

Curriculum Vitae for David O. Prevatt

BRIEF DESCRIPTION OF JOB DUTIES

The position of Assistant Professor of Civil Engineering in the Structures Group involves teaching, research, and service. Teaching includes undergraduate and graduate courses in structural engineering, and wind engineering. These courses present the state-of-art methods used in the design of structural systems. Teaching also includes the supervision of graduate students conducting research.

Research involves proposal writing; conducting funded research; publishing in peer-reviewed journals and conference proceedings; and dissemination of research findings through presentations to local, state, national, and international audiences. Research also includes attracting, recruiting, and mentoring high-quality graduate students; producing Masters and Ph.D.s; securing funding; and developing topics for their research.

Service activities promote the civil engineering profession, the Department of Civil & Coastal Engineering, the College of Engineering, and the University of Florida. Service activities include active participation on international and national committees; participation in international and national conferences; serving on university and departmental committees, and advising departmental student chapter organizations.

AREAS OF SPECIALIZATION

Experimental simulation of structural and wind loads on low-rise buildings, structural resistance of building envelope systems, quantification of extreme wind effects, wind tunnel modeling, forensic investigation techniques, modeling behavior of commercial and residential building envelope systems, predicting aging characteristics of historic and contemporary building facades, curtain wall design, roofing and wall cladding and plaza waterproofing systems.

ASSIGNED ACTIVITY

	2007--08	2002-03	2001-02	2000-01	1999-00
Teaching	25%				
Research	72%				
Service	3%				
Total	100%	0%	0%	0%	0%

EDUCATION

Ph.D., Clemson University, 1998, Civil Engineering
M.S., Clemson University, 1997, Civil Engineering
B.Sc. (Honours), University of the West Indies, 1985, Civil Engineering

PROFESSIONAL REGISTRATION

Professional Engineer (Civil-Structural), Massachusetts, 2003, No. 45425
Registered Engineer (Civil), Trinidad and Tobago, 2001, No. 04-755

EMPLOYMENT

Academic Employment

University of Florida, 2007- Present, Assistant Professor (Structures)
Clemson University, 2004-2007, Assistant Professor of Civil Engineering

Industry Employment

Simpson Gumpertz & Heger Inc., 1998-2004, Senior Engineer
Ministry of Works – Trinidad, 1985-90, Civil Engineer II

Post-Graduate Research Employment

Clemson University, 1993-98, Graduate Research Assistant
University of the West Indies, 1990-93, Research Assistant

YEAR TENURE WAS AWARDED BY UNIVERSITY OF FLORIDA

N/A

TEACHING ADVISING AND/OR INSTRUCTIONAL ACCOMPLISHMENTS

University of Florida

New Courses Developed and Courses Substantially Modified

N/A

Other Courses Taught for the First Time

CGN 3710 Experimentation and Instrumentation for Civil Engineering (undergraduate, 3 cr)

Clemson University

New Courses Developed and Courses Substantially Modified

CE 809 Forensic Engineering (graduate 3 cr)

Other Courses Taught for the First Time

CE253 Civil Engineering Measurements (undergraduate, 2 cr)
 CE 206 Structural Mechanics (undergraduate, 3 cr)
 CE 807 Wind Engineering (graduate, 3 cr)
Undergraduate High Honors Committees

Number as Chair 1 (Harold Boudreau III 2008)

Undergraduate Research Assistants (from Department of Civil and Coastal Engineering)

Student	Date

Other Research Assistants

Student	Date	Department

PUBLICATIONS

Refereed Publications Excluding Refereed Proceedings (quantity 5):

Prevatt, D.O., Schiff, S.D., Stamm, J.S., and Kulkarni, A.S., “Wind Uplift Behavior of Mechanically Attached Single-Ply Roofing Systems: The Need for Correction Factors in Standardized Tests”, *ASCE Jnl. of Structural Engineering*, Vol. 134, No. 3, (2008) 489-498.

Prevatt, D. O., “Wind Load Design and Performance Testing of Exterior Walls: Current Standards and Future Considerations”, *Performance of Exterior Building Walls*, ASTM STP 1422, P. G. Johnson Ed., *ASTM International, West Conshohocken, PA*, (2003) 17-41.

