleigh, L. H., Nishiori, D.; Reyes Cruz, E. A.; Moore, G. F. Degrade-Repair Cycle of a Fuel-forming Photoelectrode. **2022**, under review.
- (8) Reyes Cruz, E. A.; Nishiori, D.; Wadsworth, B. L.; Nguyen, N. P.; Hensleigh, L. K.; Khusnutdinova, D; A. M.; Beiler, A. M.; Moore, G. F. Molecular-Modified Photocathodes for Applications in Artificial Photosynthesis and Solar-to-Fuel Technologies. *Chem. Rev.* **2022**. DOI: 10.1021/acs.chemrev.2c00200.
- (7) Nguyen, N. P.; Moore, G. F. Storing Sunlight at low temperature? *Joule*. **2021**, *5*, 2254-2256.
- (6) Nishiori, D.; Wadsworth, B. L.; Reyes Cruz, E. A.; Nguyen, N. P.; Hensleigh, L. K.; Karcher, T.; Moore, G. F. Photoelectrochemistry of Metalloporphyrin-Modified GaP Semiconductors. *Photosynth. Res.* **2021**. DOI: 10.1007/s11120-021-00834-2.
- (5) Nguyen, N. P.; Wadsworth, B. L.; Nishiori, D.; Reyes Cruz, E. A.; Moore, G. F. Understanding and Controlling the Performance-Limiting Steps of Catalysts-Modified Semiconductors. *J. Phys. Chem. Lett.* **2021**, *12*, 199-203.
- (4) Wadsworth, B. L.; Nguyen, N. P.; Nishiori, D.; Belier, A.M.; 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)
- (3) Wadsworth, B. L.; Nishiori, D.; Nguyen, N. P.; Nishiori, D.; Reyes Cruz, E. A.; Moore, G. F. Electrochemistry of Polymeric Cobaloxime-Containing Assemblies in Organic and Aqueous Solvents. *ECS J. Solid State Sci. Technol.* **2020**, *9*, 061018

At University of Sciences, Ho Chi Minh City:

CURRICULUM VITAE

- (2) Phan, Thu †; Nguyen, N. P. †; Nguyen, L.; Nguyen, P.; Le, K. T.; Huynh, T.; Lund, T.; Tsai, D.-H.; Wei, T.-C.; Nguyen, P. T. Direct experimental evidence for the adsorption of 4-tert-butylpyridine and 2,2'-bipyridine on TiO₂ surface and their influence on dye-sensitized solar cells' performance. *Appl. Surf. Sci.* **2019**, 144878. († denotes equal author contributions).
- (1) Nguyen, P.T.; Nguyen, N. P.; Nguyen, L.; 4,4'-dinonyl-2,2'-bipyridine as an alternative electrolyte additive for improving the thermal stability of ruthenium dyes in dye-sensitized solar cells. *J. Phys. Chem. Solids.* **2018**, 122, 234-238.

Meeting Presentations

- (8) Nguyen, N. P.; Nishiori, D.; Reyes Cruz, E. A.; Hensleigh, L. K.; Moore, G. F. Understanding and Controlling the Performance Limiting Steps of Catalyst-Modified Semiconductors, **Gordon Research Conference Electron Donor-Acceptor Interactions**, July 31 – August 5, 2022 (Poster Presentation).
- (7) Nguyen, N. P.; Wadsworth, B. L.; Nishiori, D.; Reyes Cruz, E. A.; Hensleigh, L. K.; Moore, G. F. Understanding and Controlling the Performance-Limiting Steps of Catalyst-Modified Semiconductors, **Biodesign Institute Fusion 2022**, April 8, 2022 (Poster Presentation).
- (6) Nguyen, N. P.; Wadsworth, Brian L.; Nishiori, Daiki; Beiler, Anna M.; Moore, G. F. Addressing the Origin of Photocurrents in Photoelectrosynthetic Assemblies containing Light-Absorbing Catalysts, **Inclusive Future Faculty Symposium 2022**, March 2022 (Poster Presentation).
- (5) Nguyen, N. P.; Wadsworth, B. L.; Nishiori, D.; Reyes Cruz, E. A.; Hensleigh, L. K.; Moore, G. F. Understanding and Controlling Factors Limiting the Performance of Catalyst-Modified Semiconductors, **ACS ENFL Student Seminar Series**, December 10, 2021 (Oral Presentation).
- (4) Nguyen, N. P.; Wadsworth, B. L.; Nishiori, D.; Reyes Cruz, E. A.; Hensleigh, L. K.; Moore, G. F. Understanding and Controlling the Performance-Limiting Steps of Catalyst-Modified Semiconductors., **Winter Poster Session 2021 on Artificial Photosynthesis**, December 7, 2021 (Poster Presentation).
- (3) Nguyen, N. P.; Wadsworth, B. L.; Nishiori, D.; Reyes Cruz, E. A.; Moore, G. F. Understanding and Controlling the Performance-Limiting Steps of Catalysts-Modified Semiconductors, **ACS Fall Meeting**, August 2021 (Oral Presentation).
- (2) Nguyen, N. P.; Wadsworth, B. L.; Nishiori, D.; Reyes Cruz, E. A.; Moore, G. F. Photoelectrochemistry of Gallium Phosphide and Gallium Arsenide Surfaces, **Materials Research Society Spring Meeting and Exhibit**, November 2020 (Poster Presentation).

CURRICULUM VITAE

- (1) Nguyen, N. P.; Wadsworth, Brian L.; Nishiori, Daiki; Beiler, Anna M.; Moore, G. F. Addressing the Origin of Photocurrents in Photoelectrosynthetic Assemblies containing Light-Absorbing Catalysts, **Inter-American Photochemical Society Meeting**, Sarasota, FL, January 2020 (Poster Presentation).

Teaching Experience

- (3) Arizona State University, Tempe, Arizona (2018-now)
Graduate Teaching Assistant
 - i. CHM 343 Elementary Physical Chemistry Laboratory
 - ii. CHM 348 Physical Chemistry I Laboratory
 - iii. CHM 116 General Chemistry II Laboratory
- (2) ALT IELTS, Ho Chi Minh City, Viet Nam (2017-2018)
English Teacher
- (1) Private Tutor (2013-2018)
Tutor in Math, Chemistry, Physics and English for High School Students

Outreach Activities

- (9) *Running On Sun* Internship (ROSI) for high school students at Gary. F. Moore lab, Tempe, AZ (2022).
- (8) Arizona Science and Engineering Fair, Judge – Senior Division-Material Science (2022).
- (7) “Together we thrive” – STEM panel invited speaker, Association of Vietnamese Students and Professionals in the United States, USA (2021).
- (6) Arizona State University’s *Home Coming* Event volunteer, Tempe, AZ (2021)
- (5) *Running On Sun* Internship (ROSI) for high school students at Gary. F. Moore lab, Tempe, AZ (2021).
- (4) Arizona State University’s *Open Door* Event volunteer, Tempe, AZ (2019)
- (3) Academic Global Leadership with Japanese Students in Ho Chi Minh City volunteer, Viet Nam (2017)
- (2) University Entrance Exam Support, Team Leader, Ho Chi Minh City, Viet Nam (2015-2016)
- (1) *Voluntary Spring* volunteer, Ho Chi Minh City, Viet Nam (2016-2017)

Internships

- (2) National Tsing Hua University, Department of Engineering, Hsinchu, Taiwan (2017)
Prof. Chien-Wei Wu research lab
- (1) *International Week Vienna*, University of Economics and Business, Vienna, Austria (2017)