

PRISCILLA JUNE HILL

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EDUCATION:

University of Massachusetts, Ph.D., Chemical Engineering, February 1996.

Thesis Title: Simulation of Solids Processes Accounting for Particle Size Distribution.

Thesis Advisor: Prof. K. M. Ng

Clemson University, M.S., Chemical Engineering, August 1984.

Thesis Title: Local Structure in Repulsive Soft-Sphere Mixtures – A Computer Simulation Study.

Thesis Advisor: Prof. J. M. Haile

Clemson University, B.S., Chemical Engineering, May 1982.

ACADEMIC EXPERIENCE:

Mississippi State University, Associate Professor, Chemical Engineering 8/07 – Present

Mississippi State University, Assistant Professor, Chemical Engineering 8/01 – 8/07

University of Minnesota Duluth, Assistant Professor, Chemical Engineering 9/00 – 6/01

University of Massachusetts, Visiting Asst. Professor, Chemical Engineering Spring 1996

INDUSTRIAL EXPERIENCE:

Mitsubishi Chemical Corporation, Japan.

Senior Consultant, Development and Engineering Research 11/96 – 6/00

- Initiated and coordinated development of a new solution crystallization laboratory. Responsibilities included selecting equipment, developing experimental procedures, training lab technicians, and developing parameter estimation software for data analysis.
- Developed process simulation programs for crystallization
- Provided technical support in crystallization technology for new and existing processes.
- Directed experiments at other plant sites as well as providing data analysis and simulation.

Idaho National Engineering Laboratory (INEL), EG&G Idaho, Inc.

Senior Engineer, Cost and Performance Engineering 8/87 - 8/90

Engineer, Cost Estimating 2/86 - 8/87

Engineer, Thermal and Process Analysis 8/84 - 2/86

Performed parametric cost estimating to provide budget costs for projects with minimal design information. Performed economic trade-off studies and estimated life cycle costs. Prepared planning, conceptual, and final design estimates for industrial construction. Assessed energy usage in industrial processes in the United States. Evaluated hazardous waste for shipping.

Tennessee Valley Authority, Cooperative Education Student 1979 - 1980

Assisted with pilot plant production of urea phosphate and phosphoric acid for 3 semesters.

HONORS AND AWARDS

CAREER Award, National Science Foundation, 2005

2nd Place, New Faculty Research Award, ASEE Southeastern Section, 2006

PROFESSIONAL SOCIETY MEMBERSHIPS

American Association for the Advancement of Science (AAAS)
American Chemical Society (ACS)
American Institute of Chemical Engineers (AIChE)
American Society for Engineering Education (ASEE)
Sigma Xi

PUBLICATIONS:

Refereed Journal Articles

1. P. J. Hill and K. M. Ng, "New Discretization Procedure for the Breakage Equation", *AIChE J.*, **41**, 1204–1216 (1995).
2. P. J. Hill and K. M. Ng, "New Discretization Procedure for the Agglomeration Equation", *AIChE J.*, **42**, 727-741 (1996).
3. P. J. Hill and K. M. Ng, "Statistics of Multiple-Particle Breakage", *AIChE J.*, **42**, 1600-1611 (1996).
4. P. J. Hill and K. M. Ng, "Simulation of Solids Processes Accounting for Particle Size Distribution", *AIChE J.*, **43**, 715-726 (1997).
5. P. J. Hill and K. M. Ng, "Particle Size Distribution by Design", *Chem. Eng. Sci.*, **57**, 2125-2138 (2002).
6. P. J. Hill, "Statistics of Multiple Particle Breakage Accounting for Particle Shape", *AIChE J.*, **50**, 937-952 (2004).
7. P. J. Hill, "Teaching Entering Graduate Students the Role of Journal Articles in Research", *Chem. Eng. Educ.*, **40**, 246-250 (2006).
8. S. M. Reeves and P. J. Hill, "Mechanisms Influencing Crystal Breakage Experiments in Stirred Vessels", *Crystal Growth & Design*, in review.

Refereed Conference Proceedings in Published Book

1. P. J. Hill and K. M. Ng, "Particle Size Distribution by Design", in *European Symposium on Computer Aided Process Engineering-11*, pp. 1151-1156, R. Gani and S. B. Jorgensen ed., Elsevier, New York (2001).