Prevatt, D. O., Schiff, S. D., and Malpezzi, J. A., “An Investigation of Chamber Size for Standardized Tests of Single-Ply Roof Systems”, *Fourth International Symposium on Roofing Technology*, Gaithersburg, MD, *National Roofing Contractors Association*, Rosemont, IL, September 1997.

Prevatt, D. O., Schiff, S. D., and Sparks, P. R., “A Technique to Assess the Wind Uplift Performance of Standing Seam Metal Roofs”, *11th Conference on Roofing Technology*,

Gaithersburg, MD, National Roofing Contractors Association, Rosemont, IL, September 1995.

Prevatt, D., “Improving the Cyclone Resistance of Traditional Caribbean House Construction Through Rational Structural Design Criteria”, *Journal of Wind Engineering and Industrial Aerodynamics* 52, (1994) 305-319.

Refereed Proceedings

See Section 16 for refereed papers presented at conferences and included in the conference proceedings.

g) Non-refereed Publications

Bagyalakshmi Shanmugam, Bryant G. Nielson, David O. Prevatt, “Probabilistic Descriptions of Roof to top plate connections in light frame wood structures”, ASCE Structures Congress 2008, Vancouver, British Columbia, April 2008.

Forrest Masters, Kurtis Gurley, David O. Prevatt; “Full-Scale Simulation of Turbulent Wind-Driven Rain Effects on Fenestration and Wall Systems”, 3rd International Symposium on Wind Effects on Buildings and Urban Environment, Tokyo, Japan, March 2008.

Liu, Z., Prevatt, D.O., Gurley, K., Aponte, L. and Reinhold, T., “Validating Wind Tunnel Technique using Full Scale Wind Pressure Data”, accepted for presentation at the 12th International Conference on Wind Engineering, Cairns, Australia, July 2007.

Cui, Bo and Prevatt, “Are Wind Loads on Sawtooth Roofs Higher than Wind Loads on Monosloped Roofs?” accepted for presentation at the 12th International Conference on Wind Engineering, Cairns, Australia, July 2007.

Datin, P.L., and Prevatt, D.O., “Wind Uplift Reactions at Roof-to-Wall Connections of Wood-Framed Gable Roof Assembly”, accepted for presentation at the 12th International Conference on Wind Engineering, Cairns, Australia, July 2007.

Luis D. Aponte-Bermúdez, Kurtis Gurley, David O. Prevatt, Timothy Reinhold, “Uncertainties in the Measurement and Analysis of Full-scale Hurricane Wind Pressures on Low-rise Structures”, accepted for presentation at the 12th International Conference on Wind Engineering, Cairns, Australia, July 2007.

Liu, Z. Prevatt D.O., Aponte L., Reinhold, T.A., Gurley, K., and Masters, F.J. “Wind Load Determination Using Field Data and Wind Tunnel Studies on Residential Buildings, LACCEI 2006, 4th Latin American and Caribbean Conference for Engineering and Technology, Mayaguez, Puerto Rico, June 2006.

Prevatt, D.O., Cui, B., “External Pressure Coefficients for Sawtooth and Monosloped Roofs,” ASCE Structures Congress 2006, St. Louis, MO, May 2006.

Datin, P., Liu, Z., Prevatt, D.O., Reinhold, T., Gurley, K. and Masters, F.J., “Wind Loads on Single-Family Dwellings in Suburban Terrain – Comparing Field Data and Wind Tunnel Simulation”, ASCE Structures Congress 2006, St. Louis, MO, May 2006.

Reinhold, T.A., Dearhart, E.A., Gurley, K., and Prevatt, D.O., “Wind Loads on Low-Rise Buildings: Is One Set of Pressure Coefficients Sufficient for All Types of Terrain?”, The Second International Symposium on Wind Effects on Buildings and Urban Environment, Seoul, Korea, September 2005.

Prevatt, D.O., Dupigny-Giroux, L., Masters, F.J., and Koch, L., “Twenty-five Years of Caribbean Hurricane Disaster Mitigation”, Bangladesh, NSF US-Bangladesh Workshop, Bangladesh, December 2005.

