



Tenth Americas Conference on Wind Engineering (10ACWE)

May 31-June 4, 2005

Baton Rouge, Louisiana, USA

For More Information
www.10ACWE.lsu.edu
(225) 578-4813

CONFERENCE AND REGISTRATION INFORMATION

Full Registration includes the printed book of extended abstracts, full proceedings on CD-ROM, discounted registration rates for short courses, and tickets for all conference meals (Wednesday evening icebreaker reception, Thursday lunch, Thursday dinner and Awards Banquet, and Friday evening Cajun/Zydeco swamp tour and dinner at Alligator Bayou).

One-Day Registration includes the printed book of extended abstracts, full proceedings on CD-ROM, and discounted registration rates for short courses. Conference meals are not included, but tickets can be purchased.

Short Courses are available on a number of technical topics including background and application of wind load provisions, design of roofs for wind resistance, retrofit techniques for wind resistance, specifying hurricane resistant products, bridge aerodynamics, wind tunnel test techniques and applications, and wind-induced structural dynamics.

Technical Tours. A tour of a hurricane resistant glass manufacturing facility is available on May 31 (extra ticket required – see registration form). Tours to the LSU Wind Tunnel Laboratory and the Louisiana House (LSU demonstration home featuring hurricane resistant construction techniques) are scheduled for several times during the conference, available at no charge to all registrants.

Companion Tours

Thursday June 2, 10:30 am – 2:30 pm

Tour of Nottoway Plantation, one of the largest and most elaborate antebellum plantation houses in the south, including lunch at the plantation restaurant.

Friday June 3, 10:00 am – 3:00 pm

Tour of the LSU Rural Life Museum with its extensive collection of tools, utensils, furniture, and farming equipment. The museum preserves and interprets an important part of the state's and nation's rural heritage. It also serves as a research facility for LSU students engaged in heritage conservation studies. This will be followed by lunch at the LSU Faculty Club, and then a tour of the beautiful LSU campus.

Post-conference Tour in New Orleans

Saturday June 4 and Sunday June 5

The group will leave Baton Rouge by bus at 1:00 PM on Saturday for the post conference tour to the Big Easy....New Orleans! The trip to New Orleans will be narrated and we will make a visit to the Mississippi River levees. Reaching New Orleans around 4:00 PM, you will have time to settle in your hotel and get ready to board the authentic Steamboat 'Natchez' at 6:00 PM for a Jazz/Dinner Cruise. You will enjoy a casual dinner buffet all while listening to life jazz by the world renowned 'Dukes of Dixieland'. The boat will be back in the harbor by 9:00 PM after which you will have time to savor the French Quarter on your own. Sunday morning we will meet at 9:00 am for a 1½ hour guided walking tour to explore the storied streets of the 'Vieux Carre' (French Quarter), where legend and documented history converge. Discover everything from the outrageous colonial history to Creole culture, from piracy to architectural masterpieces, enjoying New Orleans' gumbo of legend and truth. After the tour we will have a New Orleans style brunch at one of the many culinary hotspots of the French Quarter. A shuttle will be available on Sunday after brunch to drop people off at the New Orleans or Baton Rouge airports.

10 ACWE CONFERENCE REGISTRATION FORM



Name _____
(first name) (last name)

Title _____

Company _____

Phone _____

Address _____

Fax _____

Email _____

		Through	After	Subtotals
		25-May	25-May	
Conference Registration				
AAWE Members	Full Registration	\$500	\$575	\$ _____
	One day registration	\$185	\$225	
NonMembers	Full Registration	\$525	\$600	
	One day registration	\$210	\$250	
Full Time Students	Full Registration	\$110	\$125	

AAWE Annual Membership \$50 \$ _____
 Not a member or haven't renewed for 2005? Include your dues and get member prices shown above.

		Number	Through	After	Subtotals
		of Courses	25-May	25-May	
Short Course Registration					
<small>(Circle all course numbers you are registering for)</small>					
4 Hour Short Courses (4PDH each)	_____		\$95	\$110	\$ _____
	Reduced rate for Conference Registrants	_____	\$55	\$65	\$ _____
<small>Courses T1 T2 T5 W1</small>					
2 Hour Short Courses (2 PDH each)	_____		\$60	\$70	\$ _____
	Reduced rate for Conference Registrants	_____	\$40	\$50	\$ _____
<small>Courses T3 T4 T6 T7 W4 F1</small>					
1 Hour Short Course (1 PDH)	_____		\$10	\$15	\$ _____
	Reduced rate for Conference Registrants	_____	\$5	\$10	\$ _____
<small>Course W3</small>					

		Number	Amount	
		of Persons	Per Person	
Extra Meal/Event Tickets				
June 1 - Icebreaker Reception	_____		\$15	\$ _____
June 2 - Lunch	_____		\$20	\$ _____
June 2 - Banquet	_____		\$45	\$ _____
June 3 - Swamp Tour/Cajun Dinner	_____		\$75	\$ _____

Technical Tour

May 31 - Hurricane Resistant Glass Manufacturing Tour	_____	\$25	\$ _____
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Companion Tours

June 2 - Nottaway Plantation and lunch	_____	\$35	\$ _____
June 3 - Rural Life Museum & LSU campus, lunch at Faculty Club	_____	\$25	\$ _____

Post Conference Trip-New Orleans

Dinner on Riverboat, French Quarter tour, Sunday Brunch	_____	\$125	\$ _____
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Payment **TOTAL** \$ _____

By Check - Make Check Payable to 10ACWE, in US\$
 Mail check to AAWE, PO Box 17298 Baton Rouge, LA, 70893 USA

By Credit Card - Circle Type Mastercard Visa Expiration _____

Name on Card _____ Card Number _____
first name middle initial last name

Billing Address _____

Signature _____

FAX REGISTRATION FORM TO +1 (225) 578-7646



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PROFESSIONAL DEVELOPMENT COURSE LIST

Separate registration required for each course, see registration sheet for details

TUESDAY MAY 31

ASCE 7 Wind Loads I - Background and Basics

Course T1. 8:15 am-12:30 pm (4 PDH)

ASCE 7 Wind Loads II – Application and Examples (4 PDH)

Course T2. 1:30 -5:45 pm (4 PDH)

Retrofit Techniques for Wind Mitigation of Existing Homes (2 PDH)

Course T3. 8:15 am-10:30 am (2 PDH)

What a Consulting Engineer Needs to Know About Wind-Tunnel Testing

Course T4. 10:30 am-12:30 pm (2 PDH)

Achieving Good High-Wind Performing Roof Systems – It Can Be Done

Course T5. 1:30 pm-5:30 pm (4 PDH)

Bridge Aerodynamics and Vibration Mitigation

Course T6. 1:30 -3:30 pm (2 PDH)

Wind Tunnel Test Techniques for Low-rise Structures and Large Roofs

Course T7. 3:45 am-5:45 pm (2 PDH)

TECHNICAL TOUR - Manufacturing of Hurricane/Impact Resistant Glass

Tour T1. 10:20 am-3:30 pm (1.5 PDH)

WEDNESDAY JUNE 1

Wind and Hurricane Provisions of the International Building Code

Course W1. 8:00 am-12:00 noon (4 PDH)

The 2004 Hurricane Test: An Assessment for Upgrades to the Building Code**

Special Session W2. 8:00 am-9:00 pm (1 PDH)

Enhancing Extreme Wind Resistance Envelope Design by Utilizing Product Approvals

Course W3. 9:00 am-10:00 pm (1 PDH)

Dynamic Response of Structures to Wind

Course W4. 10:00 am-12:00 noon (2 PDH)

FRIDAY JUNE 3

Beyond ASCE 7: What to do When Your Building or Structure is Not Covered by ASCE 7

Course F1. 1:30 am-3:45 pm (2 PDH)



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PROFESSIONAL DEVELOPMENT SHORT COURSES

Separate registration required for each course, see registration sheet for details

TUESDAY MAY 31

ASCE 7 Wind Loads I - Background and Basics

Course T1. 8:15 am-12:30 pm (4 PDH)

Ted Stathopoulos, Ph.D.

