

**OBJECTIVE:**

Potential position in Chemical Engineering

**EDUCATION:**

**Georgia Institute of Technology**, Atlanta, GA

**Bachelor of Science in Chemical Engineering**, May 2008

Certificate in Pulp & Paper Engineering

Study Abroad at Shanghai JiaoTong University, Shanghai, China

**SKILLS:**

**Computer:** Windows, Macintosh, MS Office, Visual Basic for Application (VBA),  
MATLAB, MATLAB Simulink, Aspen HYSYS, Aspen Plus, Aspen Dynamics,  
Aspen Custom Modeler, Aspen Process Explorer, Aspen Simulation Workbook.

**Languages:** Fluent in English, Mandarin Chinese, Cantonese  
Basic knowledge in Japanese, Korean, Spanish

**EXPERIENCE:**

**PPG Industries**, July 2008 to July 2009

Chemical Engineering Trainee

- Responsible for providing basic technological and engineering support to the plant's facilities, equipment, production processes, and products to provide continuous improvement in the areas of safety, quality, and value. Training is provided on the job with progressively more challenging assignments and responsibilities.
- Learn to plan, organize and direct engineering project work by enlisting sound engineering and business practices. Obtain or produce all data pertinent to the engineering project such as design engineering and construction drawings, cost estimates and equipment availability.

**Georgia Institute of Technology**, Atlanta, GA, August 2007 to July 2008

Research Assistant

Bio-mass to Bio-fuel Conversion

- Collect the glucose ( $C_6$ ) and hexose/pentose ( $C_5$ ) from the cooked lignocelluloses materials wastewater.
- Explore enzymes, bio-microorganisms, catalysts and fermentation conditions for most efficient bio-ethanol production from glucose and hexose/pentose.

SM RESUME



#### Microfibrillate Cellulose (MFC) Nanofiber

- Pretreated pulp with endocellulase enzyme and buffer with trihydroxymethyl ammonomethane/HCl; Microfibrillated wood pulp cellulose nanofiber by applying a strong mechanical shear force.
- Objective of the project was to increase the paper tensile strength and reduce the fiber & coating cost; Resulted in an increased of 300% paper tensile strength.

#### **DuPont Experimental Station**, Wilmington, DE, January 2007 to July 2007

##### R&D Coop -Computer Modeling

- Provided support for various energy management modeling projects across five DuPont Titanium Technologies titanium dioxide manufacturing plant sites; Tested and developed various modeling projects; updated a model delivery interface.

#### **University of Oklahoma**, Norman, OK, January 2005 to May 2005

##### Undergraduate Research

- Focused on surfactant science (the active ingredient in soap is surfactant).
- Polymerized varied thickness surfactant admicellar thin films and dissolve surfactants in polluted water under conditions in which contaminants associate with surfactant aggregates, which are easy to ultrafilter polluted substances from solution in a subsequent step.

#### **AWARDS and ACTIVITIES:**

Pulp & Paper Engineering Scholarship

D. & E. Mellichamp Scholarship

School of CHE Program of Excellent Scholarship

American Institute of Chemical Engineers (AIChE)

Technical Association of the Pulp and Paper Industry (TAPPI)

Association for the International Exchange of Students in Economics and Commerce (AIESEC)

Mentor in Mentors & Mentees Program

National Society of Collegiate Scholars (NSCS)

Alpha Lambda Delta Honor Society

Society of Chinese Students and Scholars Publicity Chair (CSSA)

Chinese Student Association (CAS)

Hong Kong Student Association (HKSA)

SM RESUME

