

## Education

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**Aug 2009 – Sep 2011** M.S. in Organic Chemistry, National Taiwan University, Taiwan

**Sep 2005 – Jul 2009** B.Sc. in Chemistry, Chung Yuan Christian University, Taiwan

## Professional Experience

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**Aug 2016 – Present** PhD student, King Abdullah University of Science and Technology

**Aug 2014 – Jul 2016** Chung Yuan Christian University, Taiwan

Lecturer of organic chemistry, instructed and supervised six 60-undergraduate internship sections in organic synthesis in lab per week.

**Oct 2011 – Feb 2014** Great Eastern Resins Industrial Co. Ltd., Taiwan

- In collaboration with the NIKE R&D Department of the United States on the TPU applied to gulf products, commercially available had successfully replaced in the marketing.
- Developed the high moisture vapor transmission grade of TPU with Nam Liong Enterprise Co., LTD, manufactured in bulkmass production, to supply of materials applied to GORE-TEX stability.

**Aug 2009 – Sep 2011** National Taiwan University, Taiwan

Graduate Researcher with Prof. Tien-Yau Luh on developed the first polynorbornene-based double-stranded ladderphanes with macrocyclic metallic linkers; The STM image of Ni-containing polymeric ladderphane shows an ordered pattern on the graphite surface by self-assembly.

**Jul 2007 – Jul 2009** Chung Yuan Christian University, Taiwan

Undergraduate Researcher with Prof. Jui-Ming Yeh on synthesized organic soluble polyimide with organo-modified montmorillonite; Studied the anticorrosion properties at different operational temperatures by electrochemical measurements.

## Publications

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1. **Huang, H.-H.**; Chao, C.-G.; Lee, S.-L.; Wu, H.-J.; Chen, C.-h.; Luh, T.-Y.\* “Double Stranded Polymeric Ladderphanes with 16- $\pi$ -Electron Antiaromatic Metallocycle Linkers” *Org. Biomol. Chem.*, **2012**, 10(30), 5948-5953.
2. Yang, K.-W.; Xu, J.; Chen, C.-H.; **Huang, H.-H.**; Yu, J.-Y. Tony; Lim, T.-S.; Chen, C.-h.; Luh, T.-Y.\* “Triple-Stranded Polymeric Ladderphanes” *Macromolecules*, **2010**, 43, 5188–5194.
3. Chang, K.-C.; **Huang, H.-H.**; Lai, M.-C.; Hung, C.-B.; Chand, B.; Yeh, J.-M.\*; Yu, Y.-H. “Comparative Electrochemical Studies at Different Operational Temperatures for the Effect of Nanoclay Platelets on the Anticorrosion Efficiency of Organo-Soluble Polyimide/Clay Nanocomposite Coatings” *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 3125-3133.
4. Chang, K.-C.; Lin, H.-F.; Lin, C.-Y.; Kuo, T.-H.; **Huang, H.-H.**; Hsu, S.-C.; Yeh, J.-M.\*; Yang, J.-C.; Yu, Y.-H. “Effect of Amino-Modified Silica Nano-Particles on the Corrosion Protection Properties of Epoxy Resin-Silica Hybrid Materials” *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 3040-3049.
5. Chang, K.-C.; Chen, S.-T.; Lin, H.-F.; Lin, C.-Y.; **Huang, H.-H.**; Yeh, J.-M.\*; Yu, Y.-H. “Effect of Clay on the Corrosion Protection Efficiency of PMMA/Na<sup>+</sup>-MMT Clay Nanocomposite Coatings Evaluated by Electrochemical Measurements” *European Polymer Journal*, **2008**, 44, 13-23.

## Skills

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**Specialties:** Synthetic Organic Chemistry, Surface Chemistry, Polymer Chemistry

**Analytical techniques:** NMR, HPLC, UV, FTIR, TEM, SEM, STM, CV

## Teaching and Coaching Experience

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**Aug 2014 - Jul 2016**                      **Chung Yuan Christian University, Taiwan**

- Conducted supplemental assistance and examined the experimental progress of the students.
- Labchef for the safety of an organic synthesis lab containing 6 classes and a general chemistry lab containing 12 classes.

**Aug 2009 – Sep 2011**                      **National Taiwan University, Taiwan**

- Responsible for Scanning Tunneling Microscopic (STM) as administrative.

## Additional Information

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**Languages** English (fluent), Mandarin (mother tongue), German (A1)

**Hobbies** Marathon, Traveling, Climbing, Hiking