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NATALIE S. EYKE

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6665 Summerbreeze Dr. Caledonia, MI 49316 (616) 656-1050

OBJECTIVE Seeking a full-time position in Chemical Engineering. Available January 2015

EDUCATION

Graduation: December 2014 The University of Michigan, B.S.E. in Chemical Engineering, GPA 3.94/4.00

WORK EXPERIENCE

Eli Lilly & Company, Process Development Intern

Designed experimental setup and protocol to validate novel membrane unit operation

- Performed experiments which demonstrated the superiority of the membrane over existing process technology
- Evaluated potential for scale-up and created installation plan
- Applied knowledge of mass transfer kinetics to simulate membrane performance
 - Used simulation to estimate solubility of gases in solvents and solvent mixtures

The Dow Chemical Company, Manufacturing & Engineering Intern

Diagnosed malfunctioning pumps

- Hypothesized that malfunction was caused by insufficient cooling of seal fluid
- Identified insulation material and thickness necessary to deliver MRU water to pump seal pots at the appropriate temperature
- Supervised insulation installation and managed scope changes
- Recommended pipe size adjustments by generating models of process flow
 - Developed expertise in new modeling software and coached my department on its usage
 - Collaborated with diverse teams to introduce related modeling programs to my department
 - Developed installation plan that was approved for turnaround documents

Procter & Gamble, Research & Development Intern

Reverse-engineered six outsourced Fekkai shampoo formulas

Enabled in-house manufacturing of Fekkai shampoos

Saved \$1.4MM by eliminating heritage raw materials

- Identified key shampoo/conditioner interaction explaining negative consumer reaction to shampoo/conditioner pairings
 - Applied Six Sigma tools (Design of Experiment and TQM methods) to investigations
 - Utilized advanced knowledge of JMP software to generate sampling plans and analyze data

The University of Michigan

Research Assistant, explored consolidated bioprocessing to improve biofuel efficiency

Physics Study Group Leader, designed lesson plans to facilitate collaborative learning

LEADERSHIP EXPERIENCE

Tau Beta Pi - The Engineering Honor Society, University of Michigan Chapter

- President, 2014
 - o Developed new recruiting programs & created a vertically-integrated leadership structure
- External Vice President, 2013

SWE/TBP Career Fair at the University of Michigan

- Director, 2013
 - Controlled a \$250,000 budget, managed twenty direct reports, and coordinated over a thousand volunteer hours in order to host the second-largest student-run career fair in the nation
- Operations Chair, 2012, 2014

Society of Women Engineers, University of Michigan Section

- Community Relations Co-chair, 2012-13
- Membership Officer, 2011-12

Women in Science & Engineering Residence Program, Peer Mentor, 2011-13

Indianapolis, IN May 2014 to

August 2014

Baton Rouge, LA May 2013 to

August 2013

Cincinnati, OH January 2012 to

August 2012

Ann Arbor, MI

2013

2011