Book Chapter

1. P. J. Hill, "Batch Crystallization", in *Batch Processes*, pp.151-204, E. Korovessi and A. A. Linninger ed., CRC Press, Boca Raton (2005).

PRESENTATIONS:

Conference: Research

1. P. J. Hill (speaker) and K. M. Ng, "Population Balance Models for Solids Processing", presented at the University of Massachusetts Process Design and Control Center Meeting in Amherst, June, 1994.
2. P. J. Hill (speaker) and K. M. Ng, "Discretized Population Balance Equations", presented at the AIChE National Meeting in San Francisco, November, 1994.
3. P. J. Hill (speaker) and K. M. Ng, "Computer Simulation of Plants Containing Solids", presented at the AIChE National Meeting in San Francisco, November, 1994.
4. P. J. Hill (speaker) and K. M. Ng, "Statistics of Multiple Particle Breakage", presented at the AIChE National Meeting in Miami, November, 1995.
5. B.M. Russel, R. Gani (speaker), and P. J. Hill, "An integrated computer aided system for

- bio-process simulation and design”, presented at the AIChE National Meeting in Miami, November, 1998.
6. P. J. Hill (speaker) and K. M. Ng, "Population Balance Equations in Process Synthesis and Simulation", presented at the Population Balance Modeling and Applications Conference in Kona, Hawaii, January, 2000 (Invited).
 7. P. J. Hill (speaker) and K. M. Ng, " Process Synthesis and Simulation for Particulate Solids Systems", presented at the AIChE National Meeting in Los Angeles, November, 2000.
 8. P. J. Hill and K. M. Ng, "Particle Size Distribution by Design”, presented at ESCAPE-11, Denmark, May 27-30, 2001.
 9. P. J. Hill (speaker), "Statistics of Multiple Particle Breakage Including Shape Factor", presented at the AIChE National Meeting in Indianapolis, November, 2002.
 10. K. R. Parker and P. J. Hill (speaker), "Effect of Breakage on the Particle Size-Shape Distribution in a Stirred Vessel", presented at the AIChE National Meeting in San Francisco, November, 2003.
 11. K. Vedantham and P. J. Hill (speaker), “Modeling of Coarse Particle Shape Evolution During Attrition in a Stirred Vessel”, presented at the AIChE National Meeting in Austin, November 2004.
 12. S. R. Reeves (speaker), K. Vedantham, and P. J. Hill, “Determination of the Effect of Breakage on Crystal Shape Distribution”, presented at the NOBCCChE 32nd Annual Conference in Orlando, FL, March 2005.
 13. P. J. Hill (speaker), “Batch Crystallization Tutorial”, presented at the AIChE Spring National Meeting in Atlanta, April 2005.
 14. D. S. Gandhi, P. J. Hill (speaker), “Comparison of Models for Coarse Particle Shape Evolution during Attrition in a Stirred Vessel”, presented at the AIChE National Meeting in Cincinnati, November 2005.
 15. P. J. Hill (speaker), “Breakage Distribution Functions Based on Fracture Mechanics”, presented at the Fifth World Congress on Particle Technology, Orlando, April 2006.
 16. D. S. Gandhi (speaker) and P. J. Hill, “Effect of Ostwald Ripening on Particle Breakage in Saturated Solutions”, presented at the AIChE National Meeting in San Francisco, November, 2006.
 17. P. J. Hill (speaker), “Breakage Distribution Functions Based on Branching Crack Models”, presented at the AIChE National Meeting in San Francisco, November, 2006.
 18. P. J. Hill (poster), “Breakage Distribution Functions Based on Branching Crack Models”, presented at the 3rd International Conference on Population Balance Modeling (PBM 2007) in Quebec City, Canada, 19-21 September 2007.
 19. D. S. Gandhi (speaker) and P. J. Hill, “Effects of Crystal Aging and Agglomeration on Particle Breakage in Saturated Solutions”, presented at the AIChE National Meeting in Salt Lake City, November, 2007.
 20. S. M. Reeves (speaker) and P. J. Hill, “Effect of Cooling Rate on Oleic and Linoleic Acid Crystal Compositions”, presented at the AIChE National Meeting in Philadelphia, November, 2008.
 21. P. J. Hill (speaker), D. S. Gandhi, S. M. Reeves, “Modeling of Changes in Particle Size-Shape Distribution Due to Breakage”, presented at the AIChE National Meeting in Philadelphia, November, 2008.
 22. S. M. Reeves (speaker), D. S. Gandhi, S. P. Castellane and P. J. Hill, “Effect of Aging On Crystal Breakage in Stirred Vessels”, presented at the AIChE National Meeting in Nashville, November, 2009.