Many difficulties in understanding and using the ASCE 7 wind load provisions arise from lacking the background and basics of wind engineering and building aerodynamics, particularly in the area of wind-structure interaction. This workshop intends to address and present in simple terms the fundamentals and basic concepts of wind loading in order to assist the practicing engineer and architect to understand the ASCE 7 wind load provisions and their background. In this way the provisions will be applied properly for the appropriate design of buildings and other structures against wind. The Workshop will address the following topics and include a question and answer period:

- Wind speeds, turbulence and wind climate
- Exposure of buildings
- Building aerodynamics
- Pressure coefficients
- Component and cladding loads
- MWFRS loads
- Internal pressures
- Architectural features (eaves, parapets etc)

ASCE 7 Wind Loads II – Application and Examples (4 PDH)

Course T2. 1:30 -5:45 pm (4 PDH)

T. Eric Stafford, P.E.

This presentation will address the determination and application of the wind provisions of ASCE 7. Specific issues to be discussed include the topics listed below. In addition an overview of the significant changes from ASCE 7-98 to ASCE 7-02 will be provided.

- Simplified Method
- Analytical Procedures
- Basic Wind Speeds
- Surface Roughness and Exposure Categories
- Load Combinations
- Example Problems.

Retrofit Techniques for Wind Mitigation of Existing Homes (2 PDH)

Course T3. 8:15 am-10:30 am (2 PDH)

T. Eric Stafford, P.E.

This presentation is part of the Blueprint for Safety Program. It provides an in-depth instruction to affordable disaster-resistant building techniques for existing homes. Specific retrofit techniques discussed include:

- Strengthening the Roof,
- Protecting Openings
- Connecting the Roof to Exterior Walls
- Bracing Gable End Walls.

What a Consulting Engineer Needs to Know About Wind-Tunnel Testing

Course T4. 10:30 am-12:30 pm (2 PDH)

Leighton Cochran, Ph.D, C.P.Eng

This two-hour presentation and discussion will give the consulting engineer, architect and developer a detailed outline of what wind-tunnel testing can do for a new project and when the consideration of architectural aerodynamics is appropriate. Since projects ranging from skyscrapers to single-story homes may be tested for structural loads, cladding pressures and the assessment of ambient pedestrian-level wind speeds it is appropriate for the consulting engineer to know the right questions to ask in assessing the usefulness of placing a new development in the wind tunnel. Issues like ‘At what point in the design process is such a study valuable?’, ‘How long does it take, and how are the results used upon completion?’, ‘Do only buildings in hurricane-prone areas need to be wind-tunnel tested?’, ‘Is there a financial incentive to perform a site-specific, building-specific wind-tunnel study?’ will be discussed in a ninety-minute presentation followed by about thirty-minutes of discussion and questions about specific concerns from attendees.

Achieving Good High-Wind Performing Roof Systems – It Can Be Done

Course T5. 1:30 pm-5:30 pm (4 PDH)

Tom Smith, AIA, RRC

This presentation is intended for architects, engineers and roof consultants. It will also be of interest to major building owners, contractors and roofing materials manufacturers. The following topics will be addressed:

- Correlating design uplift loads with test data
- Key elements of various low-slope systems
- Key elements of asphalt shingles and tiles
- Anchoring rooftop equipment
- Special considerations for critical/essential facilities
- Special considerations when re-roofing
- Key elements of drawings and specifications
- Key elements of construction contract administration

Bridge Aerodynamics and Vibration Mitigation

Course T6. 1:30 -3:30 pm (2 PDH)

Steve Cai, Ph.D., PE

This session is intended to provide a general overview of bridge aerodynamics, the types of problems encountered, and mitigation options. It is geared towards practicing engineers, graduate students, and others with knowledge of structural engineering, who do not necessarily have a background in wind engineering and/or bridge aerodynamics. Information provided will facilitate communication between the practicing engineers and wind experts on current or future projects.

First, the basics of wind-induced bridge/cable vibration problems will be introduced. Then, design countermeasures for new bridge designs and mitigation methods for existing bridges will be presented. The roles as a structural engineer in long-span bridge design will be discussed. Case studies of a new bridge design and existing bridge rehabilitation will be included. Finally, new developments in this area will be briefed.

Wind Tunnel Test Techniques for Low-rise Structures and Large Roofs

Course T7. 3:45 am-5:45 pm (2 PDH)

John Holmes, Ph.D., C.P.Eng

The two-hour lecture will cover the basic scaling rules for wind-tunnel studies of external and internal wind pressures on low-rise buildings, and for large roofs on sports stadia etc. State-of-the art techniques for deriving effective static design wind loads from pressure measurements will be covered, and methods of calculating and incorporating resonant response discussed. The scaling rules for internal pressure simulation and the frequency response of pressure measurement systems will be addressed. Some mathematics is included...

The course is intended for graduate students and younger wind-tunnel practitioners with some experience in wind engineering. Practicing structural designers of large roofs may find also it useful to understand the possibilities of wind-tunnels in optimizing the structural design of large roofs for wind forces.

TECHNICAL TOUR - Manufacturing of Hurricane/Impact Resistant Glass

Tour T1. 10:20 am-3:30 pm (1.5 PDH)

This session will provide information on manufacturing processes used to make hurricane and impact resistant glass and window systems. Dependable Glass Works, Inc of Covington, Louisiana uses a unique system with a 3-ply core of polyester based interlayers in their laminated glass products. One layer extends past the perimeter of the glass lites to allow mechanical fastening to a framework, in conjunction with a compatible structural adhesive. This patented method of attaching glass to the framework gives Safety Plus® Hurricane/Impact Resistant Glass its extreme unique performance characteristics.

Transportation between Dependable Glass and the Sheraton Convention Center will be provided (approximately a 75-minute drive each way). Upon arrival at the factory, attendees will be treated to a Louisiana-style lunch of crawfish and jambalaya.

For more information about the company, please see their web site at www.dependableglass.com.



Large missile impact test

WEDNESDAY JUNE 1

Wind and Hurricane Provisions of the International Building Code

Course W1. 8:00 am-12:00 noon (4 PDH)

T. Eric Stafford, P.E.

This presentation will give an overview of the wind provisions of the 2000 IBC. Specific issues addressed include Basic Wind Speed, Exposure Categories, Simplified Procedure for Low-rise Buildings, Load Combinations, Material and Assembly Specific Testing Requirements, and Example Problems. An overview of the significant changes from the 2000 IBC to the 2003 IBC will also be given.

The 2004 Hurricane Test: An Assessment for Upgrades to the Building Code**

Special Session W2. 8:00 am-9:00 pm (1 PDH)

Richard Dixon, P.E., CBO

**** No charge for this session with any other course or conference registration**

Building code requirements for hurricane protection have improved significantly in the past decade. The hurricanes of 2004 provided the first real world tests of how effective these improvements are in mitigating damage. Post hurricane assessments indicate significant improvement in structural performance but point to problems with certain components and cladding and water intrusion.

Mr. Dixon is a Florida registered professional engineer and certified building official and serves as Executive Director to the Florida Building Commission. He has worked in building product and building code standards development and administration for 30 years.

Enhancing Extreme Wind Resistance Envelope Design by Utilizing Product Approvals

Course W3. 9:00 am-10:00 pm (1 PDH)

James L. "Jimmy" Buckner, P.E.

Four Hurricanes in six weeks, affecting the majority of Florida provided full scale testing on building envelopes. Buildings designed to new codes with tested product approvals performed very well. The Florida and International Building Code requires testing and/or documentation to show compliance to code standards. Permit requirements call for the applicant to demonstrate that roof and wall products can resist the wind design loads per ASCE 7. This course will provide a basic knowledge of key wind resistant engineering data in product approvals. Handouts will provide guidance on where to find this information, examples of approvals and other resources.

- Purposes of Product Approval
- Increasing Wind Code & Wind Insurance Requirements
- Third Party Pressure Resistance Testing & Evaluations
- Third Party Quality Assurance
- Key Engineering Performance Data in Reports & Limits of Use
- Extrapolation (& limits) to demonstrate code compliance
- Where to find Approvals & Additional Product Information
- Questions & Discussion

Dynamic Response of Structures to Wind

Course W4. 10:00 am-12:00 noon (2 PDH)

Ahsan Kareem, Ph.D.