Liu, Z., Prevatt, D.O., Dearhart, E.A., Reinhold, T., Gurley, K. and Masters, F.J., “Wind Load on Components and Cladding Systems for Houses in Coastal Suburban Areas, presented at the 10th Americas Conference on Wind Engineering, Baton Rouge, LA, June 2005.

Masters, F.J., Reinhold, T.A., Gurley, K.R., and Prevatt, D.O., “The Effect of Hurricane Eyewall and Convective Features on Surface-Level Turbulence, presented at the 10th Americas Conference on Wind Engineering, Baton Rouge, LA, June 2005.

Powell, M.D., Murillo, S., Reinhold, T., Gurley, K., Masters, F., and Prevatt, D., “Hurricane Windfalls at Landfall: 2004, presented at the 10th Americas Conference on Wind Engineering, Baton Rouge, LA, June 2005.

Gurley, K., Masters, F., Prevatt, D., Reinhold, T., “Hurricane Data Collection: FCMP Deployments During the 2004 Hurricane Season, presented at the 10th Americas Conference on Wind Engineering, Baton Rouge, LA, June 2005.

Prevatt, D. O., “Engineering Curriculum for Building Envelope Professionals”, presented at the Americas Conference on Wind Engineering, Clemson, SC, June 2001.

Prevatt, D. O., Schiff, S. D., and Malpezzi, J. A., “Wind Uplift Tests for Mechanically-Attached Single-Ply Roof Membranes”, the Eighth US National Conference on Wind Engineering, Baltimore, MD, June 1997.

Kanhai, K., and Prevatt, D., “Temporary Carnival Structures in Trinidad and Tobago”, International Conference on Engineering for Crowd Safety, Institution of Civil Engineers, London, Elsevier, 1994.

Prevatt, David O., Schiff, Scott, D. and Malpezzi Joseph A. “Investigation of Chamber Size for Standardized Tests of EPDM Single-Ply Roofing Systems”, Proceedings of Structures Congress XV, Portland, OR, Kempner, L. and Brown, C. ed. (1997), p. 11-15.

Prevatt, D. O., and Schiff, S. D., “BRERWULF Across the Way”, presented at Third UK Conference on Wind Engineering, Oxford, England, Wind Engineering Society, September 1996.

Imbert, D., Drakes, P., and Prevatt, D., “The Importance of Hurricane Risk Assessment in Housing and Improved Design and Building Practice Therein”, presented at ASCE Conference on Hurricanes of 1992, Miami, FL, December 1993; *Proceedings*, American Society of Civil Engineers, NY, 1994.

Osborne, R., Imbert, I., Sharma, A., and Prevatt, D., Drakes, P., “Cyclone (Hurricane) Resistance of Residential Buildings in the Caribbean”, *Proc. Int. Assoc. of Bridge and Structural Eng. Congress*, New Delhi, 1992.

Research Reports

Prevatt, David O., “07-501 Forensic Investigation of Roof Structures of the Duplex Residential Unit at Douthit Hills Residential Complex”, Clemson University, Clemson South Carolina (8 February 2008).

Prevatt, David O., “Improving the Wind Uplift Capacity of Wood Roof Panels Retrofitted with ccSPF Adhesives”, Report No. 04-07, NCFI Polyurethanes, (19 October 2007).

Prevatt, David O. “Wind Uplift Behavior of Wood Roof Sheathing Panels Retrofitted with Spray-Applied Polyurethane Foam”, Report No. 03-07, Honeywell and Hunstman, (31 August 2007)

Prevatt, David O., “Constructing Scale Model Roof-to-Wall Connections in Residential Construction for Dissemination of Hurricane Mitigation Techniques”, WLTF 02-07, South Carolina Sea Grant Consortium, (31 May 2007)

<http://www.davidoprevatt.com/wp-content/SCSeaGrantV337SFinalReport.pdf>

Prevatt, David O., “Wind Uplift Reactions at Roof-to-Wall Connections of Wood-Framed Gable Roof Assembly,” WLTF 01-07, South Carolina Sea Grant Consortium, (31 May 2007)