23. S. M. Reeves (speaker), B. M. White, S. P. Castellane, and P. J. Hill, "Breakage Behavior of NaCl Crystals in a Stirred Vessel", presented at the AIChE National Meeting in Nashville, November, 2009.
24. P. J. Hill (speaker) and S. M. Reeves, "Breakage Distribution Functions in Fragmentation and Attrition", presented at the AIChE National Meeting in Salt Lake City, November, 2010.

Conference: Education

25. P. J. Hill (speaker), "Incorporation of Green Engineering into the Capstone Plant Design Course", presented at the AIChE National Meeting in San Francisco, November, 2003.
26. P. J. Hill (speaker), "Introducing Technical Articles to Graduate Students Through Active Learning" presented at the Southeast Regional ASEE meeting, Auburn, AL, April 2004.
27. P. J. Hill (speaker), "Introducing Technical Articles to Graduate Students Through Active Learning", presented at the Southeast Regional ASEE meeting, Chattanooga, TN, April 2005.
28. P. J. Hill (panelist), "Young Faculty Forum", AIChE National Meeting in Cincinnati, November 2005.
29. P. J. Hill (speaker), "Using Technical Articles to Teach Entering Graduate Students the Role of Journal Articles in Research", presented at the AIChE National Meeting in Cincinnati, November 2005.
30. P. J. Hill (speaker), "A Course in Particle and Crystallization Technology", presented at the Southeast Regional ASEE meeting, Memphis, TN, April 2008.
31. A. R. Minerick (speaker), K. B. Walters, B. B. Elmore, R. K. Toghiani, P. J. Hill, R. Hernandez, H. Toghiani, W. T. French, "Cross-Curricular Topic Inventory: Strategic Topic Placement for Concept Reinforcement and Enhanced Student Accountability", presented at the National ASEE meeting, Austin, TX, June 2009.
32. Toghiani, R.K. (speaker), Minerick, A. R., Walters, K. B., Hill, P. J., & Henington, C. D., "Engineering Future Chemical Engineers: Incorporation of Process Intensification Concepts into the Undergraduate Curriculum", *2010 ASEE Annual Conference Proceedings*, Louisville, KY, June 2010.
33. P. J. Hill (speaker), "NSF Broader Impacts: K-12 Outreach", presented at the AIChE National Meeting in Salt Lake City, November 2010.
34. Toghiani, R.K. (speaker), Minerick, A. R., Walters, K. B., Hill, P. J., & Henington, C. D., "Engineering Future Chemical Engineers: Incorporation of Process Intensification Concepts into the Undergraduate Curriculum", *2011 ASEE Annual Conference & Exposition*.
35. P. J. Hill (speaker), "Modeling of Breakage Equations Using PBE Software", presented at the Southeast Regional ASEE meeting, Charleston, SC, April 2011.

Undergraduate Student Poster:

D. C. Erves (presenter) and P. J. Hill, "The Size and Shape Modification of Sodium Chloride Crystals", presented at the AIChE National Meeting in San Francisco, November, 2003.

Other Universities (Invited):

1. University of Mississippi, Chemical Engineering Seminar, "Process Synthesis and Simulation of Solids Processes Accounting for Particle Size Distribution", 21 September 2001, Oxford, MS.
2. University of Alabama at Huntsville, Chemical Engineering Seminar, "Statistics of Multiple Particle Breakage Including Shape Factor", 27 January 2003, Huntsville, AL.
3. Clemson University, Chemical Engineering Seminar, "Effect of Breakage on the Particle Size-Shape Distribution in a Stirred Vessel", 30 October 2003, Clemson, SC.

4. University of Alabama at Tuscaloosa, Chemical Engineering Seminar, “Effect of Breakage on the Particle Size-Shape Distribution in a Stirred Vessel”, 18 November 2004, Tuscaloosa, AL.
5. Tennessee Technological University, Chemical Engineering Seminar, “Modeling of Changes in Particle Size-Shape Distributions due to Particle Breakage”, 27 September 2007, Cookeville, TN.

