

Chia-Ying Chiang 江佳穎+886-2-27376641
cychiang@mail.ntust.edu.tw**EDUCATION**

Ph.D. in Chemical & Biomolecular Engineering , University of Maryland, MD, USA	May 2012
M.S. in Chemical Engineering , National Taiwan University, Taipei, Taiwan	June 2008
B.S. in Chemical Engineering , National Taiwan University, Taipei, Taiwan	June 2006

EXPERIENCE

Assistant Professor <i>National Taiwan University of Science and Technology, Taipei, Taiwan</i>	2013-
Postdoctoral Fellow <i>Institute of Atomic and Molecular Sciences, Academia Sinica, Taipei, Taiwan</i>	2012-2013
Lecturer <i>Department of Chemical & Biomolecular Engineering, University of Maryland, College Park, MD, USA</i>	2012

HONORS & AWARDS

• Recruitments of Special Outstanding Personnel with Subsidies from the National Science Council, Executive Yuan, Taiwan	2013-2015
• Academia Sinica Postdoctoral Research Fellowship	2013
• Chemical and Biomolecular Engineering Doctoral Research Award	2012
• Poster Award, ResearchFest, Maryland	2012
• IGERT Symposium Award, Energy and Sustainability Conference, Delaware	2011
• Outstanding Teaching Assistant Service Award	2010
• University of Maryland Graduate Assistantship	2009-2012
• Anneke Levelt Sengers Graduate Fellowship	2008-2009
• A. James Clark School of Engineering Distinguished Fellowship	2008-2009
• Cathay Life Scholarship	2006-2008
• Chang Hwa Bank Scholarship	2002-2008

PROJECTS

• The catalytic effects of MoS ₂ for water splitting hydrogen evolution reaction (NSC 102-2218-E-011 -019 -MY2)	2013-2015
• Catalysts for oxygen evolution reaction – metal oxides (MOST 104-2221-E-011-147-)	2015-2016

PUBLICATIONS

1. C. W. Chen, P. T. Ting, **C. Y. Chiang***, (2016) Niobium-Containing Amorphous Metal Oxide Catalysts for Oxygen Evolution Reaction. *Electrochimica Acta*, ISE15-09-04, under review.
2. **C. Y. Chiang***, Y. Shin, S. Ehrman (2016) Dopant Effects on Conductivity in Copper Oxide Photoelectrochemical Cells. *Applied Energy*, 164, 1039-1042. (SCI, EI)
3. Y. H. Chang, F. Y. Wu, T. Y. Chen, C. L. Hsu, F. Wiryo, K. W. Wei, **C. Y. Chiang**, L. J. Li* (2014) Three-Dimensional Molybdenum Sulfide Sponges for Electrocatalytic Water Splitting. *Small*, 10, 895-900. (SCI, EI)
4. T. Y. Chen, Y. H. Chang, C. L. Hsu, K. W. Wei, **C. Y. Chiang***, L. J. Li* (2013) Comparative Study on Thermolysis-Produced MoS₂ and WS₂ for Electrocatalytic Water Splitting. *International Journal of Hydrogen Energy*, 38, 12302-12309 (SCI, EI)
5. **C. Y. Chiang**, Y. Shin, K. Aroh, S. Ehrman* (2012) Copper Oxide Photocathodes Prepared by a Solution Based Process. *International Journal of Hydrogen Energy*, 37, 8232-8239. (SCI, EI)
6. **C. Y. Chiang**, Y. Y. Liu, Y. S. Chen, H. S. Liu* (2012) Absorption of Hydrophobic Volatile Organic Compounds by a Rotating Packed Bed. *Industrial & Engineering Chemistry Research*, 51, 9441-9445 (SCI, EI)
7. **C. Y. Chiang**, J. Epstein, A. Brown, J. N. Munday, J. Culver, S. Ehrman* (2012) Biological Templates for Anti Reflective Current Collectors for Photoelectrochemical Cell Applications. *Nano Letters*, 12, 6005-6011. (SCI, EI)
8. **C. Y. Chiang**, M. H. Chang, H. S. Liu, C. Y. Tai, S. Ehrman* (2012) Process Intensification in The Production of Photocatalysts for Solar Hydrogen Generation. *Industrial & Engineering Chemistry Research*, 51, 5207-5215. (SCI, EI)

9. **C. Y. Chiang**, Y. Shin, S. Ehrman* (2012) Li Doped CuO Film Electrodes for Photoelectrochemical Cells. *Journal of The Electrochemical Society*, 159, B227-B231. (SCI, EI)
10. **C. Y. Chiang**, K. Aroh, S. Ehrman*, (2012) Copper Oxide Nanoparticle Made by Flame Spray Pyrolysis for Photoelectrochemical Water Splitting – Part I. CuO Nanoparticle Preparation.. *International Journal of Hydrogen Energy*, 37, 4871-4879. (SCI, EI)
11. **C. Y. Chiang**, K. Aroh, N. Franson, V. R. Satsang, S. Dass, S. Ehrman*(2011) Copper Oxide Nanoparticle Made by Flame Spray Pyrolysis for Photoelectrochemical Water Splitting – Part II. Photoelectrochemical Study. *International Journal of Hydrogen Energy*, 36, 15519-15526. (SCI, EI)
12. **C. Y. Chiang**, Y. S. Chen, M. S. Liang, F. Y. Lin, C. Y. D. Tai, H. S. Liu*, (2009) Absorption of Ethanol into Water and Glycerol/Water Solution in a Rotating Packed Bed. *Journal of the Taiwan Institute of Chemical Engineers*, 40, 418-423 (SCI, EI)

PROCEEDING

1. **Chiang, C. Y.**; Shin, Y.; Ehrman, S. “Dopant Effects on Copper Oxide Photoelectrochemical Cell Water Splitting.” *Energy Procedia*, (2014) 61, 1799-1802.

