

Education

Massachusetts Institute of Technology	(Cambridge, MA; December 2018)
PhD in Chemical Engineering	
Thesis Title: Alkylaromatic Reactions in Supercritical Water Treatment and Pyrolysis	
Other Coursework	
- Managerial Fiancance	- Entrepreneurship Lab
- Patent Law (Harvard Law School)	- Engineering Nanotechnology
University of Michigan, Ann Arbor	(Ann Arbor, MI; December 2012)
B.S.E in Chemical Engineering	
GPA: 4.0/4.0	
Relevant Coursework	
- Environmental and Sustainable Engineering	- Chemical Engineering Process Economics
- Environmental Biology	- Separation Processes
Vincennes University	(Vincennes, IN; May 2010)
A.S.E in Chemical Engineering	
GPA: 3.992/4.0	
Relevant coursework	
- Leadership in Chemistry	- Fundamentals of Public Speech

Research Experience

Massachusetts Institute of Technology, Department of Chemical Engineering, PI: William H Green Lab	(Fall 2013 – Present)
Research on alkylaromatic reactions in supercritical water and pyrolysis for crude oil upgrading	
- Quantum calculations for thermochemistry of alkylaromatic compounds and radicals.	
- Quantum calculations of rates involving alkylaromatics using transition state theory.	
- Experimental work on alkylaromatics using high pressure reactors with supercritical water.	
University of Michigan – Ann Arbor, Department of Chemical Engineering, PI: Nina Lin	
Research on isobutanol tolerance yielding strains of E.coli for Isobutanol, and potentially biofuel production.	(Spring 2011 – Fall 2012)
- Aided development of multiplex automated genome engineering.	
- Biologically engineering E.coli strain JCL 260 for isobutanol production and disabling mismatch repair system.	
- Conducting various genetic and phenotypic screens for isobutanol tolerant E.coli strains.	

Leadership Experience

Teaching Assistant, 10.26 – Chemical Engineering Lab	(Spring 2016)
- Responsible for development of ultrasonic pulse detector equipment for nanoparticle size detection.	
- Preparation of data analysis algorithm for students using MATLAB.	
- Managing student team dynamics.	
Instructional Aide, ChE 343 – Separation Processes	(Fall 2012)
- Responsible for leading weekly discussions regarding to class material.	
- Develops class project and acts as a liaison between students and instructor regarding to concerns to the project, such as design concepts and technical issues with design software Aspen.	
President of Hong Kong Student Society of MIT	(Fall 2015-Present)
Secretary of Omega Chi Epsilon	(Fall 2012)
Director of Social Affairs of the University of Michigan Engineering Council (Engineering Student Government)	(Year 2011)

Computer Skills

Experienced in using Python, C++, MatLab, and Microsoft Excel. Competent with Aspen Plus design software.

Awards

Jane and Howard M. TenBroeck Scholarship	(University of Michigan Winter 2012)
James B. Angell Scholar	(University of Michigan Winter 2012)
Holly P. Leighly outstanding second-year chemistry student award	(Vincennes University 2010)
CRC Press Chemistry, Freshman award	(Vincennes University 2009)

Language

Spoken: Fluent in Chinese and English
Written: Proficient in English and Chinese