

Leo Ya-Dong, Chiang

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EDUCATION

- **M.S. in Chemical Engineering, National Taiwan University (NTU)**, Taipei, Taiwan Jan. 2012-Jul. 2013
GPA: 4.10/4.30
Advisor: Kevin C.-W. Wu
Thesis: Triazabicyclodecene Functionalized Fe₃O₄@silica Nanoparticles as an Effective Catalyst for Biodiesel Production from a Co-Solvent Extracted Algae Oil
- **B.S. in Chemical Engineering, National Taiwan University (NTU)**, Taipei, Taiwan Sep. 2007-Jan. 2012
GPA: 3.83/4.00

RESEARCH EXPERIENCE

- **Grant Executor & Project Coordinator** Feb. 2012-Aug. 2013
Taiwan National Science Foundation Interdisciplinary Project, NTU
Direct conversion of micro-algae biomass to biodiesel
- **Visiting Researcher at National Institution for Material Science**, Tsukuba, Japan Jul. 2011-Aug. 2012
Synthesis and of analogues of Prussian Blue nanoparticles and its application of cesium adsorption
Supervisor: Dr. Yusuke Yamauchi
- Individual Study, NTU Sep. 2010-Jun. 2012

PUBLICATIONS

Journal Papers

- **Ya-Dong Chiang**, Saikat Dutta, Ching-Tien Chen, Yu-Tzu Huang, Kuen-Song Lin, Jeffrey C. S. Wu, Norihiro Suzuki, Yusuke Yamauchi, Kevin C.-W. Wu. *Triazabicyclodecene-Functionalized Fe₃O₄@Silica Core-Shell Nanoparticles as an Efficient Microalgae Harvester and Catalyst for Biodiesel Production*. ChemSusChem. 2015, 8, 789 **IF=7.117**
- Hsin-Wei Chen, **Ya-Dong Chiang**, Chung-Wei Kung, Nobuya Sakai, Masashi Ikegami, Yusuke Yamauchi, Kevin C.-W. Wu, Tsutomu Miyasaka, Kuo-Chuan, Ho, *Highly efficient plastic-based quasi-solid-state dye-sensitized solar cells with light-harvesting mesoporous silica nanoparticles gel-electrolyt*. Journal of Power Sources. 2014, 245, 411 **IF=5.211**
- **Ya-Dong Chiang**, Ming Hu, Yuichiro Kamachi, Shinsuke Ishihara, Kimiko Takai, Yoshihiro Tsujimoto, Katsuhiko Ariga, Kevin C.-W. Wu,* and Yusuke Yamauchi.* *Rational Design and Synthesis of Cyano-Bridged Coordination Polymers with Precise Control of Particle Size from 20 to 500 nm*. European Journal of Inorganic Chemistry. 2013. 18, 3141 **IF=2.965**
- Norihiro Suzuki, Yuichiro Kamachi, **Ya-Dong Chiang**, Kevin C.-W. Wu, Shinsuke Ishihara, Keisuke Sato, Naoki Fukata, Mikiya Matsuura, Kazuhiko Maekawa, Hirofumi Tanabe, Katsuhiko Ariga and Yusuke Yamauchi. *Synthesis of mesoporous antimony-doped tin oxide (ATO) thin films and investigation of their electrical conductivity*, CrystEngComm, 2013, 15, 4404 **IF=3.858**
- Juan L. Vivero-Escoto, **Ya-Dong Chiang**, Kevin C.-W. Wu*, Yusuke Yamauchi*, *Recent progress in mesoporous titania materials: morphological controls for innovative applications*, Science and Technology of Advanced Materials, 2012, 13, 013003 **IF=2.613**
- Ming Hu, Nagylabieb kamal Torad, **Ya-Dong Chiang**, Kevin Chia-Wen Wu, Yusuke Yamauchi. *Size- and Shape-Controlled Synthesis of Prussian Blue Nanoparticles by Polyvinylpyrrolidone-Assisted Crystallization Process*. CrystEngComm, 2012, 14, 3387 **IF=3.858**
- Norihiro Suzuki, Mohamed B. Zakaria, **Ya-Dong Chiang**, Kevin Chia-Wen Wu*, Yusuke Yamauchi*. *Thermally stable polymer composites with improved transparency by using colloidal mesoporous silica nanoparticles as inorganic fillers*. Physical Chemistry Chemical Physics, 2012, 14, 7427 **IF=4.198**
- **Ya-Dong Chiang**, Hong-Yuan Lian, Sin-Yen Leo, Shy-Guey Wang, Yusuke Yamauchi*, and Kevin C.-W. Wu*, *Controlling Particle Size and Structural Properties of Mesoporous Silica Nanoparticles Using the Taguchi Method*, Journal of Physical Chemistry C, 2011, 115, 13158 **IF=4.835**

