

# CHELISE VAN DE GRAAFF

## EDUCATION

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- Master of Science, *Chemical Engineering*, August 2007  
■ Engineering Management Minor  
Bachelor of Science, *Chemical Engineering*, August 2005
- Brigham Young University  
Provo, UT

## EXPERIENCE

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- Graduate Research, *Interface Transport at Combustion Conditions*  
August 2006—Current
- ACERC  
Brigham Young University  
Provo, UT

- Integrated Classical Kinetic Theory of Gases, Transition State Theory, and concept of potential-driven equilibrium into a mathematical model which accommodates for experimentally measured heat and mass transfer equilibrium deviations
- Relevant Courses: Applied Statistical Mechanics, Quantum Mechanics, Physical Chemistry, and Combustion Processes

- Graduate Fellowship, *Gasification and Synfuels Processes Simulator*  
Summer 2006
- Idaho National Laboratory  
Idaho Falls, ID

- Aspen Plus; Icarus Process Evaluator: module-based process simulator; economics evaluator
- GT Pro®: gas turbine combined-cycle design program
- Attendee of *Fischer-Tropsch Catalysis* Short Course

- Research Assistant, *Optical Particle Levitation*  
December 2004—April 2005
- ACERC  
Brigham Young University  
Provo, UT

- Optimized mechanical particle levitation system using visible laser
- Conducted extensive literature review of thermo- and photo-phoresis

- Student Body Secretary, *Student Activities Council*  
Summer 2003
- Brigham Young  
University-Idaho  
Rexburg, ID

- Represented student body on Executive Advancement Board and Student Activities Council; *Scroll* Newspaper correspondent
- Orchestrated three leadership training meetings with 25-40 attendees
- Organized and prioritized \$8,000 of advertising information
- Interviewed an regulated campaigns of new student body candidates

## PRESENTATIONS

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- Van De Graaff, C., "Heat and Mass Transfer Conditions at an Interface: The Truth About Equilibrium," presented at the Graduate ACERC Omnium, Provo, UT (December 2006)
- Van De Graaff, C., M. Svedin, and G. Tupin, "Fischer-Tropsch Reactor Modeling," poster presented at the INL Annual Symposium on Intern Research Projects, Idaho Falls, ID, (August 2006)
- Van De Graaff, C., S. Lewis, and L. Baxter, "Optical Particle Levitation," poster presented at the STCBC Conference, Victoria B.C., Canada (August 2004)

## INTERESTS

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- Country dancing, violin and vocal performance, basketball, interior design, and family