<http://www.davidoprevatt.com/wp-content/SCSeaGrantFinalReporR191061107.pdf>

Prevatt, David O., “2005 Preliminary Data - Wind Loads on Residential Roofs – Comparing Full-Scale and Wind Tunnel Results,” WLTF: 2006-02, 23, Florida Department of Consumer Affairs through Florida International University, (23 August 2006) http://www.ihrc.fiu.edu/lwer/docs/Year6_Section6_Neighborhoods_RCMPY6.pdf

Prevatt, David O., “Wind Tower Deployments and Pressure Sensor Installation on Coastal Houses – Preliminary Data Summary”, Clemson University, WLTF 01-2006, SC Sea Grant Consortium, (March 2006)

<http://davidprevatt.com/wp-content/SG%20Report%20PDF.pdf>

Prevatt, David O., Carter, Russell, and Liu, Zhuzhao, “Wind Loads on Complex Residential Roofs – Preliminary Comparison of Full-Scale and Wind Tunnel Results”, Clemson University, WLTF 05-01, Florida Department of Community Affairs through FIU, (Sept. 2005) http://www.ihrc.fiu.edu/lwer/docs/Year5_Tab04_Architecture.pdf

Prevatt, David O., and Schiff, Scott D., “Uplift Testing of Standing Seam Metal Roof Systems,” Clemson University MBMA Project 903, (June 1996).

Other Scholarly Publications

Prevatt, D.O., “Wind Engineering Response to the Hurricane Risk to the Grand Strand, SC”, Given at a Disaster Prevention and Prediction Hearing: Before the US Congress Subcommittee on Disaster Prevention and Prediction of the Committee on Commerce, Science, and Transportation of the United States Senate Myrtle Beach, SC (10 August 2005) http://commerce.senate.gov/hearings/testimony.cfm?id=1598&wit_id=4581

Lectures, Speeches, or Posters Presented at Professional Conferences/Meetings

International

Prevatt, David, O. “Wind Engineering Research at Clemson University” Dept. of Civil and Environmental Engineering, University of the West Indies, St. Augustine, Trinidad, April 2007

D.O. Prevatt, and Masters, F.; “Implications and Opportunities of US Hurricane Wind Research for Caribbean Structural Engineering Practice”, presented at the Institution of Structural Engineers Structural Engineering Conference, Barbados, (13 December 2004).

Invited Speaker/Panelist

Prevatt, David O., “Elements of Hurricane-Resistant Research”, Clemson University Restoration Institute, Clemson, SC, <http://breeze.clemson.edu/p16524406/> (8 November 2006)

Prevatt, D.O.; “The Essentials of Hurricane-Resistant Residential Construction”, Coastal Contractor Magazine Seminar, Hanley Wood’s Coastal Contractor, Wilmington, NC (10 October 2006).

Other Presentations

Datin, P.L., Prevatt, D.O., “Preliminary Results of Full-Scale Monitoring of Hurricane Wind Speeds and Wind Loads on Residential Buildings”, 12th Annual Mini-Technical Conference of the Palmetto Chapter of the American Meteorological Society, Columbia, SC, March 2006.

Prevatt, D.O., “The Hurricane Hazard, Mitigation and Vulnerability in the Caribbean”, Guest Lecture to Geography 246 – Climatology and Natural Hazards, a service-learning course at University of Vermont, Burlington, VT, (November 2005).

Prevatt, D.O., Graduate Research in Wind Engineering, highlights of current research, presented to Advisory Board of the COES, Clemson University, (14 November 2005)

Gardner, C., Prevatt, D.O., Reinhold, T., Liu, Z. and Dearhart, E.A., “Variability of External Pressure Coefficients with Terrain Roughness on Low-rise Buildings”, poster presentation at the 10th Americas Conference on Wind Engineering, Baton Rouge, LA June 2005.

Prevatt, D.O., Cui, B., Kopp, G., Gabby, B., and Dukes, Z., “External Pressure Coefficients for Sawtooth and Monosloped Roofs”, poster presentation at the 10th Americas Conference on Wind Engineering, Baton Rouge, LA, June 2005.