Patents

- Chia Wen Wu, **Ya-Dong Chiang**, Chi Sheng Wu, Kuen Song Lin, Yu Tzu Huang. 2014. *A Method for Producing Fatty Acid Alkyl Ester*. Patent No.: I468518

WORK EXPERIENCE

- **Research Assistant**, Department of Chemical Engineering, NTU Nov. 2014-present
In charge of one international (*2015 International Conference on Nanospace Materials*) and one domestic (*The 33rd Taiwan Symposium on Catalysis and Reaction Engineering*) conference management
- **Tutor**, of science and mathematics to high school students Aug. 2008-present
- **Private**, mandatory military service, Army of the R.O.C., Taipei Taiwan Sep. 2013-Aug. 2014
- **Teaching Assistant**, Thin-film Technology and Surface Feb. 2013-Jun. 2013
In charge of teaching and demonstrating the operation of spin coater
- **Laboratory Assistant**, ChE **Common Apparatus**: X-ray diffractometer, Rigaku Sep. 2012-Jun. 2013
In charge of machine maintenance and beginners' qualification
- **Staff**, part-time, at Starbucks Aug. 2010-Dec. 2010

PRESENTATIONS

- **31rd National Conference of Catalyst and Reaction Engineering** Jun. 27-28, 2013
Tainan Taiwan. **Poster**. *Functionalized Mesoporous Silica Nanoparticles for One-Pot Algae-to-Biodiesel Conversion*
- **Third International Conference on Multifunctional, Hybrid and Nano-materials** Mar. 3-7, 2013
Sorrento, Italy. **Poster**. *Controlling Particle Size and Structural Properties of Mesoporous Silica Nanoparticles Using the Taguchi Method*
- **The 58th Annual Meeting of the Taiwan Institute of Chemical Engineering** Nov. 25-26, 2011
Tainan, Taiwan. **Poster**. *Controlling Particle Size and Structural Properties of Mesoporous Silica Nanoparticles Using the Taguchi Method*
- **23rd International Symposium of Chemical Engineering** Dec. 4, 2010
Fukuoka, Japan. **Oral presentation**. *Size control of mesoporous silica nanoparticles using Taguchi method*

SKILLS

Proficient	<ul style="list-style-type: none">• Microsoft office	<ul style="list-style-type: none">• X-ray diffractor*• Nitrogen ads./des. measurement*• Zetasizer*• Gas chromatography
Adept	<ul style="list-style-type: none">• Adobe Illustrator• Adobe Photoshop• Matlab	<ul style="list-style-type: none">• Scanning electronic microscopy*• Fourier transform infrared spectroscopy

*licensed by technicians in Chemical Engineering department in NTU

AWARDS

- **STAM Best Paper Award** for Science and Technology of Advanced Materials, 2014
Recent progress in mesoporous titania materials: morphological controls for innovative applications
- **Poster Award** : 31st National Conference of Catalyst and Reaction Engineering, 2013
Functionalized silica nanoparticles with magnetic cores for one-pot algae-to-biodiesel conversion
- **Student Scholarship**, Dayuan Township
Living subsidies from Fall 2005 to Spring 2013
- **Student Scholarship**, Farmers Association
Living subsidies from Fall 2005 to Spring 2013
- **Excellence Scholarship**, Tripod Foundation
Full tuition support from Spring 2007 to Spring 2009

EXTRACURRICULAR ACTIVITIES

- **2013 Career Discovery Camp, Dupont® Taiwan and Unimicron**, Taiwan Apr. 2013
Camper, learning to construct career relationship and to present a profitable project of future-product design and of its marketing analysis
- **13rd Asia Pacific Confederation of Chemical Engineering Congress (APCChE-XIII)** Oct. 5-8, 2010
Taipei, Taiwan. **Volunteer Staff**
- **Badminton Club**, Department of Chemical Engineering, National Taiwan University
Engaged for 6 years and was team leader in 2010