

# College of Engineering and Science

**RESUME** – David O. Prevatt, Ph.D., PE

## **PERSONAL DATA**

Assistant Professor  
Department of Civil Engineering  
Clemson University  
Clemson, SC 29634  
864/656-5941

## **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

## **PROFESSIONAL EXPERIENCE**

Clemson University, 2004- , Assistant Professor of Civil Engineering  
Simpson Gumpertz & Heger Inc., 1998-2004, Senior Engineer  
Clemson University, 1993-98, Graduate Research Assistant  
University of the West Indies, 1990-93, Research Assistant  
Ministry of Works – Trinidad, 1985-90, Civil Engineer II

## **MEMBERSHIPS**

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 - )

## **PUBLICATIONS**

### **Refereed Journal Publications**

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.

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

### **Conference Proceedings (Reviewed)**

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 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.

Prevatt, D. O., Schiff, S. D., and Sparks, P. R., “A Technique to Assess the Wind Uplift Performance of Standing Seam Metal Roofs”, presented at 11<sup>th</sup> Conference on Roofing Technology, Gaithersburg, MD, National Roofing Contractors Association, Rosemont, IL, September 1995.

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.

### **Conference Proceedings (Unreviewed)**

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

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

## **PRESENTATIONS**

Prevatt, D.O., “Implications and Opportunities of US Hurricane Wind Research for Caribbean Structural Engineering Practice”, The 2004 Hurricane Season – Implications for Structural Engineering Practice in the Caribbean, Institution of Structural Engineers – Caribbean Division, St. Michael, Barbados (December 2004)

Prevatt, D.O., “Current and Future Wind Engineering Research at Clemson University”, 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., “Wind Loads on Low-Rise Buildings – A WLTF Research Program”, Charleston County Public Library, Charleston, SC (October 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., “Current Design Criteria for Components and Cladding of Engineered Buildings”, ASTM Symposium on Performance of Exterior Building Walls, Phoenix, AZ (March 2001)

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

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)

Prevatt, D. O., "Trends in Music and Wind Engineering", Simpson Gumpertz and Heger Inc., Arlington, MA (November 1997)

### **HONORS AND AWARDS**

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)

### **SPONSORED RESEARCH**

"Visiting Industrial Scholar Program - Activity to introduce building envelope design and forensic engineering to the civil engineering offerings", Oak Ridge Associated Universities, Principal Investigator, \$600, (2004-2005)

"Wind Tower Deployments and House Sensor Installation," South Carolina Sea Grant Consortium, Principal Investigator, \$9,893 (2004-2005)

"Ground-Level Hurricane Wind Characteristics in Real-time," National Oceanographic and Atmospheric Administration, Principal Investigator, \$34,013, (2004 - 2005).

### **GRADUATE STUDENT ADVISING**

#### **Current Graduate Advising**

Zhuzhao Liu (Ph.D.), "*Reliability of Components and Cladding Systems of Residential Houses*", (December 2005).

Russell R. Carter (Ph.D.), "*Investigation of Canopy Failures Under Wind Loads*", (May 2006)

Cos Gardner (M.Eng.), "*Comparison of Field and Model Wind Pressures on Suburban Residential Structure in Hurricane Ivan*", (December 2005)

### **TEACHING**

#### **Courses Taught (Beginning Fall 2004)**

CE 253, Civil Engineering Measurements

CE 200, Structural Mechanics

**UNIVERSITY AND PUBLIC SERVICE**

**Continuing Education** (Lecturer, Developer, Conference Chair, etc.).

“Active and Interactive Learning Online: Workshop for Faculty”,  
Clemson University, Clemson, SC (25 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)

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

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

“Workshop: Introduction to Photoshop”, Sam Wang, Clemson  
University, Clemson, SC - Attendee (December 2004)

“Digital Photography as a Teaching Tool”, Sam Wang Clemson  
University - Attendee (November 2004)

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

“Wind Loads on Low-Rise Buildings – A WLTF Research Program”  
Workshop for five Wind Load Test Facility students to present their  
research and preliminary findings to disaster mitigation community,  
Charleston, SC – Session Chair and Presenter (October 2004)

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

Blackboard Assessments: Gradebook Basics. Attendee (August 2004)

Blackboard Introductions: Getting Started, Attendee (August 2004)

**Committees**

Department: Member, Laboratory and Safety Committee (2004 - )

**Other Service**

Faculty Advisor, African Caribbean Students Association (2004 - ).

**MISCELLANEOUS**

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

***27 February 2005***