

Education

National Taiwan University (NTU), Taipei, Taiwan

Sep. 2009 – June. 2011

- Master of science in mechanical engineering
- GPA Overall: 3.89/4.0(90.7/100), 30 credits
- Presenter of International Solar Energy Society (ISES) congress, 2011

National Tsing Hua University (NTHU), HsinChu, Taiwan

Sep. 2005- June. 2009

- Bachelor of science in department of power mechanical engineering
- GPA Overall: 3.84/4.0 (85.94/100), 171 credits
- President of Student Association in Power Mechanical Engineering department, 2008

Working Experience

Foundation of Taiwan Industry Service (FTIS), Taipei, Taiwan

Mar. 2014 – Apr. 2015

Engineer

- ✓ Collaborated with United Microelectronics Corporation (UMC) for Project “Boosting Life Cycle Assessment use in Small to Medium Enterprises(SMEs)” to develop a web-tool for IC chip’s carbon footprint assessment
- ✓ Organized project of “Energy Efficiency Promotion Counseling in Campus” with Ministry of Education (MOE), Taiwan(R.O.C.) and completed over 20 universities on-the-spot inspection and optimize campus energy utilizing

Taiwan Semiconductor Manufacturing Company (TSMC), Hsin Chu, Taiwan

Oct. 2012 – Feb. 2014

Process Engineer

- ✓ Analyzed defect and prevent wafer breakage in 12” wafer and optimized production rate in 40 and 28 nano-process
- ✓ Transferred 16 nano-process technology from RD and improved production line stability

Air Defense Missile Command, the Republic of China Air Force, New Taipei, Taiwan

Oct. 2011 – Sep. 2012

Airman

- ✓ Maintain refrigeration equipment of anti-missile system including compressor replacement, refrigerant inspection.

Research Experience

Product Life cycle assessment

July. 2014 – Feb. 2015

- Verifying ‘LCA to go web tool’ by Carbon Footprint Verification in 6 types of IC Chip which utilizes Simapro software simulation and completed on-the-spot inspection in 10 suppliers of UMC

Wafer Breakage Prevention

Oct. 2012 – Feb. 2014

- Saving millions of dollars for TSMC by utilizing big data concept to analyze wafer breakage information and target culprits which successfully reduce hundreds of thousands 12 inches wafer from breakage in annealing tools

Solar-assisted ejector cooling system(SACH)

June. 2010 – Sep. 2011

- Developing a SACH system includes circuit design for data logging, system controlling and mechanical structure design, hardware assembling for the SACH system
- Employing field test on SACH system with solar energy and use PID control to optimize the SACH system increase 30-40% COP in overall system compared with traditional air-conditioner.

Publications

Bin-Juine Huang, Wei-Zhe Ton, Chen-Chun Wu, Hua-Wei Ko, Hsien-Shun Chang, Rue-Her Yen, Jiunn-Cherng Wang

“Maximum-power-point tracking control of solar heating system”, Solar Energy 86, Aug, 2012

Bin-Juine Huang, Wei-Zhe Ton, Chen-Chun Wu, Hua-Wei Ko, Hsien-Shun Chang, Hang-Yuen Hsu, Jen-Hao Liu, Jia-Hung Wu, Rue-Her

Yen “Performance test of solar-assisted ejector cooling system”, International Journal of Refrigeration, 2014