Prevatt, D.O., “Strategic Plan for the Wind Load Test Facility”, presented to faculty of the Department of Civil Engineering, Clemson University, (27 January 2005)

Prevatt, D.O., “Current and Future Wind Engineering Research at Clemson University”, American Association of Wind Engineering Workshop, Orlando, FL - Presenter (7 December 2004). “National Windstorm Impact Reduction Program - Developing Research and Implementation Plan”, American Association of Wind Engineering Workshop, Orlando, FL - Presenter (7 December 2004).

Prevatt, D.O., “When Bad Things Happen To Good Buildings”, Chi Epsilon (Clemson University Chapter, Keynote Speaker at the Fall Banquet (November 2004)

Prevatt, D.O., “Damage Observations in Charley, Frances, Ivan and Jeanne”, Charleston County Public Library, Charleston, SC (October 2004)

Prevatt, D.O., “Strategy for Hurricane Risk Assessment for Charleston Hospitals”, Charleston County Public Library, Charleston, SC (October 2004)

Prevatt, D. O., “Wind Engineering Design Basics”, Northeastern University, Boston, MA (April 2003)

Prevatt, D. O., “Wind Engineering Basics”, Simpson Gumpertz and Heger Inc., Waltham, MA (August 2002)

Prevatt, D. O., “Ultimate Structural Engineering”, Northeastern University, Boston, MA (November 2001)

Prevatt, D. O., “Six Days in the Life of a Building Envelope Engineer”, Northeastern University, Boston, MA (January 2001)

Building Big Classroom Video (“Thinking Big”) (2000) – WGBH, Boston, companion video for the PBS series, Consultant and Presenter.

Prevatt, D. O., “The Perfect Investigation - Carlyle Towers Condominium, NJ”, Simpson Gumpertz and Heger Inc., Arlington, MA (March 2000)

Prevatt, D. O., “Wind Engineering Topics and Building Envelope Design”, Northeastern University, Boston, MA (September 1999)

Prevatt, D. O., “The Wind and Low-Rise Building Envelopes”, Christian Brothers University, Memphis, TN (September 1999)

17. Contracts and Grants

Funded Research Contracts and Grants

University of Florida

Title of Contract	Funding Agency	Value of Contract	Effective Dates	Role
Hurricane Resistance of Florida Residential Construction: In-Field Evaluation of Practicality, Acceptability and Effectiveness of Hurricane Retrofit Mitigation Measures	Department of Community Affairs, State of Florida	\$176,008	9-1-2007 to 6-30-2008	PI
Wind Uplift Performance of Roof Sheathing retrofitted with SPF	Honeywell/Hunstman	\$44,548	5-2-2007 to 12-31-2007	PI
Structural Capacity of Roof Sheathing Panels Retrofitted with Spray-applied Polyurethane Foam	NCFI Polyurethanes	\$10,900		PI

SPONSORED RESEARCH - Pending

“Performance Based Wind Engineering: Interaction of Hurricanes with Residential Structures”, National Science Foundation, \$445,370 (7-01-08 to 6-30-11) (Co-PIs Gupta, Oregon State U. & van de Lindt, Colorado State U.)

Clemson University

Title of Contract	Funding Agency	Value of Contract	Effective Dates	Role
Constructing Scale Model Roof-to-Wall Connections in Residential Construction for Dissemination of Hurricane Mitigation Techniques	SC Sea Grant Consortium	\$5,000	(3-1-06 to 2-28-07)	PI
Predicting Wind Uplift Failures of Wood-Framed Residential Roof Structures Using Influence Function and Database Assisted Design	South Carolina Sea Grant Consortium	\$120,109 \$60k for Year 1 only	(3-1-06 to 2-28-08),	PI
SGER: Structural Roof Capacities of Existing Residential Roof Construction	NSF	\$105,771	Oct 2006 to May 2007	PI
Comparing Field Measured Pressures with Wind Tunnel Model Studies of Single-Family Homes in Suburban Areas	South Carolina Sea Grant Consortium	\$47,998	4-30-2005 to 5-1-2007	PI
Technical Support for Hurricane Loss Program – Wind Tunnel Tests	Florida DCA thru FIU	\$45,000	3-1-05 to 8-11-05	Co-PI
Wind Tower Deployments and House Sensor Installation	SC Sea Grant Consortium	\$9,893	(2004-2005).	PI
Ground-Level Hurricane Wind Characteristics in Real-time	National Oceanographic and Atmospheric Administration	\$34,013	(2004 - 2005)	Co-PI
Technical Support for Hurricane Loss Mitigation	Florida DCA thru FIU	\$55,000	(3-1-05 to 8-11-05)	Co-PI
Visiting Industrial Scholar Program - Activity to introduce building envelope design and forensic engineering to the civil engineering offerings	Oak Ridge Associated Universities	\$600		PI
Technical Support for Florida Coastal Monitoring Program, Year 2	University of Florida	\$120,228	2005-2006	Co-PI
The Florida Hurricane Alliance Year Two: Monitoring Surface Level Hurricane Winds in Real-Time	NOAA thru Univ. of Florida	\$20,000	1-1-06 to 12-31-06	Co-PI

