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

Ph.D. candidate in Chemistry

Advisor: Gary F. Moore

The University of Tokyo, Tokyo, Japan (Apr 2018 – Aug 2018)

Ph.D. candidate in Chemistry

Advisor: Hiroshi Nishihara

The University of Tokyo, Tokyo, Japan (2016 – 2018)

M.S. in Chemistry

Advisor: Hiroshi Nishihara

The University of Tokyo, Tokyo, Japan (2012 – 2016)

B.S. in Chemistry

Advisor: Hiroshi Nishihara

Internships: **United Nations Industrial Development Organization (UNIDO)**, Vienna, Austria (Apr 2018 – Aug 2018)

Pennsylvania State University, State College, PA (Sep 2015 – Oct 2015)

Fellowships and Awards:

(5) Outstanding Graduate Research Assistant Award from Arizona State University (2020)

(4) Fellowship from Heiwa Nakajima Foundation (2018 – 2020)

(3) Tobitate! (Leap for Tomorrow) Study Abroad Program Scholarship from Japan's Ministry of Education, Culture, Sport, Science, and Technology (Apr 2018 – Aug 2018)

(2) Study and Visit Abroad Program (SAVP) scholarship from the University of Tokyo (2015)

- (1) Best Poster Presenter Award of "ICE (International Chemistry for English) Summer Seminar" from the University of Tokyo (2014)

Journal Publications

At Arizona State University:

- (7) Nguyen, N. P.; Wadsworth, B. L.; Nishiori, D.; Reyes Cruz, E. A.; Moore, G. F. **Understanding and Controlling the Performance-Limiting Steps of Catalyst-Modified Semiconductors**. *J. Phys. Chem. Lett.* **2021**, *12*, 199–203.
- (6) Wadsworth, B. L.; Nishiori, D.; Nguyen, N. P.; 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. (Invited contribution for a special issue in honor of Karl M. Kadish)
- (5) Wadsworth, B. L.; Nguyen, N. P.; Nishiori, D.; Beiler, A. M.; Moore, G. F. **Addressing the Origin of Photocurrents and Fuel Production Activities in Catalyst-Modified Semiconductor Electrodes**. *ACS Appl. Energy Mater.* **2020**, *3*, 7512–7519. (cover article)

At the University of Tokyo:

- (4) Nishiori, D.; Zhu, W.; Salles, R.; Miyachi, M.; Yamanoi, Y.; Ikuta, T.; Maehashi, K.; Tomo, T.; Nishihara, H. **Photosensing System Using Photosystem I and Gold Nanoparticle on Graphene Field-Effect Transistor**. *ACS Appl. Mater. Interfaces* **2019**, *11*, 42773–42779.
- (3) Henriksson, A.; Nishiori, D.; Maeda, H.; Miyachi, M.; Yamanoi, Y.; Nishihara, H. **Attachment Chemistry of Aromatic Compounds on a Silicon(100)**. *Surface. Surf. Sci.* **2018**, *669*, 140–144.
- (2) Miyachi, M.; Okuzono, K.; Nishiori, D.; Ikehira, S.; Tomo, T.; Allakhverdiev, S. I.; Yamanoi, Y.; Nishihara, H. **Photochemical hydrogen evolution by combining cyanobacterial photosystem I and a platinum nanoparticle-terminated molecular wire**. *Chem. Lett.* **2017**, *46*, 1479–1481.
- (1) Miyachi, M.; Ikehira, S.; Nishiori, D.; Yamanoi, Y.; Yamada, M.; Iwai, M.; Tomo, T.; Allakhverdiev, S. I.; Nishihara, H. **Photocurrent Generation of Reconstituted Photosystem II on Self-Assembled Gold Film**. *Langmuir* **2017**, *33*, 1351–1358.

Poster Presentations

- (5) Nishiori, D.; Wadsworth, B. L.; Reyes Cruz, E. A.; Nguyen, N. P.; Moore, G. F. Photoelectrochemistry of Metalloporphyrin-Modified Gallium Phosphide Surfaces,

Materials Research Society Spring Meeting and Exhibit, Virtual Meeting, November 2020.

- (4) Nishiori, D.; Ikuta, T.; Miyachi, M.; Maehashi, K.; Tomo, T.; Yamanoi, Y.; Nishihara, H. A Light Sensor Based on Photosystem I and Graphene FET, **8th Meeting of Molecular Architectonics**, December 2017.
- (3) Nishiori, D.; Miyachi, M.; Okuzono, K.; Yamanoi, Y.; Tomo, T.; Iwai, M.; Allakhverdiev, S. I.; Nishihara, H. Photochemical Hydrogen Evolution with Cyanobacterial Photosystem I - Platinum nanoparticle Hybrid Systems, **The 5th Ito International Research Conferences**, November 2017.
- (2) Nishiori, D.; Miyachi, M. Okuzono, K.; Yamanoi, Y.; Tomo, T.; Iwai, M.; Allakhverdiev, S. I.; Nishihara, H. Photochemical hydrogen evolution with cyanobacterial photosystem I–platinum nanoparticle hybrid systems, **8th International Conference 'Photosynthesis and Hydrogen Energy Research for Sustainability-2017**, October 2017.
- (1) Nishiori, D.; Miyachi, M.; Ikehira, S.; Liu, W.; Yamanoi, Y.; Yamada, M.; Iwai, M.; Tomo, T.; Allakhverdiev, S. I.; Nishihara, H. Construction and electrochemical analysis of Photosystem II – Platinum nanoparticle complex linked by a molecular wire, **19th Annual meeting of The Photobiology Association of Japan**, September 2016.

Teaching Experience

- (1) Arizona State University, Tempe, Arizona (2018–2020)
Graduate Teaching Assistant
 - i. CHM 114 General Chemistry Laboratory
 - ii. CHM 116 General Chemistry Laboratory

Outreach Activities

- (2) 2019 MRS Spring Meeting & Exhibit Symposium Assistant (2019)
- (1) NPO Matching Hongo (2018)