This course provides an introduction and overview to the wind-induced dynamic response of structures. It covers the following topics:

Dynamic analysis:a primer

Natural frequencies, Damping, Modal analysis

Introduction to wind-induced response

Dynamic wind load effects on structures

Gust loading factors, Wind tunnel testing, Simulation of flows, Pressure models, High-frequency models, Aeroelastic models, Aerodynamic databases, Equivalent static wind loads, Synthesis of loads and wind climate

ASCE 7 /International Codes

Human comfort in tall buildings

Damping devices

FRIDAY JUNE 3

Beyond ASCE 7:

What to do When Your Building or Structure is Not Covered by ASCE 7

Course F1. 1:30 am-3:45 pm (2 PDH)

John Holmes, Ph.D., C.P.Eng

This short course is intended for practicing building design professionals. It describes the options available for cases when building shapes or geometries are not available to calculate wind loads in ASCE-7. The options include foreign codes and standards, and special wind tunnel-tests.

OTHER PROFESSIONAL-ORIENTED SESSIONS AND ACTIVITIES

With daily or full conference registration. See full schedule or web site for times and details.

Wednesday June 1

Opening Plenary Session on Hurricanes –

State of the-art presentations on hurricane winds, losses, and mitigation

Draft Provisions of the National Standard on Storm Shelter Design and Construction

Thursday June 2

Hurricane Charley Damage Investigation Report

Hurricane Ivan Damage Investigation Report

Building a Safer Louisiana - Learning from Florida Hurricanes of 04

National Wind Hazard Impact Reduction Program

Friday June 3

Professional Paper Session I – Wind Analysis and Design Tools

ASCE 7 05 and ASCE 7-10,

Professional Paper Session II – Hurricane Losses, Mitigation, and Shelters

ABOUT THE PRESENTERS

James L. “Jimmy” Buckner, P.E.

President, C-Buck Engineering

Jimmy Buckner is a graduate of Clemson University, BSCE and President of C-Buck Engineering in West Palm Beach, Florida. His experience includes over thirty years in the design, construction and product testing/evaluation of building covering systems in the southeastern United States and the Caribbean. Awards include “1981 Engineer of the Year in Construction” by thirty Atlanta engineering societies. He is active in Florida’s developing Product Approval System. C-Buck Engineering focuses on Roofing and Covering Products, specifically turn-key product approval services and site-specific design for local permits. He is a Miami Dade approved test engineer and is a member of ASCE / SEI, ICC, AAWE, & RCI.

Steve C.S. Cai, PhD, PE

Assistant Professor of Civil and Environmental Engineering

Louisiana State University

Dr. Cai’s expertise is in the areas of bridge engineering, bridge aerodynamics, concrete and composite design and construction, and other aspects of bridge analysis and design. He has authored and co-authored dozens of papers and has developed a very strong research program on these topics at Louisiana State University, where he currently serves as an Assistant Professor of Civil and Environmental Engineering. His professional engineering experience prior to joining academia includes an Eisenhower Fellowship with FHWA researching bridge aerodynamics, three years with Michael Baker Jr., Inc. in complex bridge design and four years with Florida DOT in R&D. His professional service work includes appointment as Secretary/Treasurer for AAWE and for 10ACWE, and membership in several ASCE, ACI, and TRB national technical committees

Leighton Cochran, PhD, CPEng.

Senior Associate, CPP Inc

Dr. Leighton Cochran is a Senior Associate at Cermak, Peterka, and Petersen, Inc., Wind Engineering and Airflow Consultants. He has a broad range of experience in research and consulting studies of wind loads on buildings, pedestrian level winds, topographic effects, wind energy, and environmental studies. His previous experience includes four years as Wind Tunnel Manager for Vipac Engineers and Scientists in Melbourne, Australia, and time as a Research Scientist at Colorado State University. Dr. Cochran is very active in the profession, participating in numerous professional engineering societies and technical committees. This includes chairing the Wind Effects Booklet Task Committee for the ASCE Wind Effects Committee, and serving as Secretary of the ASCE Aerodynamics Committee. He is also active in other several other committees related to wind engineering. He has one book chapter and 14 peer-reviewed journal articles in print, over 30 conference papers, and hundreds of technical reports. He has organized and moderated numerous conference sessions and is becoming a sought after speaker himself. Dr. Cochran has provided several invited/keynote lectures at recent international meetings, on the topic of new developments in commercial wind engineering.

John Holmes, Ph.D., C.P.Eng

Director, JDH Consulting

Dr. John D. Holmes has been engaged in research, testing and consulting in wind loads and wind effects for over 30 years. He was actively involved in the writing of Australian Standards AS1170.2-1989, AS/NZS1170.2:2002 (Wind loads) and AS3995-1994 (Design of steel lattice towers and masts). He is the author or co-author of some 300 journal papers, conference presentations, and research and consulting reports, and the strong selling book: “Wind Loading of Structures”, published by Spon Press of London in 2001. He has been a consultant for, or carried out collaborative research with, many companies and organizations worldwide. He was awarded a Fulbright Senior Fellowship in 1989, the Warren Medal by the Institution of Engineers in 1990, and a Senior Fellowship by the Japan Society for Promotion of Science in 1996. He is a Fellow of the Institution of Engineers, Australia. He is currently also Regional Coordinator, Asia-Pacific, and Convenor of Workshops on Codification, for the International Association of Wind Engineering. As a consultant, he has also been involved in the determination of design wind loads for many major structures including : West Gate Bridge, Melbourne; Citycorp Building, New York; Stadium Australia, Sydney; My Thuan Bridge, Vietnam; Colonial Stadium, Melbourne; Baram Bridge, Malaysia; Macau Tower, China; Wembley Stadium, London, Chevron Redevelopment, Gold Coast, Australia.

Dr. Ahsan Kareem

Robert M. Moran Professor of Civil Engineering and Geological Sciences, University of Notre Dame

Dr. Ahsan Kareem is one of the leading authorities on wind-induced dynamics of buildings and structures. His work forms much of the basis for the dynamic response provisions of ASCE 7, a committee on which he has long served. His distinguished career includes significant contributions in many areas of wind engineering, structural dynamics, damping systems, offshore mechanics, probabilistic mechanics, full-scale monitoring, and translating his research findings into codes and standards. A few of the many highlights from his career include being the recipient of the 2002 ASCE Jack E. Cermak Medal for outstanding contributions to wind engineering, serving as the President of AAWE, and chairing the 6th US National Conference on Wind Engineering, the ASCE Specialty Conference on Hurricane Alicia, and the ASCE Specialty Conference on Probabilistic Mechanics and Structural Reliability. He currently directs the NatHaz Modeling Laboratory at Notre Dame

Thomas L. Smith, AIA, RRC

President, TlSmith Consulting Inc.

Thomas L. Smith is president of TlSmith Consulting Inc. He specializes in architectural technology and research, with an emphasis on roof systems. Smith is a licensed architect and a registered roof consultant. In particular, he is recognized for his expertise related to wind performance of roof systems. Mr. Smith has been a member of the committee that is responsible for ASCE 7, *Minimum Design Loads for Buildings and Other Structures* since 1990. He has performed building performance research following ten hurricanes and several tornadoes. He authored *Low-Slope Roofing II*, published by the National Council of Architectural Registration Boards (2001), and he was contributing author of the following publications: *Design Guide for Improving School Safety in Earthquakes, Floods, and High Winds*, FEMA 424 (2004), *Coastal Construction Manual: Principles and Practices of Planning, Siting, Designing, Constructing, and Maintaining Residential Buildings in Coastal Areas, Third Edition*, FEMA 55 (2000) and *Buildings at Risk: Wind Design Basics for Practicing Architects*, AIA (1997). Previous positions include serving as Research Director for the National Roofing Contractors Association (NRCA) and private practice in California and Alaska. He has designed roofs from the arctic to the tropics.