CONFERENCE PRESENTATIONS

1. Chiang, C. Y., Ting, P. T. “Multi-components Amorphous Metal-Oxides Catalysts for Oxygen Evolution Reaction,” 66th Annual Meeting of the International Society of Electrochemistry, Taipei, Taiwan, October 2015 (oral)
2. Lee, K. C., Chiang, C. Y. “MoS_x for Electrocatalytic Water Splitting Hydrogen Evolution Reaction,” International Symposium on Relations between Homogeneous and Heterogeneous Catalysis, Utrecht, the Netherlands, July 2015 (poster)
3. Lee, K. C., Chiang, C. Y. “Molybdenum Sulfide Synthesized by Thermo-decomposing as Hydrogen Evolution Catalyst,” 61 週年化工年會，元智大學，桃園，Dec 2014 (poster)
4. **(Invited Talk)** Chiang, C. Y. “Photoelectrochemical Cell Water Splitting Hydrogen Generation by CuO Photocathodes,” The International Conference on Nanocatalysts for Green Technologies, Taipei, Taiwan, Nov 2014
5. Chiang, C. Y.; “Metal Sulfide Catalysts in Electrocatalytic Water Splitting Reaction,” International Research Conference on Engineering and Technology, Bali, Indonesia, June 2014 (poster)
6. Chiang, C. Y.; Shin, Y.; Ehrman, S. “Dopant Effects on Copper Oxide Photoelectrochemical Cell Water Splitting,” The 6th International Conference on Applied Energy, Taipei, Taiwan, May 2014 (oral)
7. Chiang, C. Y.; Ehrman, S. “Bio-template nanostructures for photoelectrochemical cell applications,” Engineering Sustainability Workshop, College Park, MD, April 2012. (oral)
8. **(Poster Award)** Chiang, C. Y.; Ehrman, S. “Biological templates for anti-reflecting surface and current collectors for photoelectrochemical cell applications,” ResearchFest, College Park, MD, March 2012. (poster)
9. **(Invited Plenary Talk)** Chiang, C. Y.; Ehrman, S. “Copper Oxide Nanoarchitectures for Photoelectrochemical Hydrogen Generation.” Space, Propulsion & Energy Sciences International Forum, College Park, MD, March 2012. (oral)
10. Chiang, C. Y.; Aroh, K.; Franson, N.; Ehrman, S. “Photoelectrochemical Water Splitting by p-type Copper Oxide Photocathode with Scalable Processes.” AIChE Annual Meeting, Minneapolis, MN, October 2011. (oral)
11. **(IGERT Symposium Award)** Chiang, C. Y.; Shin, Y.; Aroh, K.; Ehrman, S. “Industrial Waste to Hydrogen Energy via a Copper Oxide Photoelectrochemical Cell.” Energy and Sustainability Conference, Newark, DE, Sep 2011. (poster)
12. Chiang, C. Y.; Aroh, K.; Ehrman, S. “Preparation and Modeling of CuO Nanoparticles Formation and Growth in Flame Spray Pyrolysis.” 42nd ACS Middle Atlantic Regional Meeting, College Park, MD, May 2011. (poster)
13. Chiang, C. Y.; Dass, S.; Satsangi, V. R.; Shrivastav, R.; Sharma, V.; Kumar, P. Ehrman, S. H. “Nano Copper Oxide – from Flame Spray Pyrolysis to Photoelectrochemical Hydrogen Generation.” AIChE Annual Meeting, Salt Lake City, UT, November 2010. (oral)
14. Chiang, C. Y.; Liu, H. S. “Stripping Methanol from a High Viscosity by a Rotating Packed Bed.” AIChE Annual Meeting, Salt Lake City, UT, November 2010. (oral)
15. Chiang, C. Y.; Emmanuel, J.; Ehrman, S. H.; Shrivastava, J.; Singh, A.; Satsangi, V. R.; Shrivastav, R.; Dass, S. “Copper Oxide Nanoparticles via Flame Spray Pyrolysis for Photoelectrochemical Hydrogen Production” Functional Oxides for Renewable Energy, Cambridge, MA, March 2009. (poster)

SERVICES

Reviewer: Advanced Powder Technology (2013-), Scientific Reports (2014-)

AFFILIATION

American Institute of Chemical Engineers

2011

OTHER ACTIVITIES

1. **Mentor:** ESTEEM (Engineering Science and Technology to Energize and Expand Young Minds) research Mentoring Program – 11th Annual Research Symposium, **2011-2012**.
 2. **Mentor:** ESTEEM (Engineering Science and Technology to Energize and Expand Young Minds) research Mentoring Program – 10th Annual Research Symposium, **2010-2011**.
 3. **Visiting Scholar:** Dept. of Chemistry and Dept. of Physics and Computer Science, Dayalbagh Educational Institute, Agra, India. July **2009**.
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Update: 2016/3/3