

# Daniel Grooms

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## Education:

- Doctor of Philosophy in Chemical Engineering (expected graduation: August 2006) – Texas A&M University. Passed Ph.D. proficiency exam in Fall 2003.
- Bachelor of Science degree in Chemical Engineering from Lamar University – Beaumont, Texas. Graduated May, 2002. 3.942 GPA.

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## Engineering Experience:

- Consulting project for Watergy, Inc. water purification plant, January 2005 to present.
  - Projects included: Developed model for ion exchange process; utilized process integration tools to optimize process; hands-on assistance with pilot plant startup.
- 2 Co-op terms at Dupont – Orange, Tx. January-May, 2000 & May-July, 2001.
  - Projects included: Led design of large piping system installation; Automation of monthly environmental reports by integrating spreadsheets with network data; Collaborated on design to install TOC meter in building sump.
- 1 Intern Semester at Dow Chemical – Freeport, Tx. August-December, 2000.
  - Projects included: Creating flowsheet showing related plants' production rates and inventory levels; creation of a spreadsheet to aid in prompt calculation of spill amounts.

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## Presentations/Publications:

- D. Grooms, V. Kazantzi, M. El-Halwagi; *Optimal synthesis and scheduling of hybrid dynamic/steady-state property integration networks*; **Computers & Chemical Engineering**; Accepted for publication May 23, 2005.
- D. Grooms, V. Kazantzi, M. El-Halwagi; *Scheduling and Operation of Property-Interception Networks*; AIChE 2004 Annual Meeting, Austin, TX, November 7-12, 2004.
- D. Grooms, M. El-Halwagi; *Optimal Synthesis & Scheduling of Hybrid Dynamic/Steady-state MEN's*; 2004 Spring National Meeting, New Orleans, LA, April 25-29 2004.
- K. Vajifdar, T. Han, B. Ardoin, D. Grooms, D. H. Chen, and K. Li; *Fiber-Optic Photoreactor Using Titania Modified with Ferroelectric Optical Crystals for VOC Destruction*; 13th International Congress on Catalysis, Paris, France, July 11-16, 2004

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## Awards:

- Otho Plummer Award (Highest Male Graduate, Lamar University Class of 2002)
- Lamar University President's List: Spring and Fall '98, Spring '99, Fall '01 and Spring '02
- 1999 Dow Outstanding Junior Award
- Acceptance into Phi Kappa Phi National Honor Society
- Acceptance into Tau Beta Pi National Engineering Honor Society

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## Extra-Curricular Activities:

- Member of Texas A&M University Chemical Engineering Graduate Student Council – Fall 2003 to Present
- Texas A&M University Graduate Student Council representative for Chemical Engineering
- 2001-2002 President – Tau Beta Pi, Texas Zeta (Lamar University) Chapter
- Member of AIChE, Lamar University Student Chapter (1998-2002)
- Member of Lamar University Honors Program Student Advisory Council – Fall 1999

## References Available upon Request