

EXECUTIVE SUMMARY

A **chemical engineering and research expert** with 4 years of experience in applied materials research and chemicals production. A scientific thinker who is highly organized, analytical, enjoys solving problems, and works well on teams. A spring 2014 graduate of the University of Dayton's chemical engineering master's program who is authorized to work in the US on a long-term and permanent basis.

PROFESSIONAL SKILLS

- Leadership and Teamwork
- Interpreting and Presenting Results
- Configuring and Maintaining Lab Equipment
- Working with and Analyzing Data
- Preparing Specimens and Samples
- Testing and Process Development

PROFESSIONAL SKILLS DEMONSTRATED

UNIVERSITY RESEARCH INSTITUTE

October 2020– December 2023

A division of Dayton University with ~425 full-time employees focused on developing and applying technology for customers in areas such as materials, manufacturing, structures, energy, and intelligence.

Researcher

Successfully contributed to the team led by Dr. John Doe, working full time on a corrosion inhibition research project for the United States Office of Naval Research (ONR) that had an annual budget of \$350,000.

- **Testing and Process Development:** Supported research and discovery efforts by extracting proteins from biological samples, testing yields and purifying through the use of high performance liquid chromatography (HPLC), and applying protein solutions to metal surfaces for corrosion inhibition testing.
- **Interpreting and Presenting Results:** Regularly drafted results of findings and progress reports for the ONR, working with Dr. Doe and other team members to collect key metrics, summarize findings, create technical images, and prepare documents and memos prior to their transmission to counterparts at the ONR.
- **Working with and Analyzing Data:** Consistently used SigmaPlot software to create, manage, and analyze large datasets, regularly performing hypothesis tests to compare functional groups, test assumptions, etc.
- **Configuring and Maintaining Lab Equipment:** Acted as the *de facto* equipment specialist for a team of 3 researchers and scientists, configuring and maintaining a variety of lab equipment (e.g. spectrometers, pumps, centrifuges, algae bio reactors, etc.) to facilitate their use in scientific research.

EAZL POLYTECHNIC UNIVERSITY (COLLEGE OF BIOENGINEERING)

September 2019 – June 2020

One of four institutes of light industry in China with ~20,000 undergraduate students that undertake coursework in engineering, science, art, literature, economics, or management.

Assistant Researcher

Supported researchers and professors by calibrating and maintaining lab equipment, preparing laboratories prior to use by students and faculty, and assisting professors with the grading of tests and exams for 60 pupils.

- **Configuring and Maintaining Lab Equipment:** Designed a bioreactor using AutoCAD software, creating a list of parts, identifying the materials need, and predicting output from the machine. Also oversaw the preparation of and environmental safety for two labs during two college semesters, enabling their ongoing use for experiments and for other pedagogical purposes by ~60 students.

ACME PHARMACEUTICAL COMPANY

September 2017– December 2018

An American chemical engineering organization with 60 employees that specializes in the production of medicinal compounds and pharmaceutical intermediates, including synthetic analogs of natural products.

Quality Assurance Specialist (*Internship*)

Successfully supported the production team and quality assurance managers by collecting random samples and testing a variety of metrics to ensure consistency and quality.

- **Working with and Analyzing Data:** Collected and analyzed ~20 samples/day, working with senior product inspectors to analyze products and assuring that production was within 1 σ of targeted metric means.

EDUCATION

Master of Science (Chemical Engineering). Eazl Y=University (Eazl, OH) – *Expected May 2014*

- Overall GPA: 3.4/4.0

Bachelor of Science (Bioengineering). Eazl Polytechnic University (Eazl, China)

- Overall GPA: 3.8/4.0

LEADERSHIP ACTIVITIES & AWARDS

Leadership Activities:

- **Vice President, Student Association of Eazl Polytechnic University (2007):** Elected by department faculty and students to be one of 70 student representatives from an undergraduate population of 20,000 and elected in 2007 to serve as the Association's Vice President. Regular activities included attending weekly meetings, liaising on student issues, and organizing student events.

Awards

- **Excellence in Student Leadership, Eazl Polytechnic University (2009):** One of 20 students (out of a of 20,000 students) to be recognized by the University for academic excellence and leadership.
- **Excellence in Student Leadership (2008):** One of 15 students to be recognized by the provincial government for academic excellence and leadership.
- **National Scholarship (2007):** One of 8 students recommended by the faculty of the College of Biological Engineering and Food Science Technology to receive this RMB8,000 scholarship award.

OTHER RELEVANT INFORMATION

Other Languages: Mandarin Chinese (bilingual proficiency)

Computer Skills: MS Excel, AutoCAD, SigmaPlot, Genius (for statistics)

Work Authorization: Legal Permanent Resident (LPR) status in the United States.