Role	Total	Direct Costs	Indirect Costs
Principal Investigator			
Co-Principal Investigator			
Investigator			
Totals			

Other Sponsored Activities

NSF Travel Fund from CMMI Grant #0555920 to attend 12th International Conference on Wind Engineering, Cairns, Australia 1 July 2007 through 6 July 2007 (\$6,000).

Travel Grant, College of Engineering and Science, Clemson University, \$2,500, (2005).

International Research: Richards, G., Hinds, L., Bryan, C., “ICT Enabled Disaster Communications for Vulnerable Caribbean Communities” sponsor, The International Development Research Center, Canada (December 2005), research collaborations with the University of the West Indies – wind effects on structures, pending

GRADUATE STUDENT ADVISING

University of Florida

Applicant's Role	Student	Research Topic	Home Dept.	Complete Date
Chair 1 Ph.D.	Peter L. Datin		CE	
Chair 3 MS	Kenneth Hill		CE	
Committees	William Dugary			
	Chelsea Scheid		CE	
Member 1 Masters	Nard Shah		CE	
			CE	
			CE	

Clemson University

Applicant's Role	Student	Research Topic	Home Dept.	Complete Date
Chair 2 Ph.D.	Zhuzhao Liu	Reliability of Components and Cladding Systems of Residential Houses	CE	08/2006*
	Bo Cui	External Pressure Coefficients for Sawtooth and Monosloped Roofs	CE	08/2007*
Ph.D. External Examiner	Sudhakar Molletti	Performance Evaluation of Mechanically Attached Roofing Systems	CE/ Univ. of Ottawa, Canada	12/2005
Member 3 Ph.D.	Ketan R. Sompura	A study on the potential of deicing chemicals to cause alkali-silica reaction in concrete		06/2006
	Rashmi R. Pattnaik	Investigation into compatibility between repair material and substrate concrete using experimental and finite element methods		12/2006
Committees	Cheng Liang (Evan) Hsiao	Wall and ground movements in a braced excavation in clays and serviceability reliability of adjacent buildings		05/2007
Chair MS Committees	Peter L. Datin	(MS Non-thesis)	CE	05/2007
	Satyam Gajjar	(MS Non-thesis)	CE	05/2007
Member 3 Masters	Joshua S. Stamm	Evaluation of single-ply mechanically attached roof membrane systems under wind uplift conditions	CE	12/2004
	Amolprasad S. Kulkarni	Evaluation of mechanically attached single-ply membranes based on tear resistance and weld strength under wind uplift conditions	CE	12/2005
	Aniket Shrikhande	(MS Non-thesis)	CE	12/2006

CE 889, Special Projects I – Paul Fama, “Wind Uplift Strength of Roof-to-Wall Connection in 50-Year Old Residential Structures”, (Spring 2007)

CE 889, Special Projects I, - Satyam Gajjar, “A Data Acquisition Program for Measuring Roof-to-Wall Connection Loads”, (Fall 2006)

Undergraduate Student Advising:

CE 490, Special Topics – Kenneth Hill, “Validation of TSI 1127 Air Velocity Calibrator as a Replacement for the Current EPA Software”, (Spring 2007)