T. Eric Stafford, PE

President, T. Eric Stafford & Associates

T. Eric Stafford is a registered professional engineer specializing in wind hazard mitigation and code development activities. He is currently President of T. Eric Stafford & Associates and serves as a building code consultant for the Federal Alliance for Safe Homes and the Institute for Building and Home Safety. He previously served as Vice President/Technical Services for the Federal Alliance for Safe Homes (FLASH). He has a Bachelor Civil Engineering and a Master of Science (Structural emphasis). Eric is a member of the ASCE 7 Task Committee on Wind Loads, the ASCE Standards Committee on Minimum Design Loads, member of the National Hurricane Conference Planning Committee, Chairman of the National Hurricane Conference Engineering Topic Committee, Former Staff Liaison to the SBCCI Wind Load Committee, and former Staff Liaison to the International Building Code Structural Code Development Committee. Eric is a national lecturer on the wind provisions of the International Building Code and ASCE 7. Prior to joining FLASH, he was Manager of Codes for the International Code Council and Director/Code Development for the Southern Building Code Congress

Ted Stathopoulos, PhD

Professor of Building, Civil and Environmental Engineering, Concordia University,

Dr. Ted Stathopoulos is currently Professor at the Department of Building, Civil and Environmental Engineering and Associate Dean of the School of Graduate Studies of Concordia University in Montreal, Canada. His research in the area of wind effects on buildings and their codification has been influential in the development of codes and standards around the world. He has an extensive publication record with 125 articles in refereed journals. He received the Best Paper Award for the paper entitled "Wind-Tunnel Studies of Buildings and Structures" published in the ASCE Journal of Aerospace Engineering in 1996. He has been honored by the American Association for Wind Engineering and he received the 1997 Engineering Award of the National Hurricane Conference for his "exhaustive studies leading to the adoption of the new ASCE-7 *Minimum Design Loads for Buildings and Other Structures* which is already leading to safer, more hurricane-resistant construction in many areas". He serves on the ASCE Standards Committee of Minimum Design Loads of Buildings and Other Structures and chairs the Wind Effects Committee of the Structural Engineering Institute of ASCE. He is a member of ASHRAE Technical Committee 4.3 on Infiltration Requirements and Ventilation. He is a professional engineer registered in Québec, Ontario and in Greece; he is a Fellow of the Canadian Academy of Engineering and a Fellow of the American Society of Civil Engineers.

Tenth Americas Conference on Wind Engineering Overall Schedule of Events and Sessions

Tuesday May 31

	Track 1	Track 2	Track 3	Track 4	Technical Tours
7:30-5:00	Registration				
8:15-10:15		ASCE 7 Wind Loads I - Background and Basics Ted Stathopoulos	Retrofit Techniques for Wind Mitigation of Existing Homes T. Eric Stafford		
10:15-10:30	Break				Manufacturing of Hurricane Resistant Glass Dependable Glass Works, Inc Covington, Louisiana Transportation and lunch provided
10:30-12:30		ASCE 7 Wind Loads I - Background and Basics continued	Guide to Wind Tunnel Testing for Practicing Engineers and Architects Leighton Cochran		
12:30-1:30	Lunch on your own				
1:30-3:30	Bridge Aerodynamics and Vibration Mitigation Steve Cai	ASCE 7 Wind Loads II - Provisions T. Eric Stafford	Achieving Good High-Wind Performing Roof Systems-- It can be done. Tom Smith		
3:30-3:45	Break				
3:45-5:45	Wind Tunnel Test Techniques for Low-rise Structures and Large Roofs John Holmes	ASCE 7 Wind Loads II - Provisions continued	Achieving Good High-Wind Performing Roof Systems-- It can be done. cont'd		LSU Wind Tunnel Laboratory and Louisiana House demonstration home for hurricane, wind, and flood resistant construction
6:00-8:30	Reception and Cash Bar, Bienville Room				

Note - shaded entries denote short courses with additional fees required. See registration information

Wednesday June 1

	Track 1	Track 2	Track 3	Track 4	Technical Tours
7:30-5:00	Registration				
8:00-8:55	IAWE Regional Assembly Ahsan Kareem	The 2004 Hurricane Test: An Assessment of Building Code Performance Richard Dixon	Wind and Hurricane Provisions of the International Building Code T. Eric Stafford		
9:00-9:55	AAWE General Membership Meeting	Enhancing Extreme Wind Resistance Envelope Design by Utilizing Product Approvals Jimmy Buckner, P.E.			
10:00-10:55	AAWE Board Meeting	Wind Resistant Wood Frame Construction Randy Shackelford		Dynamic Response of Structures to Wind Ahsan Kareem	LSU Wind Tunnel Laboratory and Louisiana House demonstration home for hurricane, wind, and flood resistant construction
11:00-11:55					
12:00-1:00	Lunch on your own				
1:00-1:20	OPENING PLENARY SESSION Welcome Opening Remarks - Conference Chairman, Marc Levitan				
1:20-2:15	STATE-OF-THE ART SESSION ON HURRICANE WINDS, LOSSES, AND MITIGATION Uncertainty in Hurricane Wind Speeds - Dr. Mark Powell, NOAA Hurricane Research Division Hurricane Loss Estimation Modeling - Dr. Larry Twisdale, Applied Research Associates				
2:15-3:10	Break				
3:10-3:30	Reducing Damage and Losses in Hurricanes: The Need for Barbarians and Bureaucrats - Dr. Timothy Reinhold, Institute for Business and Home Safety				
3:30-4:25	Break				
4:25-4:45	Break				
4:45-6:15	WIND I 2004 Hurricane Winds	DAMAGE I 2004 Hurricane Damage	LOW RISE BUILDINGS I	Professional Track The ICC/NSSA Storm Shelter Standard: Ultimate Wind?	Wave Lab Tour Shaketable - Mounted Wave Tank with Applications to Liquid Dampers
6:30-8:30	Reception and Cash Bar, Atrium Lounge				

Note - shaded entries denote short courses with additional fees required. See registration information

Thursday June 2

	Track 1	Track 2	Track 3	Professional Track	Technical Tours
7:30-5:00	Registration				
8:00-8:15 8:15-9:10 9:10-9:15	PLENARY SESSION - INTERNATIONAL WIND ENGINEERING Introduction, and International Perspectives on Wind Engineering - Dr. Ahsan Kareem Aerodynamic Studies for the Brazilian Wind Code - Prof. Joaquim Blessmann Conference Announcements				
9:20-10:25	WIND II Extratropical Winds	WIND ENERGY	BLUFF BODY AERODYNAMICS Cylinders	Professional Track Hurricanes of 2004 Damage Report I: Charley	
10:25-10:45	Break				
10:45-12:15	WIND III Wind Climate	ANALYSIS TOOLS I Proper Orthogonal Decomposition	NON-BUILDING STRUCTURES I Open Structures, Walls,	Professional Track Hurricanes of 2004 Damage Report II: Ivan	
12:15-1:30	Lunch in Atrium				
1:30-2:00	POSTER SESSION I			Professional Track	
2:00-3:45	WIND IV Tropical Winds	ANALYSIS TOOLS II Computer-Aided Wind Engineering	NON-BUILDING STRUCTURES II Loads and Wind-Induced	Building a Safer Louisiana: What Should be the Blueprint? Panel	
3:45-4:15	Break				
4:15-6:00	WIND V Engineering Wind Parameters	DAMAGE II Hurricane Damage Investigations and Techniques	ENVIRONMENTAL WIND ENGINEERING	Professional Track Input by Wind Engineering Community to Planning Process For the National Windstorm Impact Reduction Program	LSU Wind Tunnel Laboratory and Louisiana House <small>demonstration home for hurricane, wind, and flood resistant construction</small>
6:30-7:30	Cash Bar in Atrium Lounge				
7:30-9:30	Conference Banquet AAWE Awards Speaker - Dr. Kam-biu Liu "Hunting Prehistoric Hurricanes"				

Friday June 3

	Track 1	Track 2	Track 3	Professional Track
7:30-4:30	Registration			
8:00-8:15 8:15-9:10 9:10-9:15	PLENARY SESSION - COMMERCIAL WIND ENGINEERING Introduction and Australian Perspectives on Wind Engineering - John Holmes State-of-the-Art Review of Commercial Wind Engineering - Dr. Leighton Cochran Conference Announcements			
9:15-10:25	STORM SHELTERS	WINDBORNE DEBRIS I	BRIDGE AERODYNAMICS I	PROFESSIONAL I Wind Analysis & Design Tools
10:25-10:45	Break			
10:45-12:15	WIND VI Models and Simulations	WINDBORNE DEBRIS II	BRIDGE AERODYNAMICS II	The Wind Provisions of ASCE7 - From 2002 to 2010 Jim Rossberg
12:15-1:30	Lunch in Atrium			
1:30-2:00	POSTER SESSION II			BEYOND ASCE 7 What to do When Your Building or Structure is Not Covered by ASCE 7 John Holmes
2:00-3:45	WIND VII	STRUCTURAL RELIABILITY, DAMAGE MODELS, & MEASUREMENTS	BRIDGE AERODYNAMICS III	
3:45-4:15	Break			
4:15-6:00	RISK ANALYSIS I Vulnerability, Impacts, and Mitigation	TALL BUILDINGS I Serviceability, Motion, and Comfort	BRIDGE AERODYNAMICS IV	PROFESSIONAL II Hurricane Losses, Mitigation, and Shelters
6:25	Bus Departs from Sheraton for dinner			
7:00-11:30	Swamp Tour/Cajun Dinner at Alligator Bayou			

