

Curriculum Vitae

Ioannis Zisis

Educational Background

Ph.D. in Building Engineering

Jan. 2007 – Sept. 2011

Department of Building, Civil and Environmental Engineering
Concordia University, Montreal, Canada

- Ph.D. Thesis: “Wind Load Paths on Wood Buildings”

M.A.Sc. in Building Engineering

Sept. 2004 – Dec. 2006

Department of Building, Civil and Environmental Engineering
Concordia University, Montreal, Canada

- M.A.Sc. Thesis: “Structural Monitoring and Wind Tunnel Studies of a Low Wooden Building”

Dipl.-Ing in Civil Engineering

Sept. 1998 – Sept. 2003

Civil Engineering Department, Faculty of Polytechnics
Aristotle University of Thessaloniki, Thessaloniki, Greece

- Dipl.-Ing. Thesis: “Design of connections of structural steelwork against seismic and fire loading”

Academic Appointments

Assistant Professor (Tenure-track)

Oct. 2012 - present

Department of Civil and Environmental Engineering, Florida International University, Miami, FL, USA

Postdoctoral Fellow

Oct. 2011- Aug. 2012

Building Aerodynamics Laboratory, Concordia University, Montreal, QC, Canada

Graduate Research and Teaching Assistant

Sept. 2004 – Sept. 2011

Department of Building, Civil and Environmental Engineering, Concordia University, Montreal, QC, Canada

Scholarships - Awards

- Conference Supplemental Fund, awarded by American Association for Wind Engineering (AAWE) – 2011 and 2013
- Conference Supplemental Fund, awarded by International Association for Wind Engineering (IAWE) – 2009 and 2011
- NSERC Postdoctoral Industrial R&D Fellowship, Natural Sciences and Engineering Research Council of Canada - 2011
- Doctoral Thesis Completion Award, Concordia University - 2010

- AHEPA Scholarship for Academic Achievement, American Hellenic Education Progressive Association – Montreal Chapter – 2010
- Faculty of Engineering and Computer Science Graduate Scholarship, Concordia University - 2009
- Canadian Society of Civil Engineers Annual General Meeting and Conference, Graduate student competition award (best paper) - 2008
- Carolyn and Richard Renaud Teaching Assistantship, Concordia University - 2009
- Conference Supplemental Fund, awarded by School of Graduate Studies, Concordia University – 2008, 2009 and 2012
- Catherine Lalonde Memorial Scholarship, awarded by Canadian Wood Council (awarded to only one graduate student across Canada) - 2008
- Hellenic Scholarships Foundation Award - 2008
- Power Corporation of Canada Graduate Fellowship - 2007 and 2008
- Harriet and Abe Gold Entrance Bursary, Concordia University - 2007
- Concordia University Graduate Fellowship - 2007-2009
- Hellenic Board of Trade Graduate Award - 2007
- Concordia University International Tuition Fee Remission Award - 2006-2009
- Concordia University Graduate Entrance Scholarship - 2004-2006

Refereed Journal Papers

1. Fu, T.C., Gan Chowdhury, A., Smith, D., **Zisis, I.**, Irwin, P. and Simiu, E. 2013. *Experimental investigation of wind pressures on large-scale building models and comparisons with field measurements*. Journal of Wind Engineering and Industrial Aerodynamics, (under review).
2. Fu, T.C., Gan Chowdhury, A., **Zisis, I.** and Irwin, P. 2013. *Wind loads on solar collectors and PV panels on roofs: A review of the state-of-the-art*. Engineering Structures, (under review).
3. Stathopoulos, T., **Zisis, I.** and Xypnitou, E. 2013. *Wind loads on solar collectors and PV panels on roofs: A review of the state-of-the-art*. Journal of Wind Engineering and Industrial Aerodynamics, (accepted for publication).
4. Candelario, J. D., Stathopoulos, T. and **Zisis, I.** 2013. *Wind loading on attached canopies: A codification study*, Journal of Structural Engineering ASCE, (accepted for publication).
5. **Zisis, I.** and Stathopoulos, T. 2012. *Wind load transfer mechanisms on a low wood building using full-scale load data*. Journal of Wind Engineering and Industrial Aerodynamics, Vol. 104-106, pp. 65-75.
6. **Zisis, I.**, Stathopoulos, T., Smith, I. and Doudak, G. 2011. *Cladding pressures and primary structural system forces of a wood building exposed to strong winds*. Canadian Journal of Civil Engineering, Vol. 38, No. 9, pp. 963-973.
7. **Zisis, I.** and Stathopoulos, T. 2010. *Wind-induced pressures on patio covers*. Journal of Structural Engineering, ASCE, Vol. 136, No. 9, pp. 1172-1181.
8. Stathopoulos, T., Baniotopoulos, C.C. and **Zisis, I.** 2009. *Urban habitat construction under catastrophic wind events*. Journal of Global Environmental Research, Vol. 13, No. 2, pp.197-202.
9. **Zisis, I.** and Stathopoulos, T. 2009. *Wind-induced cladding and structural*