CE 490, Special Topics - Zach Dukes, “Wind Pressure Coefficients” (Spring 2005)

CE H387 – Junior Honors Project - Rebecca Hunter “Hospital Evacuation (Fall 2005)

MGT 315 – New Ventures Creation – Eric Boettner and Michael Finnegan “A Strategic Plan for Wind Load Test Facility – facilitator senior management project (Spring 2005)

TEACHING

Courses Taught – UF (Beginning Spring 2008)

CGN 3710, Instrumentation and Measurements for Civil Engineers, S08

Courses Taught – Clemson (Beginning Fall 2004)

CE 253, Civil Engineering Measurements, F04, S05

CE 200, Structural Mechanics (Co-taught with Dr. Scott Schiff), S05

CE 206, Structural Mechanics, F05, S06

CE 807, Wind Engineering, F05

CE 809, Forensic Engineering, F06

UNIVERSITY AND PUBLIC SERVICE

Service

Panel Reviewer - Pre-Disaster Mitigation Proposal, Department of Homeland Security
(April 2007)

National Science Foundation IGERT Pre-Proposal Reviewer, Arlington, VA 18/19 June
2007

University Committees

Department: Member, Laboratory and Safety Committee (2005 -)
Member, Structures Faculty Search Committee (2005 - 2006)

College: Member, Dean Search Committee (2005 - 2006)

University: Energy Task Force Committee, Housing Division (Fall 2006)

25. Membership and Activities in the Profession

Member, American Society of Civil Engineers, ASCE (1995 -)

Member, American Association of Wind Engineering, AAWE (1997 -)

Member, Wind Engineering Society (United Kingdom), WES (2004 -)
Member, Association of Professional Engineers of Trinidad and Tobago,
APETT (1985 -)
Partner, Partnership for Advancing Housing Technology, PATH (2005 -)

26. Honors

Faculty Award, Board of Trustees, Clemson University (April 2007)
ASCE EXCEED Teacher Fellow Award (2006)
Herb Busching Award, Roof Consultant's Institute (1997)
R. C. Edwards Fellow, Clemson University (1996, 1997)
Kimley-Horn Fellow, Clemson University (1996)
Chi Epsilon Society (1995)

CONSULTING EXPERIENCE

Englekirk & Sabol Consulting Engineers, Los Angeles, CA (2005 - 2006), Conduct wind tunnel studies to determine components and cladding and MWFRS loads and pedestrian-level wind speeds for high-rise buildings using boundary layer wind tunnel.

4SEInc. Charleston, SC (2004-2005), Consulting on hurricane risk assessment for component and cladding wind loads during hurricane of the Medical University of South Carolina, Charleston, SC campus.

Bloom & Watkin, Boston, MA (2004-2005), Forensic investigation of water-damaged high-rise apartment building in Newport News, VA to determine cause of leakage during Hurricane Isabel (2003).

32. Further Information

Other Teaching Duties

- Coordinator and instructor for transportation session in CGN 2002 (Introduction to Civil Engineering course);
- Regular guest lectures for courses.
- Guest lecture for); Spring 2003, Spring 2004.
- Performed 2 guest lectures per semester for

Professional Development

Monthly Faculty Development Program Meetings, Charles H. Houston Center for the Study of the Black Experience in Education, Clemson University, Clemson, SC (Oct. 06, Nov. 06, Dec. 06, Jan. 07)

ASCE EXCEED 2006 Teacher Training Workshop, West Point Military Academy, NY, American Society of Civil Engineers (23 to 28 July 2006)

Motivating and Teaching Your Students to Take Good Lecture Notes, OTEI Workshop Clemson University, Clemson, SC (9 December 2005)

How to Become a Successful Author of Scientific Articles on Article Writing OTEI Workshop, Clemson University, Clemson, SC , (10 November 2005)

“Teaching Your Students to Read Academic Material” OTEI Workshop, Clemson University, Clemson, SC (4 February 2005).

“Mitigating Housing Losses in Extreme Natural Events: 2005”, Institute for Catastrophic Loss Reduction and University of Western Ontario, Toronto, Canada (21 February 2005).