Saturday June 4

	Track 1	Track 2	Track 3
8:30-10:30	Registration		
8:30-10:00	RISK ANALYSIS II Storm and Windfield Models	TALL BUILDINGS II Dynamic Response and Interference	LOW-RISE BUILDINGS II Full-Scale Testing
10:00-10:20	Break		
10:20-12:05	RISK ANALYSIS III Hurricane Loss Models	TALL BUILDINGS III	LOW-RISE BUILDINGS III Wind Pressures
12:05	Conference Adjourns		
1:00	Depart for Optional Post-Conference Social Event in New Orleans		

**Tenth Americas Conference on Wind Engineering
Schedule of Oral and Poster Presentations**

Wednesday, June 1, 2005				
Wednesday 1:00-1:20	<p align="center">OPENING PLENARY SESSION Welcome Opening Remarks - Conference Chairman, Marc Levitan</p>			
Wednesday 1:20-4:25	<p align="center">STATE-OF-THE ART SESSION ON HURRICANE WINDS, LOSSES, AND MITIGATION Moderator: Jon Peterka Uncertainty in Hurricane Wind Speeds (p. 2) - Dr. Mark Powell Hurricane Loss Estimation Modeling (p. 27) - Dr. Larry Twisdale Moderator: Thomas L. Smith Reducing Damage and Losses in Hurricanes: The Need For Barbarians and Bureaucrats (p. 29) - Dr. Timothy Reinhold</p>			
	ROOM 1	ROOM 2	ROOM 3	ROOM 4
	WIND I 2004 Hurricane Winds Moderator: A. M. Loredou-Souza	DAMAGE I 2004 Hurricane Damage Moderator: Lawrence A. Twisdale	LOW RISE BUILDINGS I Moderator: Ted Stathopoulos	PROFESSIONAL TRACK
Wednesday 4:45-6:15	<p>p. 86 Hurricane Data Collection: FCMP Deployments During the 2004 Atlantic Hurricane Season <i>Gurley, Masters, Prevatt, Reinhold</i></p> <p>p. 88 Near-Ground Observations from Hurricanes Frances and Ivan (2004) <i>Howard, Blair, Finney, Chenoweth, Mullins</i></p> <p>p. 90 Hurricane Winds at Landfall: 2004 <i>Powell, Murillo, Reinhold, Gurley, Masters, Prevatt</i></p> <p>p. 92 The Effect of Hurricane Eyewall and Convective Features on Surface-Level Turbulence <i>Masters, Reinhold, Gurley, Prevatt</i></p>	<p>p. 94 Damage Investigation of manufactured homes in Hurricane Charley <i>Zhu, Bowles, Mehta</i></p> <p>p. 96 Case Study: Wind Damage to Commercial Building From Hurricane Charley <i>French</i></p> <p>p. 98 Statistical Documentation Algorithm and Data Format Applied to Hurricanes Charley and Ivan <i>He, Yin, Mehta, Chen</i></p> <p>p. 100 Post 2004 Hurricane Field Survey - an Evaluation of the Relative Performance of Building Codes <i>Gurley, Burton, Reinhold</i></p>	<p>p. 102 Application of Quasi-Steady Theory To Wind Load Prediction <i>Zhou, Smith, Hu</i></p> <p>p. 104 Peak Wind Load Comparison: Theoretical Estimates and ASCE 7 <i>Tieleman, Elsayed, Hajj</i></p> <p>p. 106 Uncertainties Associated with the Full-scale to Wind Tunnel Pressure Coefficient Extrapolation <i>Long, Smith, Zhu</i></p> <p>p. 108 Further investigation of the flow field around and within a cross-ventilated building using the SST k-w model <i>Hu, Ohba, Kurabuchi</i></p>	<p>THE ICC/NSSA STORM SHELTER STANDARD: ULTIMATE WIND? <i>Dave Bowman</i></p>
Thursday, June 2, 2005				
Thursday 8:00-9:15	<p align="center">PLENARY SESSION - INTERNATIONAL WIND ENGINEERING Introduction and International Perspectives on Wind Engineering - Dr. Ahsan Kareem Aerodynamic Studies for the Brazilian Wind Code (p. 31) - Prof. Joaquim Blessmann</p>			
	ROOM 1	ROOM 2	ROOM 3	ROOM 4
	WIND II Extratropical Winds Moderator: Horia Hangan	WIND ENERGY Moderator: Dorothy A. Reed	BLUFF BODY AERODYNAMICS Cylinders Moderator: Michael Eaddy	PROFESSIONAL TRACK
Thursday 9:20-10:25	<p>p. 110 Extreme Wind Events Observed in the 2002 Thunderstorm Outflow Experiment <i>Gast, Schroeder</i></p> <p>p. 112 Development of Sensor Networks to Document Regional Surface Wind Data <i>Liang, Li, Gaus</i></p> <p>p. 114 Simulation of extreme winds from thunderstorm downbursts <i>Chen, Letchford</i></p>	<p>p. 116 Design and Construction Considerations for Offshore Wind Turbine Foundations <i>Malhotra</i></p> <p>p. 118 A Novel Technique for Wind Speed Forecasting Using Grey Predictor <i>El-Fouly, El-Saadany, Salama</i></p> <p>p. 120 Potential wind power generation in the State of Kuwait <i>Al-Nassar, Alhajraf, Al-Enezi, Al-Awadhi</i></p>	<p>p. 122 Forecasting lift and drag on a circular cylinder at $Re=10^6$ using point pressure data and a fuzzy ARTMAP neural network <i>Ferrer-Gener, Kopp, Giralt, Galsworthy</i></p> <p>p. 124 Wind Tunnel Tests on Equal and Unequal Diameter Cylinders in Tandem <i>Liu, Levitan, Narasimhan, Nikitopoulos</i></p> <p>p. 126 Application of Immersed Boundary Method to Flow past a Oscillatory Circular Cylinder <i>Lee, Lee, Kim, Yang</i></p>	<p>HURRICANES OF 2004 DAMAGE REPORTS I Moderator: John Ingargiola Hurricane Charley <i>Tim Reinhold</i></p>
10:25-10:45 Break				

