# **Bang Tran**

# Senior Chemical Engineering Student at Drexel University

Philadelphia, PA - Email me on Indeed: indeed.com/r/Bang-Tran/5704fec46b05febe

Willing to relocate: Anywhere

Authorized to work in the US for any employer

WORK EXPERIENCE

# **Capstone Senior Design Project**

Drexel University - Philadelphia, PA - September 2015 to Present

- \* Manage a cross-functional team of five to develop a new chemical plant for the production of tri-propylene glycol
- \* Optimize and interpret the most feasible process design and simulation for the plant by utilizing Aspen Plus
- \* Generate block flow diagrams (BFDs) and detail process flow diagrams (PFDs) via Microsoft Visio

# **Pharmaceutical Packaging Engineer**

Merck, Center for Materials Science and Engineering - West Point, PA - March 2015 to September 2015

- \* Improved the precision, and reduced the evaluation time for current SOPs use in headspace moisture analysis
- \* Planned and executed Product Characterization Studies (PCS) for oral solid dosage products and API
- \* Performed detail data analysis, technical memos drafting and reviewing for FDA filings
- \* Established mathematical modeling to predict behavior of products in package and recommend packaging configurations
- \* Conducted physical testing for pharmaceutical drugs by using both GMP and non-GMP instruments

## Research and Development (R&D) Technician

Heraeus Materials Technology, Thick Film Research and Development - Conshohocken, PA - April 2014 to September 2014

- \* Aided scientists and process engineers to modify formulation and increase the quality of polymer conductive inks
- \* Batched, milled, and implemented quality assurance tests on products for process scale-up
- \* Coordinated with scientists, engineers, and technicians to establish semi-annual inventory for precious metal pastes

## **Research Assistant**

Drexel University, Polymers and Composites Laboratory - Philadelphia, PA - April 2013 to April 2014

- \* Accomplished the design of experiments to process the dispersion of graphite in thermoset systems
- \* Synthesized the nanocomposite samples for testing the improvements in electrical conductivity, toughness, and modulus
- \* Provided literature research and statistical data for writing technical reports

## **Research Assistant**

Drexel University, Polymers and Composites Laboratory - Philadelphia, PA - May 2013 to August 2013

- \* Investigated and eliminated the effects of filtering, temperature, and hydration time on degradation of gelatin as drug carrier
- \* Collected and analyzed data to confirm the positive outcomes with supervisor and program director

\* Developed experimental protocol based on results and findings

# **Laboratory Technician**

Community College of Philadelphia - Philadelphia, PA - February 2010 to July 2012

### Responsibilities

- \* Trained and directed four lab assistants in properly operating lab technical procedures
- \* Assisted lab managers in maintaining safety audit according to OSHA regulation and updated chemical MSDS
- \* Created chemical solutions, prepared experiments, and ensured the lab safety for students

## **Production Technician**

Engineered Plastics Company (EPC) Inc - Philadelphia, PA - September 2008 to December 2009

- \* Accompanied with production supervisor to replace and install custom molds into plastic injection molding machines
- \* Set up and operated electric Cincinnati Roboshot and Robotics to manufacture large scale of plastic products
- \* Performed troubleshooting problems occurring in manufacturing process to improve process development

### **EDUCATION**

# **Master of Science in Chemical Engineering**

Drexel University - Philadelphia, PA 2012 to 2016

# **Bachelor of Science in Chemical Engineering**

Drexel University - Philadelphia, PA 2012 to 2016

#### **SKILLS**

Computer: Aspen Plus, Visio, Minitab, SPSS, AutoCAD, COMSOL, Matlab, Pro/ENGINEER, MS Word, Excel, PowerPoint, Laboratory Instruments: 3-Roll Mill, DSC, DMA, FTIR, HPLC, Instron, Rheometer, Brookfield HBT/RVT Viscometer, UV-Vis, SEM, GC, Tencor Surface Profiler, zwicki-Line testing machine, Texture Analyzer, VTI moisture sorption analyzer, Lighthouse headspace moisture analyzer, Environmental Specialty chamber