PROFESSIONAL ACTIVITIES

Officer

American Institute of Chemical Engineers (AIChE), National Programming Committee
 Vice-Chair, AIChE Area 2B, Crystallization and Evaporation (11/2001 – 11/2003).
 Chair, AIChE Area 2B, Crystallization and Evaporation (11/2003 – 11/2005).

American Institute of Chemical Engineers (AIChE), National
 Director, Separations Division, AIChE (11/2005 – 11/2010)

American Society for Engineering Education (ASEE), Southeastern Section
 Secretary, Chemical Engineering Division (4/2004 – 4/2005).
 Vice-Chair, Chemical Engineering Division (4/2005 – 4/2006).
 Chair, Chemical Engineering Division (4/2006 – 4/2007).
 Secretary, Publications and Promotions Unit (4/2007 – 4/2008).
 Vice-Chair, Publications and Promotions Unit (4/2008 – 4/2009).
 Vice-President, Publications and Promotions Unit (4/2009 – 4/2010).
 Vice-Chair, Chemical Engineering Division (4/2011 – 4/2012).

Session organizer

1. V. Manousiouthakis (Chair) and P. J. Hill (Vice-Chair), Process Synthesis, AIChE National Meeting in Los Angeles, November, 1997.
2. P. J. Hill (Chair) and D. J. Kirwan (Vice-Chair), Poster Session: Recent Developments in Crystallization and Evaporation, AIChE National Meeting in Miami, November, 1998.
3. D. J. Kirwan (Chair) and P. J. Hill (Vice-Chair), Advances in Crystallization and Evaporation, AIChE National Meeting in Miami, November, 1998.
4. P. J. Hill (Chair) and I. Moon (Vice-Chair), Advanced Process Integration, AIChE National Meeting in Dallas, November, 1999.
5. C. D. Maranas (Chair) and P. J. Hill (Vice-Chair), Design and Analysis, AIChE National Meeting in Los Angeles, November, 2000.
6. P. J. Hill (Chair) and G. C. Harris (Vice-Chair), Batch Processing Crystallization Tutorial, AIChE National Meeting in Reno, November, 2001.
7. P. J. Hill (Chair) and D. C. Miller (Vice-Chair), Process Synthesis, AIChE National Meeting in Reno, November, 2001.
8. D. A. Green (Chair) and P. J. Hill (Vice-Chair), Characterizing and Modeling Industrial Crystallization, AIChE National Meeting in Indianapolis, November, 2002.
9. D. L. Silverstein and P. J. Hill, Design in the ChE Curriculum, ASEE Annual Conference and Exposition in Nashville, June, 2003.
10. A. Jefcoat (Chair) and P. J. Hill (Vice-Chair), Modeling of Crystallization Processes (Solids Flow), AIChE National Meeting in San Francisco, November, 2003.

11. P. J. Hill (Chair) and J. Sefcik (Vice-Chair), Structural Models of Complex Particle Agglomerates and Assemblages, AIChE National Meeting in San Francisco, November, 2003.
12. P. J. Hill (Moderator), Chemical Engineering, Southeast Regional ASEE meeting, Auburn, AL, April 2004.
13. P. J. Hill (Chair), Separation Tutorial, AIChE Spring National Meeting in Atlanta, April, 2005.
14. P. J. Hill (Chair) and P. T. Spicer (Vice-Chair), Particle Formation and Crystallization Processes from Liquids or Slurry, AIChE National Meeting in Cincinnati, November, 2005.
15. P. J. Hill (Chair) and P. T. Spicer (Vice-Chair), Particle Formation and Crystallization Processes from Liquids or Slurry, AIChE National Meeting in San Francisco, November, 2006.
16. P. T. Spicer (Chair) and P. J. Hill (Vice-Chair), Particle Formation and Crystallization Processes from Liquids or Slurry, AIChE National Meeting in Salt Lake City, November, 2007.
17. P. J. Hill (Chair) and J. M. Gillian (Vice-Chair), Advances and Case Studies in Crystallization and Post-Crystallization Processing, AIChE National Meeting in Salt Lake City, November, 2007.
18. T. LaPorte (Chair) and P. J. Hill (Vice-Chair), Polymorphism in Pharmaceutical Development, AIChE National Meeting in Philadelphia, November, 2008.
19. P. J. Hill (Chair) and B. D. Hook (Vice-Chair), Advances and Case Studies in Crystallization and Post-Crystallization Processing, AIChE National Meeting in Nashville, November, 2009.
20. G. Beaucage (Chair) and P. J. Hill (Vice-Chair), Comminution - Experiments, Theory & Modeling, AIChE National Meeting in Nashville, November, 2009.
21. P. J. Hill (Chair) and M. Strumendo (Vice-Chair), Comminution - Experiments, Theory & Modeling, AIChE National Meeting in Salt Lake City, November, 2010.