**Other Refereed
Contributions**

- loads on a low wooden building*. Journal of Structural Engineering, ASCE, Vol. 135, No. 4, pp. 437-447.
10. Irwin, P., Chowdhury, A.G., Fu, T.C., Marques, R.L. and **Zisis, I.** 2013. *Developments in wind testing of building envelope systems*. 2013 Symposium on Building Envelope Technology, Minneapolis, MN, USA.
 11. Tzempelikos, A., Moustakas, K. and **Zisis, I.** 2013. *Thermal and lighting dynamics in buildings with active envelope controls*, Proceedings of ELCAS 2013 Conference, Nisyros, Greece.
 12. **Zisis, I.** and Stathopoulos, T. 2013. *Wind design of timber buildings*. Proceeding of the Second International Conference Structures and Architecture (ICSA 2013), Guimaraes, Portugal.
 13. Stathopoulos, T., Xypnitou, E. and **Zisis, I.** 2013. *Wind-induced loads on rooftop and ground photovoltaic panel systems*. Proceeding of the 12th Americas Conference on Wind Engineering (ACWE), Seattle, WA, USA.
 14. Stathopoulos, T., Xypnitou, E. and **Zisis, I.** 2013. *Wind Loads on Solar Collectors and PV Panels on Roofs*. 2013 Structures Congress, ASCE, Pittsburgh, PA, pp. 1545-1554.
 15. Stathopoulos, T., Xypnitou, E. and **Zisis, I.** 2012. *Wind Loads on Rooftop Solar Panel Systems: A Contribution to NBCC 2015*. 7th Workshop on Regional Harmonization of Wind Loading and Wind Environmental Specifications in Asia-Pacific Economies (APEC-WW 2012), Hanoi, Vietnam.
 16. **Zisis, I.** and Stathopoulos, T. 2012. *Evaluation of wind-induced structural attenuation based on full-scale monitoring*. Advances in Hurricane Engineering Conference, ATC & SEI, Miami, FL, USA.
 17. **Zisis, I.** and Stathopoulos, T. 2012. *Field data stationarity for a full-scale wind monitoring study*. 2012 Joint Conference of the Engineering Mechanics Institute and the 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability, Notre Dame, IN, USA.
 18. Stathopoulos, T., Saathoff, P., and **Zisis, I.** 2012. *Windbreaks for the comfort of workers in loading zones of commercial buildings*. 5th International Building Physics Conference, IABP, Kyoto, Japan.
 19. Stathopoulos, T., **Zisis, I.** and Xypnitou, E. 2012. *Wind effects on roof-mounted solar equipment*. 2012 Structures Congress, ASCE, Chicago, IL, USA.
 20. **Zisis, I.**, Stathopoulos, T. and Candelario, J. D. 2011. *Codification of wind loads on a patio cover based on a parametric wind tunnel study*. 13th International Conference in Wind Engineering, Amsterdam, Netherlands.
 21. **Zisis, I.** and Stathopoulos, T. 2011. *Wind load transfer mechanisms on a low wood building using full-scale load data*. 13th International Conference in Wind Engineering, Amsterdam, Netherlands.
 22. **Zisis, I.**, Stathopoulos, T., Smith, I. and Doudak, G. 2011. *Wind loading of a wood light-frame building*. Proceeding of the 2011 CSCE Annual General Meeting and Conference, Ottawa, Canada.
 23. Stathopoulos, T. and **Zisis, I.** 2010. *Contributions of wind tunnel and full-scale studies in wind induced disaster mitigation*. Wind-Related Disaster Risk Reduction Activities in Asia-Pacific Region and Cooperative Actions (IG-WRDRR), Incheon, Korea.