“Hurricanes Charley, Frances, Ivan and Jeanne Researchers Workshop”, Florida Building Commission and Institute for Business and Home Safety, Orlando, FL - Attendee (6 December 2004).

“Grant Writers’ Seminars and Workshop”, David Morrison and Stephen Russell, Madren Center, Clemson, SC – Attendee (November 2004).

“College of Engineering and Science Seminar on NSF’s CAREER,” Attendee (September 2004).

Continuing Education

Facilitator, ECE 417/617 Elements of Software Engineering, taught by Stan Birchfield, Asst. Professor, Electrical Engineering (Spring 2006). “Visualization of Wind Pressures on Roofs of Low-Rise Residential Buildings”, <http://www.ces.clemson.edu/~stb/ece417/>

Workshop, “Using the Clemson Library for Research and Projects”– presented by Sylvia George-Williams Engineering Librarian, for graduate students of Dept. of Civil Engineering and CE807 wind engineering class (November 2005)

Service-learning Facilitator, GEOGRAPHY 246 - Climatology and natural hazards, taught by Dr. Lesley-Ann Dupigny-Giroux, University of Vermont, Burlington, VT (November 2005), “Natural Hazards Risks in the Caribbean Islands”

“Coastal Disasters Conference”, Charleston, SC, ASCE, Session chair, (May 2005).

“10th Americas Conference on Wind Engineering”, Baton Rouge, LA, Session Chair and Reviewer (June 2005).

“The 2005 Hurricane Season and Wind Load Test Facility”, interview for Focus on Schools with Doug Keels Program, Madren Center, for broadcast on 23 May 2005, (19 April 2005).

“Structural Engineering Input to Health Facility Design”, Guest Lecture for final year Architecture students for Prof. Jane Hurt, (4 April 2005).

“CCATS Open House at the Wind Load Test Facility”, Clemson University, SC (16 April 2005).

“High School Students Open House at the Wind Load Test Facility”, Focus on Research Month at Clemson University, SC (15 April 2005).

“What Can I Do with This BS?” hosted by the PEER and WISE Program, Panelist, (17 March 2005).

“Field Instruments in Action”, forensic engineering demonstration workshop at the Wind Load Test Facility, Presenter (18 March 2005).

“Visiting Industrial Scholar Program of the Oak Ridge Associated Universities”, Seminar Chair and Host to Ms. Susan Knack of SGH Inc. (17 March 2005).

“National Windstorm Impact Reduction Program - Developing Research and Implementation Plan”, American Association of Wind Engineering Workshop, Orlando, FL - Presenter (7 December 2004).

“Wind Loads on Low-Rise Buildings – A WLTF Research Program” Workshop at the Charleston Public Library to present research findings and results from WLTF students to disaster mitigation community, Charleston, SC – Session Chair and Presenter (October 2004).

Papers submitted for publication to refereed journals

Koch, L., D.O. Prevatt, Dupigny-Giroux, L., and Masters, F.J., “Hurricane Disaster Mitigation to Reduce Damage and Losses to Caribbean Residential Construction”, ASCE Natural Hazards Review (under revision, December 2008)

Prevatt, David O.; “Training of Engineers – In Class or On the Job? Student Responses to Learning Forensic Engineering Techniques”, (May 2008)

Datin, Peter L. and Prevatt, David O.; “Wind Uplift Capacities of OSB Panels Fastened to Wood Trusses”, (May 2008)

Liu, Z., Prevatt, D.O., Reinhold, T., Gurley, K. and Masters, F.J., “Field Measurements and Wind Tunnel Simulation of Hurricane Wind Loads on Single Family Dwellings,” to be submitted to Jnl. of Wind Engineering and Industrial Aerodynamics (June 2008)

Prevatt, D.O., Cui, B., “External Pressure Coefficients for Sawtooth and Monosloped Roofs”, to be submitted to the Jnl. of Wind Engineering and Industrial Aerodynamics (March 2008)

Carter, R.R., and Prevatt, D.O. “Wind Loads on Free Canopy Roofs – the Design and Performance of Gas Station Canopies in Extreme Wind Events, to be submitted for review and publication to the Journal of Architectural Engineering (in preparation)