

TANYA L. CHANTAWANSRI

Education

- **University of California, Santa Barbara**—Santa Barbara, CA
Majoring in Chemical Engineering with an emphasis in Computer Science
 - Degree: Doctor of Philosophy
 - Advisor: Dr. Glenn Fredrickson
 - Projected Graduation Date: June 2009
- **University of California, San Diego**—San Diego, CA
Major in Chemical Engineering
 - Degree: Bachelor of Science
 - Honors: Provost Scholar (College Honors), Departmental Honors, Summa Cum Laude
 - Graduation Date: June 2004

Experience

- **University of California, Santa Barbara**—Santa Barbara, CA
Graduate Researcher: Jan 2005–present
 - Developed programs to study diblock copolymer thin films on the surface of the sphere through the use of self consistent field theory
- **University of California, Santa Barbara**—Santa Barbara, CA
Teacher Assistant: Sept 2006–Dec 2006
 - Class: Chemical Engineering 132b: Computational Methods in Chemical Engineering
 - Graded homework assignments
 - Office hours are also held to aid student in the learning process
 - Supervisor: Professor Sandall
- **University of California, Santa Barbara**—Santa Barbara, CA
Teacher Assistant: Jan 2006–Mar 2006
 - Class: Chemical Engineering 180b: Chemical Engineering Laboratory
 - Assisted and supervised students in a lab environment
 - Graded lab reports
 - Office hours are also held to aid student in the learning process
 - Supervisor: Professor Sandall
- **General Atomics/San Diego State University Foundation**—San Diego, CA
Research Specialist: Sept 2003–June 2004
 - Used Aspen to develop/optimize flow sheets of chemical processes
 - Employer: Dr. Lloyd Brown, Fusion Group

- **University of California, San Diego**—San Diego, CA
Research Assistant: Mar 2002–Aug 2003
 - Designed oligonucleotides to target specific mRNA sequences
 - Helped develop a technique (FISH-FC) that combines fluorescent in situ hybridization (FISH) with flow cytometry (FC)
 - Employer: Dr. Pao C. Chau
- **University of California, San Diego**—San Diego, CA
Grader: Jan 2003–Mar 2003
 - Class: Chemical Engineering 100: Process Modeling and Computation
 - Graded homework assignments
 - Office hours are also held to aid student in the learning process
 - Supervisor: Dr. Pao. C. Chau

Skills

- **Operating Systems:** Linux (Fedora) and Windows 98/2000/XP
- **Computer Languages and Programs:**
 - Proficient in Fortran, Matlab
 - Proficient in Microsoft Excel, Word, Powerpoint

Academic Honors/Awards/Scholarships

- **Honor Society Membership**
 - Tau Beta Pi: California Psi Chapter
 - Phi Beta Kappa: Sigma Chapter
 - Golden Key
- **At University of California, Santa Barbara**
 - Jan 2005–Present: Integrative Graduate Education and Research Traineeship (IGERT) Fellowship
- **At University of California, San Diego**
 - Sept 2000–Jun 2004: Provost's Honors: Awarded to students with a GPA of 3.5 or higher with at least twelve graded units
 - Jun 2004: Highest Academic Achievement Award: Chemical Engineering
 - Jun 2004: Huppert Memorial Outstanding Senior Chemical Engineering Award
 - May 2004: Eleandor Roosevelt College Provost Scholar
 - Sept 2002–Jun 2003: William Stout Scholarship
 - Jun 2002–Jun 2003: Chancellor Research Scholarship
 - Sept 2003–Jun 2004: Madge E. Lawhead Scholarship
 - Sept 2003–Jun 2004: Elizabeth Stupp Kohl Scholarship for Women Engineers

Publications

- T. L. Chantawansri, A. W. Bosse, A. Hexemer, H. D. Ceniceros, C. J. Garcia-Cervera, E. J. Kramer, G. H. Fredrickson Self-consistent field theory simulations of block copolymer assembly on a sphere *Phys. Rev. E* 75, 031802 (2007).
- M Lozano MM, Chantawansri TL, Chau PC, Simultaneous detection of double-stranded RNA-induced protein kinase and its specific mRNA by single cell analysis, *BIOTECHNOLOGY LETTERS* 27 (12): 875-880 JUN 2005.

Presentations

- **American Physical Society – March Meeting**—Denver, CO
March 7, 2007
 - Oral presentation: Self Consistent Field Theory Simulations of Block Copolymer Assembly on a Sphere
- **Complex Fluids Design Consortium**—University of California, Santa Barbara
January 23, 2007
 - Oral presentation: Self-Assembly on the Sphere: A Route to Functional Colloids
- **KAIST/UCSB Symposium**—University of California, Santa Barbara
January 22, 2007
 - Oral presentation: Block Copolymer Simulations using Self Consistent Field Theory for the Surface of a Sphere
- **Functional Engineered Nano Architectonics (FENA) Annual Review**—Los Angeles, CA
January 16, 2007
 - Oral Presentation and Poster: Laterally Confined Diblock Copolymer Thin Films
- **CSE IGERT Research Review**—University of California, Santa Barbara
November 18, 2006
 - Oral presentation: Block Copolymer Simulations using Self Consistent Field Theory for the Surface of a Sphere
- **Chemical Engineering Advisory Board Meeting**—University of California, Santa Barbara
March 20, 2006
 - Poster: Microdomain Defects in 2D Block Copolymer Thin Films on Curved Surfaces
- **Complex Fluids Design Consortium**—University of California, Santa Barbara
January 23, 2006
 - Oral presentation: Microdomain Defects in 2D Block Copolymer Thin Films on Flat and Curved Surfaces