Thursday, June 2, 2005 (cont'd)				
	ROOM 1	ROOM 2	ROOM 3	ROOM 4
Thursday 10:45-12:15	WIND III Wind Climate Moderator: John L. Schroeder	ANALYSIS TOOLS I Proper Orthogonal Decomposition Moderator: John Holmes	NON-BUILDING STRUCTURES I Open Structures, Walls, and Fences Moderator: Dimitris Nikitopoulos	PROFESSIONAL TRACK
	p. 130 Extreme Wind Speed Climatology in the United States Mid-West <i>Letchford, Ghosalker</i>	p. 134 Wind Load and Its effects on Latticed Spatial Structures with Different Gaussian Curvatures: From Planar Trusses to Spherical Reticulated Shells <i>Li, Tamura, Shen, Katsumara</i>	p. 142 Wind Tunnel Test on Partially Clad Buildings and Structures <i>Hebert, Amoroso, Levitan</i>	HURRICANES OF 2004 DAMAGE REPORTS II Moderator: Tony Gibbs Hurricane Ivan <i>Bill Coulbourne</i> Performance of Critical and Essential Facilities <i>Thomas L. Smith</i>
	p. 132 Integration of Wind Tunnel Data with Full Scale Wind Climate <i>Irwin, Garber, Ho</i>	p. 136 Some problems of proper orthogonal decomposition in application to reconstruction of wind pressure field for reticulated spherical domes <i>Zhang, Tamura</i>	p. 144 Influence of Framework and Equipment Interaction on the Wind Loads for Open-Frame Structures <i>Amoroso, Levitan</i>	
	p. 128 Early 21st Century Hurricane Threats: Maximum Potential Intensity, the Atlantic Multidecadal Oscillation, Global Warming, and Chance <i>Willoughby, Masters</i>	p. 138 A Physical Interpretation of the Dominant POD Mode for Full- Scale Pressure Fields <i>Gilliam, Smith</i>	p. 146 A Comprehensive Look at Wind Loading on Freestanding Walls and Signs <i>Fox, Levitan</i>	
	p. 140 Early 21st Century Hurricane Threats: Maximum Potential Intensity, the Atlantic Multidecadal Oscillation, Global Warming, and Chance (cont)	p. 140 Characterization of Evolving (Local) Pressure Fields on a Low- Rise Building <i>Caracoglia, Jones</i>	p. 148 Wind Tunnel Testing of a Coal Pile Model of the CVRD - Vitória, Brazil, and the Effects Caused by Porous Fences <i>Loredo-Souza, Schettini, Guimaraes, Pimentel, Ignacio</i>	
12:15-1:30 Lunch in Atrium				
Thursday, June 2, 2005 (cont'd)				
	Poster Session I - 1:30-2:00 (see pg xx)		Poster Session I - 1:30-2:00 (see pg xx)	
Thursday 2:00-3:45	WIND IV Tropical Winds Moderator: Hugh E. Willoughby	ANALYSIS TOOLS II Computer-Aided Wind Engineering Moderator: G.A. Kopp	NON-BUILDING STRUCTURES II Loads and Wind-Induced Failures Moderator: Jon Galsworthy	PROFESSIONAL TRACK (1:30-3:45)
	p. 152 Satellites- For Meteorological Applications in the Indian Context <i>Yaragal, Tamura, Matsui</i>	p. 158 Multivariate Stochastic Simulation of Wind Pressure over Low-Rise Structures through Linear Model Interpolation <i>Masters, Gurley</i>	p. 170 Wind-induced Oscillations of Cantilevered Traffic Signal Structures <i>Letchford, Cruzado, Huang</i>	BUILDING A SAFER LOUISIANA: WHAT SHOULD BE THE BLUEPRINT? Moderator: Paul Coreil Florida's Building Code System, the Response to Hurricane Andrew <i>Richard Dixon</i> How Effective were Building Code Changes in Reducing Hurricane Damage <i>Tim Reinhold</i> Building Codes, State Hazard Mitigation Plan and Implications for FEMA Post- Disaster Aid <i>Art Jones</i> Panel Discussion
	p. 154 Using Mobile Research Radar to Extract Hurricane Boundary Layer Wind Information <i>Schroeder, Lorsolo, Beck, Weiss</i>	p. 160 Computation of Moment Coefficients on a Cubic Building Due to Tornado <i>Millett, Selvam, Riordan</i>	p. 172 Observations On Wind-induced Failures of Highway Light Poles <i>Caracoglia, Jones</i>	
	p. 156 A Study Coupling Hurricane Wind Speed and Radar Observations <i>Schroeder, Edwards, Martinez</i>	p. 162 LES analysis of the turbulent boundary layer flow over 2 dimensional hills <i>Cao, Tamura</i>	p. 174 Experimental Study of Wind Effects on Circular Stacks <i>Mitra, Chakraborty, Mazumdar, Bhattacharya</i>	
	p. 150 Brazil Storm Catarina: Hurricane WIFIA <i>Loredo-Souza, Paluch</i>	p. 164 Numerical Prediction of Flow Past and Loading on a Bluff Body Using the Modified DES Model- the TL/LES Model <i>Chung, Bienkiewicz</i>	p. 176 Attrition of Ground Weather Observations during Hurricane Landfall <i>Blessing, Masters</i>	
		p. 166 Application and Analysis of a Two-Layer Rough Wall, Near Wall Treatment for Bluff Body Aerodynamics <i>Unhale, James</i>	p. 178 Infrastructure Failure Interactions <i>Reed, Chang, McDaniels, Peterson</i>	
3:45-4:15 Break				
Thursday, June 2, 2005 (cont'd)				
	Poster Session I - 1:30-2:00 (see pg xx)		Poster Session I - 1:30-2:00 (see pg xx)	
	ROOM 1	ROOM 2	ROOM 3	ROOM 4

		Thursday, June 2, 2005 (cont'd)		Thursday, June 2, 2005 (cont'd)	
		ROOM 1	ROOM 2	ROOM 3	ROOM 4
Thursday 4:15-6:00		WIND V Engineering Wind Parameters Moderator: Mark D. Powell	DAMAGE II Hurricane Damage Investigations and Techniques Moderator: David Henderson	ENVIRONMENTAL WIND ENGINEERING Moderator: Bob Meroney	Professional Track
		p. 180 Uncertainties in Flow Characteristics Developed From Full Scale Data <i>McElrath, Smith</i>	p. 190 CFD Analysis of Wind Flow Impact on the Vehicle Assembly Building <i>Vu, Zysko</i>	p. 196 Validation of CFD Prediction of Cooling Tower Drift <i>Meroney</i>	INPUT BY WIND ENGINEERING COMMUNITY TO PLANNING PROCESS FOR THE NATIONAL WINDSTORM IMPACT REDUCTION PROGRAM <i>Bogusz Bienkiewicz</i> Panel Discussion
		p. 188 Lateral Length Scales Measured in Land Falling Tropical Cyclones <i>Gurley, Aponte</i>	p. 192 Internet-Based Building Damage Data Collection System <i>Liang, Gaus, Li</i>	p. 198 Plume dispersion on the roof of a building: Influence of rooftop structure geometry <i>Gupta, Saathoff, Stathopoulos</i>	
		p. 186 Gust Factors Observed in Tropical Cyclone Landfalls <i>Masters, Reinhold, Gurley, Powell</i>	p. 194 Windstorm Damage Surveys Using High-Resolution Satellite Images <i>Womble, Adams, Mehta</i>	p. 200 Fundamental Study on Formula for Predicting Convective Heat Transfer Coefficient above Heated Panels using Thermally Stratified Wind Tunnel <i>Kurita, Ohba</i>	
		p. 184 Gust Factors: From Theoretical Considerations to Field Measurements <i>Masters, Gurley, Kareem</i>	p. 354 Hurricane Ivan in Grenada – Implications for Structural Engineering in the Caribbean <i>Gibbs</i>	p. 202 Wind Factors Influencing Spread and Suppression of a Forest Fire <i>Lee, Park, Lee, Kim</i>	
		p. 182 Evaluation of Integral Length Scales in Wind Tunnel Simulation and Field Study <i>Chen, Letchford</i>	Hurricane Ivan in Grenada – Implications for Structural Engineering in the Caribbean (cont)	p. 204 Pedestrian Level Wind Environment Around a Projected Building Complex in Neuquen, Argentina <i>Scarabino, Di Leo, Delnero, Bacchi, Colman, Boldes</i>	
		7:30-9:30 Conference Banquet AAWE Awards Speaker - Dr. Kam-biu Liu "Hunting Prehistoric Hurricanes"			
		Friday, June 3, 2005			
Friday 8:00-9:15		PLENARY SESSION - COMMERCIAL WIND ENGINEERING Introduction and Australian Perspectives on Wind Engineering - John Holmes State-of-the-Art Review of Commercial Wind Engineering (p. 71) - Dr. Leighton Cochran			
Friday 9:15-10:25		ROOM 1	ROOM 2	ROOM 3	ROOM 4
		STORM SHELTERS Moderator: Kurtis Gurley	WINDBORNE DEBRIS I Moderator: Yukio Tamura	BRIDGE AERODYNAMICS I Moderator: Partha Sarkar	PROFESSIONAL I Wind Analysis & Design Tools Moderator: Bogusz Bienkiewicz
		p. 206 Ballistic testing of Polymer Composites to Manufacture Affordable Emergency Safe House Shelters <i>Uddin, Vaidya</i>	p. 210 Numerical Solutions for Trajectories of Wind-Driven Compact Objects: Verification and Application <i>English, Holmes</i>	p. 214 Experimental Study on Vortex- Induced Vibrations of Selected Bluff Sections <i>Mashnad, Jones</i>	p. 356 Development of XML Tools for Distributed Aerodynamic Database <i>Lim, Bienkiewicz</i>
		p. 208 Design and Suitability of Shelters of Last Resort for Remote Areas <i>Hill, Levitan, Fratta, van Heerden</i>	p. 212 Trajectories of wind borne debris of the plate-type <i>Holmes, Letchford, Lin</i>	p. 216 Unified approach to predict the dynamic performance of long- span bridges and vehicles under wind <i>Chen, Cai</i>	p. 358 Utilization and Validation of Applied CFD Techniques for CWE <i>Scott, Banks, Peterson</i>
	p. 372 Performance of Storm Shelters During Hurricanes Charley and Ivan <i>Levitan, Holmes</i>	Trajectories of wind borne debris of the plate-type (cont)	p. 218 Evaluation of Multimode Coupled Bridge Response and Equivalent Static Wind Loading <i>Chen, Kareem</i>	p. 360 Designing Large Structures for Hurricane Force Winds and the Design Implications of Hurricane Categories <i>Montefiore, Soligo, Irwin</i>	
		10:25-10:45 Break		10:25-10:45 Break	