24. Stathopoulos, T. and **Zisis, I.** 2010. *Wind Load Revisions in 2010 National Building Code of Canada and Future Research-Based Submissions*. 6th Workshop on Regional Harmonization of Wind Loading and Wind Environmental Specifications in Asia-Pacific Economies (APEC-WW 2010), Incheon, Korea.
25. Stathopoulos, T., Baniotopoulos, C.C. and **Zisis, I.** 2010. *Structural design of urban habitat construction against catastrophic wind actions*. European Cooperation in Science and Technology COST Action C26 - Urban Habitat Constructions Under Catastrophic Events – Final Conference, 519-524. Naples, Italy.
26. **Zisis, I.** and Stathopoulos, T. 2010. *Wind-induced loads on the foundation of a low-rise building: Full-scale and wind tunnel experimentation*. Proceedings of the 2010 Structures Congress, 369: 1120-1130, ASCE, Orlando, FL, USA.
27. Stathopoulos, T., **Zisis, I.** and Wang, K. 2009. *Terrain classification and exposure factor in the 2005 National Building Code of Canada*. 5th Workshop on Regional Harmonization of Wind Loading and Wind Environmental Specifications in Asia-Pacific Economies (APEC-WW 2009), Taipei, Taiwan.
28. **Zisis, I.** and Stathopoulos, T. 2009. *Wind loads on low-rise buildings: Upstream exposure effect*. Proceedings of the 7th Asia-Pacific Conference on Wind Engineering (APCWE), Taipei, Taiwan, November 2009.
29. **Zisis, I.** and Stathopoulos, T. 2009. *Wind tunnel experiments on a patio cover attached to a low-rise building*. Proceeding of the 11th Americas Conference on Wind Engineering (ACWE), San Juan, PR, USA.
30. **Zisis, I.**, Stathopoulos, T., Smith, I., Galal, K. and Doudak, G. 2009. *Wind induced structural attenuation in low-rise wood buildings*. Proceedings of the 11th Americas Conference on Wind Engineering (ACWE), San Juan, PR.
31. **Zisis, I.** and Stathopoulos, T. 2009. *Wind loads on patio covers*. Proceedings of the 2009 Structures Congress, 341: 2889-2896, ASCE, Austin, TX, USA.
32. Stathopoulos, T., Wang, K. and **Zisis, I.** 2009. *Wind loading and building exposure: Are we still on A, B, C?* Proceeding of the 2009 Structures Congress, 341: 2458-2466, ASCE, Austin, TX, USA.
33. Stathopoulos, T., Baniotopoulos, C.C. and **Zisis, I.** 2008. *Structural failure and prevention during catastrophic wind events*. European Cooperation in Science and Technology (COST) Action C26 - Urban Habitat Constructions Under Catastrophic Events, pp. 363-370, Malta.
34. **Zisis, I.** and Stathopoulos, T. 2008. *Wind load paths on wood buildings*. Proceeding of the 2008 CSCE Annual General Meeting and Conference, Quebec City, Canada.
35. **Zisis, I.**, Stathopoulos, T., Galal, K. and Smith, I. 2008. *Wind tunnel tests and structural monitoring of a low wooden building*. Proceedings of the 10th World Conference on Timber Engineering (WCTE), 320, Miyazaki, Japan.
36. **Zisis, I.** and Stathopoulos, T. 2008. *Field and wind tunnel experiments to evaluate wind-induced cladding and structural loads on a low wooden building*. Proceedings of the 18th Analysis and Computation Specialty Conference – 2008 Structures Congress, 315:50, ASCE, Vancouver, Canada.
37. Doudak, G., Ghallagher, A., Kasal, B., McClure, G., Mohammad, M., Smith, I., Stathopoulos T. and **Zisis, I.** 2005. *Towards wind load paths on wood buildings*. Proceedings of 4th European - African Conference on Wind

Engineering (EACWE), Prague, Czech Republic.

Reports

38. **Zisis, I.** and Candelario, J. D. 2013. Hurricane Loss Reduction for Housing in Florida 2013: Wind-induced loads and damage mitigation techniques on sunrooms. Submitted to The State of Florida Division of Emergency Management

Books/Contributions to Books

39. Stathopoulos, T., **Zisis, I.**, Talon, A., Muzeau, J.P., Coelho, C., Carlier, J.P., Wolinski, S. 2010. *Characterization of catastrophic actions on constructions: Actions due to natural catastrophes*. European Cooperation in Science and Technology (COST) Action C26 - Urban Habitat Constructions Under Catastrophic Events – Final Report, ISBN 9780415606868, 53-72.

Technology Transfer

40. Lexicon COST C26, 2010. *Software Application Development - Translation of terminology related to COST Action C26 Action*. European Cooperation in Science and Technology (COST) Action C26 - Urban Habitat Constructions Under Catastrophic Events.