Reviewer

Journals

Served as peer reviewer for:

AIChE Journal since 1995: 2002(2), 2004(2), 2005(1), 2006(2), 2007(2), 2008(1), 2010(2)

Chemical Engineering and Processing: Process Intensification: 2008(1)

Chemical Engineering Education since 2007: 2007(2)

Chemical Engineering Science since 2001: 2002(1), 2007(2), 2009(2), 2010(1)

Colloids and Surfaces A since 2004: 2004 (1), 2010 (1)

Computers & Chemical Engineering since 2008: 2008(1), 2009(1), 2010(1)

Crystal Growth & Design since 2006: 2006(1), 2009(4), 2010 (5)

Industrial & Engineering Chemistry Research since 2004: 2004(1), 2005(1), 2010(1)

Powder Technology since 2009: 2009(2), 2010(2)

Numbers in parentheses indicate number of articles reviewed that year.

Proposals

ACS-PRF: Reviewed individual proposal, 2006 (1), 2007 (1)

NSF: Review of individual proposals

2002 (1) NSF-Europe

2006 (2) DMS-MSPA-Interdisciplinary

Numbers in parentheses indicate number of proposals reviewed that year.

NSF Review Panels: 2004 (1), 2005 (1), 2006 (4), 2007(2), 2008(1), 2009 (1), 2010 (1), 2011 (1)

Numbers in parentheses indicate number of panels served on that year.

Other Professional Service

Judge, Graduate Student Award in Crystallization and Evaporation, Separations Division, American Institute of Chemical Engineers: 2003, 2004, and 2005

SERVICE

University Service

- University Library Committee, August 2006 – Present.
- Honor Code Council, August 2007 – Present.
- ORED Panel for Research Initiation Program Proposals, 2007.
- MSU Commencement Usher: December 2002, May 2003, December 2003, May 2004, December 2004, May 2005.
- Volunteer for Staff Appreciation Day: 26 May 2004.
- Materials Working Group, Secretary, February 2011 – Present
- Faculty Grievance Panel (Alternate), 4/2010 – Present.

College of Engineering Service

- Dean Search Committee for Bagley College of Engineering: 5/2007 – 2/2008
- Bagley Research Advisory Group: 11/2008 – 5/2009, 8/2010 - Present
- Speaker on MSU College of Engineering panel on NSF CAREER Awards: Spring 2006, Spring 2007
- Judge, Society of Plastics Engineers, MSU Chapter Poster Competition: February 2003
- Judge, MSU E-Week Research Poster Competition: February 2003, February 2004.
- Judge, MSU Region V Science and Engineering Fair: 28 March 2003, 10 March 2004, 2 March 2005, 1 March 2006, 28 February 2007, 27 March 2008, 26 March 2009
- Judge, Mississippi Science and Engineering State Fair (MSEF): 7 April 2006, 30 March 2010, 29 March 2011
- WISE Women Camp, Chemical Engineering Presentation: 13 July 2004, 17 July 2007, 10 July 2008
- Introduction to Engineering for Counselors and Teachers, Chemical Engineering Presentation: 28 July 2004

Departmental Service

- Scholarship Coordinator, 1/2008 – Present
- Promotion and Tenure Committee, 9/2007 - Present
- Search Committee for Director of School of Chemical Engineering: 12/2004 – 5/2005, 10/2008 – 10/2009, 11/2010 – present.
- Graduate Affairs Committee: 8/2001 – 8/2003
- Computing in the Curriculum Committee (Ad-hoc): Fall 2002
- Assessment Committee: 8/2003 – 8/2004
- Undergraduate Affairs Committee: 8/2004 – 8/2007
- Rose Report (Diversity and Conduct) Committee (Ad-hoc): 1/2006 – 12/2006

- Library Representative: Fall 2002 – Present
- Presented departmental FE reviews on:
 - Plant Design and Economics: Spring 2002, Fall 2002, Spring 2004, Spring 2005, Fall 2005, Spring 2006, Spring 2007, Spring 2008
 - Mass Transfer and Transport Phenomena: Fall 2003

Community Service

- Judge, Mississippi Private School Education Association (MPSEA) State Science Fair: 14 April 2004, 13 April 2005.
- Judge, Starkville Academy Science Fair: 22 February 2005, 21 February 2006.

