

Ernest Erlenmeyer



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EDUCATION

M.S Chemical EngineeringB.S Chemical EngineeringUniversity of Southern CaliforniaWuhan Institute of TechnologyMay 2017June 2015GPA: 3.40GPA: 3.30

SKILLS

- Advanced in using XRD and SEM to do membrane characterization.
- Microsoft Word, Microsoft Excel, Microsoft PowerPoint
- Languages: Mandarin Chinese, English

ACADEMIC PROJECT EXPERIENCE

A More Economical Solution to the Dimersol Process, Engineering Competition

Spring 2017

- Created a consistent and comprehensible understanding of the economic report which made valid assumptions, such as all data will be reported in SI units unless otherwise noted and there will be no legal restrictions for the possible economic options proposed in this report to form
- Applied Aspen Plus for equipment selection and utilized both the Aspen Process Economic Analyzer and Cost Estimator to obtain the equipment unit price.
- Calculated the payback period using the data we obtained and assumed in the cash flow table.

Synthesis and Characterization of SAPO-34 zeolite membrane, Graduation Thesis

Summer 2015

- Applied hydrothermal synthesis method to produce the SAPO-34 molecular sieves.
- Used vacuum seeding method to introduce seed on α -Al₂O₃ support.
- Characterized the peak of produced membranes by XRD and compared to the XRD of standard SAPO-34 molecular sieve.
- Applied gas permeation tests in order to examine whether the membrane is dense.

WORK EXPERIENCE

The Coca-Cola Company Asian Pacific Technology Center, Beverage Testing Intern

Summer 2016

- Used High Performance Liquid Chromatography to measure the amount of the caffeine, aspartame as well as pesticide residue and preservatives of Coke for monitoring the main agent of Coca-Cola.
- Formulated the phosphoric acid standard solution to provide a universal standard for global bottlers.
- Interpreted from Chinese to English for global sensory experts at Tea Talk event, which intends to expand the tea beverage market.
- Finished the Chinese and English subtitles of the introductive video of APTC to facilitate a comprehensible understanding among visitors.

Wuhuan Engineering Co. Ltd, Process Intern

200000 MTPY Phosphoric Acid and By-product Project

Summer 2014

- Monitored the filling of the catalyst vanadium and the alumina ceramic balls in the sulphuric acid plant converter(R-1201) to ensure the catalyst's quality.
- Examined the thermal expansion condition of the Sulphur furnace and recorded abnormal data.
- Observed the operation state of the equipment with the DCS system in the central control room to monitor situations on site effectively.

LEADERSHIP AND COMMUNITY INVOLVEMENT

Department Senator, Viterbi Graduate Student Association

Spring 2017

• Volunteer, Chinese Career Center, Business Development Team

Spring 2017