Friday, June 3, 2005 (cont'd)		Friday, June 3, 2005 (cont'd)	
ROOM 1	ROOM 2	ROOM 3	ROOM 4
WIND VI Models and Simulations Moderator: Chris Letchford	WINDBORNE DEBRIS II Moderator: John Holmes	BRIDGE AERODYNAMICS II Moderator: Jannette Frandsen	Professional Track
p. 220 Analytical Models for Impinging Jets with application to Downburst Simulations <i>Xu, Hangan</i>	p. 228 Trajectories of Roof Sheathing Panels Under High Winds <i>Visscher, Kopp</i>	p. 236 Comparison of Flutter Derivatives obtained from Free and Forced Vibration Section Model Tests of Long-Span Bridge Decks <i>Sarkar, Haan Jr., Stronck</i>	THE WIND PROVISIONS OF ASCE7 - FROM 2002 TO 2010 Moderator: Jim Rossberg Panelists: <i>Lawrence Griffis</i> <i>Timothy Reinhold</i> <i>Jon Peterka</i> <i>Ahsan Kareem</i>
p. 222 Scale and Roughness Effects in Impinging Jets with application to Downburst Simulations <i>Hangan, Xu</i>	p. 230 LES Analysis for behavior of a flying plate with rotation in turbulent flow <i>Katafuchi, Itoh, Tamura</i>	p. 238 A Combined Flutter reliability analysis of Long-span bridges <i>Cheng, Cai, Xiao, Chen</i>	
p. 224 Dynamical and Dimensional aspects of the flow in the low-height calm regions in a forest canopy <i>Boldes, Scarabino, Colman</i>	p. 232 Experimental investigation of trajectory of windborne debris with applications to debris impact criteria <i>Lin, Letchford, Holmes</i>	p. 240 Flutter stability condition of bluff body with respect to stochastic approach <i>Hracov, Pospisil, Naprstek</i>	
p. 226 A Nonparametric Deterministic-Stochastic Hybrid Model for Nonstationary Wind Speeds <i>Chen, Letchford</i>	p. 234 Application of Wind-Borne Debris Research to Hurricane Protection Systems and Shelter Standards <i>English, Holmes, Levitan</i>	p. 242 Study on Vehicle Location on Deck for the Wind-vehicle-bridge System <i>Li, Shizhong, Haili</i>	
12:15-1:30 Lunch in Atrium		12:15-1:30 Lunch in Atrium	
Friday, June 3, 2005 (cont'd)		Friday, June 3, 2005 (cont'd)	
Poster Session II - 1:30-2:00 (see pg. xxi)		Poster Session II - 1:30-2:00 (see pg. xxi)	
ROOM 1	ROOM 2	ROOM 3	ROOM 4
WIND VII Moderator: Peter A. Irwin	STRUCTURAL RELIABILITY, DAMAGE MODELS, AND MEASUREMENTS Moderator: Jean-Paul Pinelli	BRIDGE AERODYNAMICS III Moderator: Harold Bosch	
p. 244 Characterization of Exposure for Wind Standards and Codes of Practice <i>Wang, Stathopoulos</i>	p. 254 Fatigue Failure of Metal Roofing Subjected to Cyclonic Wind Loading <i>Ginger, Henderson</i>	p. 264 The Mechanism of Rain-Wind-Induced Vibration: Vortex-shedding or Galloping <i>Zuo, Jones</i>	SHORT COURSE F1 (1:30-3:45) BEYOND ASCE 7 What to do When Your Building or Structure is Not Covered by ASCE 7 John Holmes
p. 246 Topographic Wind Speed-up and Directionality Factors for Use in the City and County of Honolulu Building Code <i>Chock, Peterka, Yu</i>	p. 256 Modeling the reliability of a high set house subjected to cyclonic wind loading <i>Henderson, Ginger</i>	p. 266 Vehicle loading prediction for roadways and bridges considering full interactions <i>Chen, Cai, Liu, Levitan</i>	
p. 248 A Laboratory Tornado Simulator: Comparison of Laboratory, Numerical and Full-Scale Measurements <i>Sarkar, Haan Jr., Gallus Jr., Le, Kardell, Wuman</i>	p. 258 Reliability-Based Approach to Estimation of Load Factors for Rigid and Flexible Buildings <i>Diniz, Simiu</i>	p. 268 A Systematic Finite Element-Based Buffeting Formulation <i>Jeong, King, Isyumov</i>	
p. 250 Comparison of Pressure Distribution on a Cubical Model in Boundary Layer and Tornado-Like Flow Fields <i>Mishra, James, Letchford</i>	p. 260 A Probabilistic Windstorm Glass Damage Assessment Model <i>Kumar Jain, Khanduri</i>	p. 270 Joint Time-frequency Analysis of Approach wind Velocity and Pressure on Bridge Pylons <i>Ham, Lee, Kim, Kim, Kim, Kim</i>	
p. 252 Modeling and Simulation of Transient Winds: Downbursts/Hurricane <i>Wang, Kareem</i>	p. 262 Wireless Pressure Sensing During Florida 2004 Hurricanes <i>Subramanian, Pinelli, Lapilli</i>	p. 272 Large Suspension Bridges to Withstand Wind Loading <i>Borri, Costa, Majowiecki, Salvatori</i>	
3:45-4:15 Break		3:45-4:15 Break	

		Friday, June 3, 2005 (cont'd)		Friday, June 3, 2005 (cont'd)	
		ROOM 1	ROOM 2	ROOM 3	ROOM 4
Friday 4:15-6:00		RISK ANALYSIS I Vulnerability, Impacts, and Mitigation Moderator: Siamak Daneshvaran	TALL BUILDINGS I Serviceability, Motion, and Comfort Moderator: K.C.S. Kwok	BRIDGE AERODYNAMICS IV Moderator: Steve Cai	PROFESSIONAL II Hurricane Losses, Mitigation, and Shelters Moderator: Forrest Masters
		p. 274 Windstorm vulnerability of structures in Florida 2004: Have we seen an improvement since Hurricane Andrew struck in 1992? A reinsurer's perspective <i>Bove, Rauch</i>	p. 288 On the Wind-Induced Response of Tall Buildings: The Effect of Uncertainties in Dynamic Properties and Human Comfort Thresholds <i>Bashor, Kjewski-Correa, Kareem</i>	p. 294 Particle Image Velocimetry for Flow Visualization around Generic Bridge Shapes <i>Bosch, Kerenyi</i>	p. 362 Correlation of Losses from two concurrent hurricanes in the 2004 season <i>Young, Michel, LeGrone</i>
		p. 276 The Effects of La Nina and El Nino on Tornado Outbreaks <i>Gilliam, Nagle</i>	p. 286 Acceptability Curves Derived from Motion Simulator Investigations and Previous Experience with Building Motion <i>Burton, Hitchcock, Kwok, Roberts</i>	p. 298 Observations of Vortex-Induced Vibrations on a Cable-Stayed Bridge <i>Mashnad, Ozkan, Jones</i>	p. 364 The 2004 Hurricane Season - A Catastrophe Modeling Perspective <i>Khanduri, Pande</i>
		p. 278 Spatial Dependencies in Wind-Related Housing Damage <i>DeSilva, Kruse, Wang</i>	p. 284 Buildings Undergoing Complex Motions: Accelerations and Human Comfort <i>Kareem, Chen, Kjewski-Correa</i>	p. 300 Computational and Experimental Investigation of Wind Load on Bridge with Split Decks on Single Pylon <i>Lee, Park, Kim, Kim, Lee, Cho, Cho</i>	p. 366 Inclined Residential Concrete Roofs for Hurricane Protection <i>Bermudez</i>
		p. 280 Wind Hazard Mitigation in Southeast Florida <i>Peacock, Kukadia, Dash</i>	p. 290 Full -Scale Validation of the Wind Induced Response of Tall Buildings: Updated Findings from the Chicago Monitoring Project <i>Kjewski-Correa, Kilpatrick, Kwon, Bashor, Young, Abdelrazaq, Galsworthy, Morrish, Sinn, Baker, Isyumov, Kareem</i>		p. 368 Development of a Performance-Based Design Approach and Related Loads for Facilities Designated as Essential During a Hurricane Event <i>Easley, Levitan</i>
	p. 282 Transmission of Labor Market Shocks across Regions: Evidence from the May 3, 1999 Oklahoma City Tornado <i>Thompson, Ewing, Kruse</i>	p. 292 Serviceability Criteria: A Review and Comparison with Recent Full-scale Measurements <i>Kilpatrick, Galsworthy, Isyumov</i>		p. 370 Development and Application of a Method for Hurricane Shelter Assessments and Operational Planning <i>Gregg, Levitan</i>	
6:30-9:30 Cajun Dinner					
		Saturday, June 4, 2005		Saturday, June 4, 2005	
Saturday 8:30-10:00		RISK ANALYSIS II Storm and Windfield Models Moderator: Michael A. Young	TALL BUILDINGS II Dynamic Response and Interference Moderator: TBA	LOW RISE BUILDINGS II Full-scale Testing Moderator: David O. Prevatt	
		p. 302 Effects of Hurricane Wind Models on Risk Assessment <i>Li, Ellingwood</i>	p. 308 Downburst induced dynamic responses of tall buildings <i>Kim, Ho, Hangan</i>	p. 316 Recent developments at the "Three Little Pigs" full-scale testing facility <i>Kopp, St. Pierre, Bartlett, Galsworthy, Hong, Inculet, Savory, Surry</i>	
		p. 304 Typhoon Simulation Technique incorporating Sea-surface Temperature <i>Katsuchi, Yamada</i>	p. 310 Dynamic Response of structures to thunderstorm winds <i>Holmes, Forristall, McConochie</i>	p. 322 Mean Line Wind Pressure Coefficients on Surfaces of Gable-roofed Low-rise Buildings <i>Quan, Tamura, Matsui</i>	
		p. 306 Tornado Risk Analysis in United States <i>Daneshvaran, Morden</i>	p. 312 Interference Effect on Force and Moment Coefficients on Tall Buildings <i>Ahuja, Jain</i>	p. 318 Torsional wind loads measured on a full-scale low-rise building <i>Hu, Smith</i>	
		p. 314 Tornado Risk Analysis in United States (cont) <i>Gupta</i>		p. 320 C-130 Test on a Gable Roofed Manufactured Home <i>Zhu, Smith</i>	