Research Funding (Awarded)

- *Wind-induced loads and damage mitigation techniques on sunrooms*, Florida Division of Emergency Management –FLDEM (\$123,995 – PI – 2012/2013)
- *Codification of wind-induced loads on rooftop solar panels*, Florida Division of Emergency Management –FLDEM (\$124,752.62 – PI – 2013/2014)

Student Supervision

- 3 PhD (FIU – in progress)
- 2 MS (FIU – in progress)
- 2 MAsc (Concordia University – Co-Supervised - completed)

Research Experience

Florida International University – Assistant Professor and Member of International Hurricane Research Center

October 2012 – present

- Wind-induced loads on rooftop energy equipment
2013-2014
(Florida International University – Laboratory for Wind Engineering Research)
- Codification of wind-induced loads on low- and midrise buildings with hipped and cross hipped roofs
2013-2014
(Florida International University – Laboratory for Wind Engineering Research)
- Wind-induced loads and damage mitigation techniques on canopies and sunrooms
2012-2013
(Florida International University – Laboratory for Wind Engineering Research)

Concordia University – Post Doctoral Fellow

October 2011 – August 2012

- Codification of wind-induced loads on patio covers attached to low- and mid-rise buildings
2011-2012
(Concordia University – Building Aerodynamics Laboratory)
- Wind effects on solar equipment
2011-2012
(Concordia University – Building Aerodynamics Laboratory)
- Codification of wind-induced loads on low- and midrise buildings with a hipped and cross hipped roofs
2012
(Concordia University – Building Aerodynamics Laboratory)
- Novel vacuum insulated panel technology for light-frame construction
2012
(University of New Brunswick - National Research Council of Canada)

Concordia University - Graduate Research Assistant

September 2004 – September 2011

- Wind load paths on wood buildings
2004-2006
(Natural Science and Engineering Research Council of Canada – Collaborative Research and Development Program – FPInnovations – Canadian Wood Council)
- Engineering design of low-rise wood buildings
2007-2010
(Natural Science and Engineering Research Council of Canada – Collaborative Research and Development Program – FPInnovations – Canadian Wood Council)
- Wind-induced loads on patio covers
2007-2010
(Concordia University – Building Aerodynamics Laboratory)
- Exposure effects on approaching wind flow characteristics and wind-induced envelope loads covers
2008-2010
(Concordia University – Building Aerodynamics Laboratory)
- Wind loads on flat roof building of different geometries
2008
(National Research Council of Canada)
- Urban habitat construction against catastrophic wind actions
2008-2010
(European Cooperation in Science and Technology – COST Action C26)

**Teaching
Experience**

Florida International University – Assistant Professor

- Engineering Drawing

- Timber Design
- FE Seminal (Statics and Dynamics)

Concordia University - Graduate Teaching Assistant

- Engineering Statics (Teaching Assistant - 7 terms / Marker - 5 terms)
- Engineering Dynamics (Teaching Assistant - 6 terms / Marker - 4 terms)
- Engineering Mathematics
- Civil Engineering Drawing
- Computer-Aided Building Design
- Decision Analysis

Concordia University - Graduate Lab Instructor

- Civil Engineering Drawing
- Building Science
- Computer-Aided Building Design

Consulting Experience

- Building Aerodynamics Laboratory - Concordia University – 2008-2012
Pedestrian comfort and wind load assessment wind tunnel study
Structural load evaluation using wind tunnel high-frequency pressure scanning technique (detailed list will be provided upon request)
- Laboratory for Wind Engineering Research – International Hurricane Research Center – 2012-2014
Destructive and non-destructive testing of large and full-scale structures and structure components/attachments (detailed list will be provided upon request)

Memberships in Academic/ Professional Committees

- Member of the Technical Council on Wind Engineering (TCWE-ASCE), Structural Wind Engineering Committee (SWEC) and Environmental Wind Engineering Committee (EWEC)
- Member of the International Hurricane Research Center (IHRC)
- Member in various Departmental Faculty Committees (CEE – FIU)

Professional and other Memberships

- Member of the American Society of Civil Engineers (ASCE)
- Member of the Canadian Society of Civil Engineers (CSCE)
- Member of the Greek Society of Civil Engineers (TEE)
- Member of the American Association for Wind Engineering (AAWE)
- Sigma Xi, Scientific Research Society

Reviewer Duties

- Journal of Wind Engineering and Industrial Aerodynamics, Elsevier
- Journal of Structural Engineering, ASCE
- Journal of Engineering Mechanics, ASCE
- Indoor and Built Environment, SAGE
- Wind and Structures, An international Journal, Techno-Press.
- Ontario Center of Excellence (Research Proposal Reviewer)