

# SHENG-NING HSU

## EDUCATION

<b>Purdue University</b> <i>Ph. D student, Major in Chemical Engineering</i> Advisor: Dr. Bryan Boudouris and Dr. Letian Dou	West Lafayette, Indiana 2018.08-present
<b>National Taiwan University (NTU)</b> <i>Bachelor of Science, Majored in Chemical Engineering</i> Advisor: Wen-Chang Chen	Taipei, Taiwan 2012.09-2016.06

## WORK AND RESEARCH EXPERIENCE

<b>Department of Chemical Engineering, National Taiwan University</b> RA in <i>Optoelectronic Polymer lab.</i> (Advisor: <i>Prof. Wen-Chang Chen</i> ) ◆ Develop low Dk/Df Adhesive Materials for Flexible Printed Circuit (FPC) 1. Design, Synthesis and Characterization of Ally-PPE derivatives. 2. Low Dk/Df Adhesives Fabrication and Characterization - applying Allyl-PPE derivatives to composite adhesive films.	Taipei, Taiwan 2017.11-2018.08
<b>R.O.C Substitute Military Service</b> ◆ Police Service at Special Police First Headquarters, National Police Agency 1. Assisting Police Mission during Social Movement. 2. Installing and Removing Defensive Structures of Governmental Buildings.	Taipei, Taiwan 2016.10-2017.10
<b>Department of Chemical Engineering, National Taiwan University</b> Undergraduate Researcher in <i>Optoelectronic Polymer lab.</i> (Advisor: <i>Prof. Wen-Chang Chen</i> ) ◆ Fabrication and Characterization of Polymer/ Small Molecule Thin Film by Ultrasonic Spray Coating Techniques. ◆ Crosslinking of Solid Phase Polyvinyl Alcohol-Poly(methacrylic acid) Blends. ◆ Organic Electronic Devices – applying Ultrasonic Sprayed PVA-PMAA Blends Films to Dielectric Layers of Low Voltage Organic Field Effect Transistor and Organic Transistor Memory.	Taipei, Taiwan 2015.02-2016.08

## AWARDS

<b>Presidential Award in Fall 2015</b> <b>in National Taiwan University (NTU)</b> In honor of excellent academic performance (rank in top 5%).	Taipei, Taiwan 2016.04
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## PUBLICATIONS

◆ Chien-Chung Shih, Mercedes Wu, <b>Sheng-Ning, Hsu</b> , Li-Che Hsu, Chao-Wei Huang, Jeun-Yan Lam and Wen-Chang Chen*, "A robust, air-stable and recyclable hydrogel toward stretchable electronic device applications", <i>Macromol. Mater. Eng.</i> 2018,1800282
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## SKILLS

<b>Synthesis:</b> Polymer Condensation, Oxidative Polymerization (Ally-PPE, PPE), Purification <b>Experiment instrument:</b> Spin-Coater, Spray-Coater, Ultrasonic Spray-Coater, Glove Box, Thermal Evaporator, Electron Beam Physical Evaporator(E-gun) <b>Analytical instrument:</b> Fourier transform infrared spectroscopy (FTIR), Nuclear magnetic resonance (NMR), Size exclusion chromatography (SEC) Thermogravimetric analyzer (TGA), Surface Profiler (Alpha step), Atomic force microscopy (AFM), Optical microscope(OM), I-V semiconductor analyzer(KEITHLEY). <b>Computer Software:</b> MATLAB, Origin
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