TEACHING EXPERIENCE

Courses:

University of Massachusetts – Amherst

ChE 445 Chemical Process Design II (UG) Spring 1996

University of Minnesota – Duluth

ChE 2111 Material and energy balances (UG) Fall 2000, Spring 2001

ChE 4501 Chemical Engineering Design I (UG) Fall 2000

ChE 4502 Chemical Engineering Design II (UG) Spring 2001

Mississippi State University

ChE 3123 Chemical Engineering Thermodynamics II (UG) Fall 2005, Fall 2006, Fall 2008, Fall 2009, Fall 2010

ChE 3223 Mass Transfer Operations (UG) Spring 2008, Spring 2010, Spring 2011

ChE 4133 Process design (UG) Fall 2001, Spring 2002, Fall 2002

ChE 4234 Plant design (UG) Spring 2003, Spring 2004, Spring 2005, Spring 2006

ChE 4990/6990 Special Topics (UG/G) (Introduction to Particle and Crystallization Technology) Spring 2007, Spring 2009

ChE 4990/6990 Special Topics (UG) (NanoExposed!) Spring 2011

ChE 7000 DIS: Advanced Chemical Engineering Thermo (G) Fall 2010

ChE 8011 Graduate Seminar (G) Fall 2002, Fall 2010, Spring 2011

ChE 8113 Advanced Chemical Engineering Thermodynamics (G) Fall 2003, Fall 2004, Fall 2006, Fall 2009

Student Research supervision:

Current Ph.D. student: Devkant S. Gandhi

Current M.S. student: Aubrey Rainer

Former Ph.D. student:

Sheena M. Reeves, *Effects of Aging and Crystal Attributes on Particle Size Distributions in Breakage Experiments in Stirred Vessels*, 4/2011.

Former M.S. students:

Kumar Vedantham, *Effect of Operating Parameters on the Growth Rate of Solution Grown Crystals*, 8/2004. Currently in the Ph.D. program, Industrial and Physical Pharmacy Department, Purdue University

Katrina R. Parker, *Effect of Breakage on Crystal Shape Distribution in a Stirred Vessel*, 5/2005. Currently employed by the Mississippi Department of Transportation

Summer REU (Research Experience for Undergraduates) Students:

Donald C. Erves (2003)	Laci Smothers (2007)
Sheena M. Reeves (2004)	Stephen Castellane (2008)
Blair Broussard (2005)	Brian M. White (2009)
Hunter Lightsey (2006)	

Undergraduate research assistants: Fall 2004-Spring 2005: Sheena M. Reeves
Fall 2005-Spring 2006: Sheena M. Reeves
Fall 2006-Spring 2007: Hunter Lightsey
Fall 2007: Laci Kemp
Spring 2008-Spring 2009: Stephen Castellane

High School Student (Quest): July 2007 – Katie Clark

Service on other M.S. thesis committees: 11 completed

2001: Vijay K. Raju
2003: Tushar S. Durve, Sajeev Moorthiyedath, Dinesh K. Selvaraj,
Viviana Bennun Serrano
2004: Esteban J. Romano, Tao Ding
2007: Timothy J. Ruff
2008: Vijitha Mohan
2009: James Radich, Shangmin Xiong
2010: Caitlin Naske

Service on non-thesis M.S. committee: 1 completed

2005: Revathy Anbalagan

Service on other Ph.D. dissertation committees: 5 completed

2004: Tieling Xie
2005: Esteban J. Romano
2007: Jennifer Dearman, Stephen T. Dufreche
2010: Matthew Rowe
In Progress: Adebola Coker

FUNDING

Start-up Package at Mississippi State University: \$150,000.

