

YU-HSIANG (JEFFERY) WANG

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• Website: jefferywangblog.wordpress.com

EDUCATION

- University of Minnesota, College of Science and Engineering, Minneapolis, MN Anticipated
May 2018
Master of Science in Microbial Engineering
Research focuses on developing CVD processes to generate nanocarbon materials from cellulose fibers for chemical processing and biosensing applications
Honor: Industrial Partnership & Materials Engineering Graduate Assistantship
- National Taipei University of Technology, College of Engineering, Taipei, Taiwan July 2005
Master of Science in Chemical Engineering
Studied organic synthesis, organic light-emitting diode, and catalytic converter
- Ming-Chi University of Technology, College of Engineering, Taipei, Taiwan July 2003
Bachelor of Science in Biochemical Engineering
Designed and synthesized a solar pump system at a molecular level to capture and store solar energy
Honor: Outstanding Student Award

INDUSTRY EXPERIENCE

- Formosa Plastics Group, Nan-Ya Printed Circuit Board Corporation, Taoyuan, Taiwan 2010 - 2014
Senior Research & Development Engineer
- Coordinated raw material suppliers, production lines, quality assurance and sales department to manufacture cutting edge printed circuit boards for AMD™, Intel®, and Broadcom®
 - Engaged in the innovative programs of backend and printed electronics process, developing 90 μm micro-ball mounting process for new generation Intel® CPU products
 - Led Japan-Taiwan coreless technology transfer team, expanding new production lines for coreless products, coordinating communication between local and international companies
- Tatung Technologies Incorporated, Fuel Cell Development Department, Taipei, Taiwan 2007 - 2010
Fuel Cell System Engineer
- Developed methanol-to-hydrogen catalytic converters for 1.5 kwatts fuel cell systems, systematically analyzing failure modes and taking a proactive approach to solve issues
 - Worked with equipment engineers to increase the efficiency of fuel cell systems, successfully reducing the activation time by 45%
 - Acquired 40,000 USD funding from Ministry of Economic Affairs for developing portable fuel cell systems

PATENT OWNERSHIP AND PUBLICATION

- Patent: Lin, J., Wang, Y. J., & Chih, C. (2010). Fuel cell system and method for operating the same. US20100062292 A1
- Select Publication: Elangovan, A., Wang, Y. J., & Ho, T. (2003). Sonogashira Coupling Reaction with Diminished Homocoupling. Organic Letters, 5(11), 1841-1844.

TECHNICAL EXPERTISE

- **Characterization Techniques:** Atomic Force Microscopy, Nanoindentation, Gas chromatography–mass spectrometry (GC-MS), Nuclear magnetic resonance spectroscopy (NMR), High-performance liquid chromatography (HPLC), Scanning Electron Microscope (SEM)
- **Modeling Techniques:** SolidWorks, Pro/E, COMSOL Multiphysics
- **Software:** Excel, Matlab, R

LEADERSHIP AND PUBLIC SERVICE

- Vice President** of ConneXions International Student Organization (coordinating international student social activities and cultural learning classes) 2017 - present
- Trustee** of Stadium Village Church, Minneapolis, MN (defining budgets, documenting all revenues and expenditures, and managing physical properties) 2016 - present
- Lead Engineer** of Coreless Technology Transfer Team in Nan-Ya PCB Corporation, Taiwan 2012 - 2014
Vice President of Judo club at the Ming-Chi University of Technology, Taiwan 1997 - 2000
(recruiting new members, managing finances, and designing curriculum with national coaches)