Saturday, June 4, 2005 (cont'd)		Saturday, June 4, 2005 (cont'd)	
ROOM 1	ROOM 2	ROOM 3	
RISK ANALYSIS III Hurricane Loss Models Moderator: Sofia M.C. Diniz	TALL BUILDINGS III Moderator: Elizabeth C. English	LOW RISE BUILDINGS III Wind Pressures Moderator: Doug Smith	
p. 324 Florida Public Hurricane Loss Projection Vulnerability Model: Implementation and Validation <i>Pinelli, Subramanian, Murphree, Gurley, Hamid, Gulati</i>	p. 334 Evaluation Model for the 2nd Generation Wind-Excited Benchmark Building <i>Tse, Hitchcock, Kwok</i>	p. 344 Wind-induced Pressures and Internal Forces in Generic Low-rise Building <i>Endo, Bienkiewicz</i>	
p. 326 The 2004 Hurricane Season in Context: Potential Impact on Risk Modeling <i>Muir-Wood, Dong, Boissonnade, Jewson</i>	p. 336 Effect of Corner Balconies on Wind-Induced Response of Tall Buildings <i>Browne, Kumar</i>	p. 346 Wind Load on Components and Cladding Systems for Houses in Coastal Suburban Areas <i>Liu, Dearheart, Prevatt, Reinhold, Gurley</i>	
p. 328 Drivers of Tree Failures in Hurricane Isabel and Implications for Insurance Risk <i>Beatty, Young, Boissonnade</i>	p. 338 Evaluation of Equivalent Static Wind Loads on Buildings <i>Chen, Kareem</i>	p. 348 Wall Area-averaged Pressure Coefficients Measured in Full-Scale <i>Bi, Smith</i>	
p. 330 Ensembles of Deterministic Footprints for Real Time Assessment of Hurricane Losses <i>VandePoll, Boissonnade, Muir-Wood</i>	p. 340 e-Analysis/Design of Tall Buildings Subjected to Wind loads <i>Kwon, Kijewski-Correa, Kareem</i>	p. 350 Mean Wind Pressure Distribution on Buildings with Canopies <i>Goyal, Ahuja</i>	
p. 332 Uncertainty in Real-time Hurricane Loss Estimation <i>Guin, Pande</i>	p. 342 Characteristics of Wind Loads of Typical Super-tall Buildings <i>Gu, Ye</i>		
Thursday		Friday	
POSTER SESSION I		POSTER SESSION II	
p. 376 Wind Characteristic of the State of Kuwait <i>Alenezi, Al-Awadi, Alhajraf, Al-Nassar</i>	p. 383 The Effect of Wind Load on the Stability of a Container Crane <i>Lee, Han, Shim, Kim, Han</i>	p. 394 Wind Engineering and Trees <i>Liang, Gaus</i>	p. 406 Separated Shear Layer Investigations using Discrete Vortex Methods with Experimental Validation <i>Murgai, Haan Jr.</i>
p. 378 Effect of boundary layer characteristics on wind ripples <i>Alhajraf, Al-Nassar, Ramadan, Alenezi, Neelamani</i>	p. 384 The Capacity Paradox <i>Reed</i>	p. 396 Variability of External Pressure Coefficients with Terrain Roughness on Low-Rise Buildings <i>Gardner, Prevatt, Reinhold, Liu, Dearheart</i>	p. 408 Three Representative Case Studies of the South Plains Nocturnal Low Level Jet <i>Giammanco, Peterson</i>
p. 379 A Summary of the Wind Engineering Mobile Instrumented Tower Experiment During the 2004 Atlantic Hurricane Season <i>Edwards, Schroeder</i>	p. 386 Experimental Determination of the Drag Coefficients and Strouhal Numbers of a Port Crane Boom Girder Section <i>Scarabino, Maranon Di Leo, Bacchi</i>	p. 397 The Prediction of Overall Structural Wind Loads on Tall Buildings: An Assessment of the Current State-of-the-Art <i>Kilpatrick, Galsworthy, Isyumov</i>	p. 410 Probabilistic description of tall building response to wind: Database-assisted design, dynamics, and wind directionality effects <i>Fritz, Simiu</i>
p. 380 Introduction to a model on development based on Monte Carlo method: Application to a farm's pollutants dispersion <i>Llorens, Sanchez, Berbegall, Verdu</i>	p. 388 Projecting Changes in the Hurricane Risk of Residential Wood Frame Structures in North Carolina <i>Kumar Jain, Davidson</i>	p. 398 Wind Response Analysis of Tall Framed Buildings <i>Prasad, Singh</i>	p. 411 Incorporation of Structural Design for Hurricanes into Senior Design Courses of Civil Engineering Program at TAMUK <i>Leelani</i>
p. 381 Quantification of Gust Response of Low-rise Building Pressures using an Active Gust Generation Technique <i>Haan Jr., Sarkar</i>	p. 390 Assessing Vulnerability of Industrial Structures: Development of Damage Functions <i>Hill, Levitan</i>	p. 400 Comparison Of Predicted Value Of Maximum Height For Tall Square Buildings Subjected To Peak Wind Loads At Different Terrains <i>Mitra, Mazumdar, Bhattacharya</i>	p. 412 Pressure-Velocity Correlation Study on 1:50 Geometrical Scale Model of the TTU Building <i>Kumar, Nikitopoulos, Levitan</i>
p. 382 External Pressure Coefficients for Sawtooth and Monosloped Roofs <i>Prevatt, Cui, Kopp, Gabby, Dukes</i>	p. 392 Variation of wind velocity over falling sand dunes <i>Alenezi, Alhajraf, Al-Nassar</i>	p. 402 Wind Loading Effects on Parapet Effects on Roof Top Pressures <i>Smith, Wiese</i>	p. 414 Hysteresis in Liquid Dampers <i>Peng, Frandsen</i>
		p. 404 Influence of Relative Dimensions and Arrangement of Buildings on Wind Environment Around Buildings <i>Ahuja, Dalui, Gupta</i>	p. 415 Numerical Modeling of Free-Surface Flows using a Mesoscopic Approach <i>Tubbs, Frandsen</i>

Saturday
10:20-12:05

1:30-2:30

WITHDRAWN