Includes funding for equipment, supplies, graduate student salaries, and faculty summer salary

NSF SGER, “Effect of Breakage on Crystal Shape Distribution in a Stirred Vessel”, PI, 9/1/02 – 12/31/03, \$60,000

REU supplement to NSF SGER, PI, 5/03-8/03, \$3,535

NSF, “Theoretical Prediction of Coarse Particle Shape Evolution During Attrition in a Stirred Vessel”, PI, 3/1/04 – 2/28/05, \$60,000

REU supplement, PI, 6/04-8/04, \$3,535

NSF, “CAREER: A Multi-scale Approach to Particle Breakage in Stirred Vessels and Its Integration into Education”, PI, 7/15/2005 – 6/30/2010, \$400,001

REU supplement, PI, 6/06-8/06, \$3,791

REU supplement, PI, 5/07-7/07, \$5,964

REU supplement, PI, 6/08-8/08, \$3,791

REU supplement, PI, 6/09-8/09, \$4,265

Mississippi State University Sustainable Energy Center, “Separation of Specialty Chemicals from Bioenergy Processes”, PI: P. J. Hill, co-PI’s: A. R. Minerick, and K. B. Walters, 6/06-5/07; Total Project: \$454,888; Hill’s Funding: \$122,473.

Mississippi State University Sustainable Energy Center, “Development of Fuels from Bio-Oils”, PI: Philip Steele, co-PI’s: Steven Alderman, El-Barbary Hassan, Priscilla Hill, Leonard Ingram, Adrienne Minerick, Richard Patton, Charles Pittman, Radha Srinivasan, Hossein Toghiani, Rebecca Toghiani, Keisha Walters; 9/2008 – 5/2010; Total Project: \$1,162,954; Hill’s Funding: \$102,860.

NSF, CCLI, “Engineering Future Chemical Engineers: Incorporation of Process Intensification Concepts into the Undergraduate Curriculum”, PI: R. K. Toghiani, co-PI’s: A. R. Minerick; K. B. Walters, P. J. Hill, C. Henington; 3/2009 – 2/2012; Total Project: \$150,000; Hill’s Funding: \$30,000.

NSF, “Thermal Characterization Equipment for Diverse Particulate Materials Research and Education”, PI: P. J. Hill, co-PI’s: A. R. Minerick, and K. B. Walters, 9/09-8/10; Total Project: \$100,000.

NSF, NUE, “Multifunctional Nanostructures for Integrated Electrical, Chemical, Mechanical and Biological Applications: an Interdisciplinary Certificate Program”, PI: P. J. Hill, co PI’s: G. Thibaudeau, O. J. Myers, Y. Koshka, C. Henington, 1/2011 – 12/2012; Total Project: \$200,000; Hill’s Funding: \$40,000.

RESEARCH COLLABORATION

MSU Diagnostic Instrumentation and Analysis Laboratory (DIAL), 9/2001 – 7/2003.

MSU Sustainable Energy Research Center (SERC), 6/2006-12/2010.

OTHER CONFERENCES AND WORKSHOPS ATTENDED

SACHE Faculty Workshop: Process Safety in Process Design, Wyandotte, Michigan, April 21-24, 2002.

ASEE Summer School for Chemical Engineering Faculty, Boulder, Colorado, July 27 – August 1, 2002.

12th Larson Workshop, Association for Crystallization Technology, Groton, Connecticut, September 15-17, 2003.

13th Larson Workshop, Association for Crystallization Technology, North Chicago, Illinois, October 3-6, 2004.

Southeast Regional ASEE meeting, Tuscaloosa, Alabama, April 2006.

14th Larson Workshop, Association for Crystallization Technology, Princeton, New Jersey, October 8-11, 2006.

Teaching Workshop for Science, Engineering & Mathematics, Mississippi State, Mississippi, January 4-5, 2007.

Southeast Regional ASEE meeting, Louisville, Kentucky, April 2007.

15th Larson Workshop, Association for Crystallization Technology, Madison, Wisconsin, October 7-10, 2007.

ACS-PRF Grant Writing Workshop, Washington, D.C., August 2008.

Southeast Regional ASEE meeting, Marietta, Georgia, April 2009.

AIChE Leadership Development Conference (LDC), Augusta, Georgia, June 12-14, 2009.

16th Larson Workshop, Association for Crystallization Technology, Cambridge, Massachusetts, October 4-7, 2009.

17th Larson Workshop, Association for Crystallization Technology, New Brunswick, New Jersey, October 3-6, 2010.