Curriculum Vitae
CHIA-HUNG HUNG

Education

Missouri University of Science and Technology 01/2016-Current
PhD student in Mechanical Engineering
Supervisor: Dr. Ming Leu
Research Topic: Laser Foil Printing Technology

National Taiwan University of Science and Technology, Taipei, Taiwan 09/2011-06/2014
Master in Mechanical Engineering GPA: 3.75
Supervisor: Dr. Fuh-Yu Chang
Thesis Title: A Study of Nitinol Biliary Stent Fabrication by Femtosecond Laser Ablation Process

National Taiwan University of Science and Technology, Taipei, Taiwan 09/2007-06/2011
Bachelor in Mechanical Engineering GPA: 3.83 Rank: 3/81

Research Experience

- **Visiting Graduate Student, Missouri University of Science and Technology, USA** 05/2013-04/2014
  Supervisor: Professor Hai-Lung Tsai
  Conduct research in femtosecond laser micromachining:

- Using a femtosecond laser beam to dissociate water to hydrogen and oxygen and utilize this phenomenon on improving the efficiency of glass drilling process.
- Set up a dual-beam laser system which is combined femtosecond and nanosecond laser to integrate into a laser beam to manufacturing non-conductive materials.
- Design a laser beam system to separate a pulse to two pulse, and freely alter the first pulse and second pulse energy proportion.

- **Research assistant, Industrial Technology Research Institute (ITRI), Taiwan** 07/2011-03/2013

- Develop a novel method for enhancing the laser ablation rate and reducing the amount of energy accumulated within the materials of a NiTi tube in femtosecond laser micromachining process with galvano-mirror scanner.
- Through the unique characteristics of Gaussian laser beam fabricates rounded edges of nitinol biliary stent from sharp and square edges.
- Forming microstructure on nitinol surfaces to enhance the wettability by femtosecond laser scanning.

Publications

- ***Published Journal Papers***

1. Chia-Hung Hung, Fuh-Yu Chang, Tien-Li Chang, Yu-Ting Chang, Kai-Wen Huang, and Po-Chin Liang. "Femtosecond Laser Nonlinear Ablation Process of Biliary Nitinol Stent for Cholangiocarcinoma" *Advanced Materials Research* 699. (2013): 859-863.

2. Chia-Hung Hung, Fuh-Yu Chang, Tien-Li Chang, Yu-Ting Chang, Kai-Wen Huang, and Po-Chin Liang. "Micromachining NiTi Tube for Use in Medical Devices by Using a Femtosecond Laser" *Journal of Optics and Lasers in Engineering* 66. (2015): 33-40.

Grants

03/2008	First Bank Scholarship (US$304)
07/2010	Scholarship of industrial human resources training program in the field precision machinery, Industrial Development Bureau, Ministry of Economic (US$923)
09/2010	Lung-Shan Temple Scholarship (US$304)
05/2013-04/2014	Research grant for overseas internship (US$13,521), Ministry of Education, Taiwan Pilot Overseas Internships, Missouri University of Science and Technology, MO, USA

Honors

1st Semester, 2007	Certificate of Excellence, National Taiwan University of Science and Technology
2nd Semester, 2007	Certificate of Excellence, National Taiwan University of Science and Technology
1st Semester, 2008	Certificate of Excellence, National Taiwan University of Science and Technology
2nd Semester, 2008	Certificate of Excellence, National Taiwan University of Science and Technology
1st Semester, 2009	Certificate of Excellence, National Taiwan University of Science and Technology
2nd Semester, 2009	Certificate of Excellence, National Taiwan University of Science and Technology
06/2010	Optimal Mechanism Design, NTUST Robot Competition, National Taiwan University of Science and Technology, Taiwan

Employment

06/2009-07/2010	Intern, Asus Campus Executive Officer Program, Taiwan ASUS Campus Executive Officer Program to accomplish the business tasks and conducted marketing training; reported market analysis and execution performance to the managers.
01/2015-01/2016	Substitute Military Service, Beitou Refuse Incineration Plant, Department of Environment Protection, Taipei City Government, Taiwan