

# Mohamed Elsharawy

PhD, P.Eng. (Ontario-Canada). Assistant Professor.

# Personal Data

Nationality | Canadian Date of Birth | March. 1, 1978 Department | Civil and Construction Engineering Department Official IAU Email | mrelsharawy@iau.edu.sa Office Room No. | A13-3634 Office Phone No. | 31743

# Language Proficiency

Language	Read	Write	Speak
Arabic	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent
French	Basic	-	Basic
Chinese	-	-	Basic

# Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
April 02, 2014	Ph.D.	Concordia University	Montreal, Canada
August. 15, 20 · 5	M.Sc.	Mansoura University	Mansoura, Egypt
June 15, 2000	B.Sc.	Mansoura University	Mansoura, Egypt

# PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Wind-induced torsional loads on low- and medium-rise buildings
Master	Optimum shapes of guyed towers
Fellowship	Postdoctoral fellowship:" Wind-induced loads on building and other structures"



#### Professional Record:

Job Rank	Place and Address of Work	Date
Assistant Professor	Imam Abdulrahman Bin Faisal University	2017- On.
Structural Engineer	SOH Wind Engineering, Vermont, USA.	2016
Structural Engineer	Graitec Inc., Montreal, Canada.	2015
Postdoctoral Fellow,	Concordia University, Montreal, Canada.	2014
Research and Teaching Assistant	Concordia University, Montreal, Canada.	2008-2013
Assistant Lecturer	Mansoura university, Mansoura, Egypt	2004-2007
Structural Engineer	Consulting offices, Mansoura, Egypt.	2000-2003

# Scientific Achievements

#### **Refereed Scientific Research Papers:**

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- El-Sokkary, H., Elsharawy, M. (2022). Impact of Revised Seismic Hazard Values in NBCC 2015 on RC Shear Wall Buildings. Journal of Architectural Engineering, American Society of Civil Engineering (ASCE), Volume 28 Issue 3 - September 2022
- 2- Mahmoud, S., Saleem, M., Hasanain, A., El-Sokkary, H., Elsharawy, M., Genidy, M., Abd-Elhamed, A. (2022). Structural Response and Damage Evaluation of a Typical Highrise RC Building in Dubai Under an Earthquake with Single and Multiple Peaks., Journal of Civil Engineering and Management 28 (7):509–522.
- **3-** Kaloop, M., Elsharawy M., Abdelwahed B., Hu J., Kim D. (2020). Performance Assessment of Bridges Using Short-Period Structural Health Monitoring System: Sungsu Bridge Case Study., Journal of Smart Structures and Systems.
- 4- Kaloop, M., Kim, K., Elsharawy, M., Zarzoura, F., Hu J. (2019). Performance Assessment Using a Field Test of a Short-Period Monitoring System: Tun Bridge Case Study. Journal of Structural Engineering International.
- 5- Kaloop, M., Yigit, C., Dindar, A., Elsharawy, M., Hu, J., (2018). Evaluation of the High-Rate GNSS-PPP Method for Vertical Structural Motion. Journal of Survey Review.
- **6-** Elsharawy, M., Galal, K., and Stathopoulos, T. (2015). Torsional and shear wind loads on flat-roofed buildings. Journal of Engineering Structures, Elsevier, 84, 313-324.
- 7- Elsharawy, M., Galal, K., and Stathopoulos, T. (2014). Comparison of wind tunnel measurements with NBCC 2010 wind-induced torsion provisions for low- and mediumrise buildings. Canadian Journal of Civil Engineering, 41(5), 409-420.



- **8-** Elsharawy, M., Galal, K., and Stathopoulos, T. (2014). Design wind loads including torsion for rectangular buildings with horizontal aspect ratio of 1.6. Journal of Structural Engineering, ASCE, Note 140(4), 1-5.
- **9-** Stathopoulos, T., Elsharawy, M., and Galal, K. (2013). Wind load combinations including torsion for rectangular medium-rise buildings. International Journal of High- Rise Buildings, 2(3), 1-11.

10- Elsharawy, M., Stathopoulos, T., and Galal, K. (2012). Wind-induced torsional loads on low buildings. Journal of Wind Engineering and Industrial Aerodynamics, Elsevier, 104-106, 40-48.

#### Scientific Research Papers Presented to Refereed Specialized Scientific Conferences:

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1- m Au - 7	1- Salama, T., Figgess, G., Elsharawy, M., El-Sokkary, H., (2020). Financial modeling for modular and offsite construction. Proceedings of the 37th International Symposium on Automation and Robotics in Construction, ISARC 2020: From Demonstration to Practical Use - To New Stage of Construction Robot, 2020, pp. 1082–1089		
2- of U	Horn, A., Elsharawy, N Long-Span Cable Sup SA.	M., Hansen, S. (2017). Effects of Trapported Bridges. Structures Engine	ffic on Aerodynamic Performance ering Congress, ASCE, Denver,
3- in Er	<b>3-</b> Elsharawy, M., Stathopoulos, T., and Galal, K. (2016). Comprehensive study of wind- induced torsional loads on low- and medium-rise buildings. Canadian Society of Civil Engineering, London, Ontario, Canada		
4- wi (I	4- Elsharawy, M., Stathopoulos, T. and Zhang, Z. (2015). Effect of low-rise building shape on wind-induced torsion and shear forces, the 14th International Conference on Wind Engineering (ICWE 14), June 21-26, Porto Alegre, Brazil.		
5- sh M	Zhang, Z., Elsharawy, aped low-rise buildings aterials Research (ACE	M., and Stathopoulos, T. (2014). A . The 2014 World Congress on adv M14), August 24-28 at BEXCO in I	erodynamic torsional loads on L- ances in Civil, Environmental, & Busan, Korea.
6- ro M	Alrawashdeh, H., Elsh of edges and corners. E cMaster University, Har	arawy, M., and Stathopoulos, T. (20 ngineering Mechanics Institute Com milton, Ontario, Canada (oral preser	014). Wind pressures on large flat afference (EMI 2014), August 5-8, ntation).
7- ris Sc	7- Elsharawy, M., Alrawashdeh, H., and Stathopoulos, T. (2014). Wind loading zones for low- rise buildings with flat roofs. 4th International Structural Specialty Conference, Canadian Society of Civil Engineering (CSCE), May 28-31, Halifax, Canada.		



**8-** Elsharawy, M., Stathopoulos, T., and Galal, K. (2013). Wind tunnel study on load combinations including torsion for design of medium-rise buildings. The Eighth Asia-Pacific Conference on Wind Engineering (APCWE), Chennai, India.

**9-** Elsharawy, M., Stathopoulos, T., and Galal, K. (2013). Wind load combinations including torsion for medium-rise buildings. European-African Conference on Wind Engineering, (EACWE 2013), July 9-1, Cambridge, England.

**10-** Elsharawy, M., Galal, K and Stathopoulos, T., (2013). Comparison of wind tunnel results with Canadian provisions for wind-induced torsion on low- and medium-rise buildings. Annual General Meeting and Conference, Canadian Society of Civil Engineering (CSCE), May 29- June 1, Montreal, Canada - Best Student Paper/Presentation Award (2<sup>nd</sup>).

11- Elsharawy, M., Galal, K and Stathopoulos, T., (2013). Wind-induced torsion on buildings. Poster presented in 3rd Specialty Conference on Disaster Prevention and Mitigation, CSCE, May 29- June 1, Montreal, Canada - Best Technical Poster Award (2<sup>nd</sup>).

**12-** Elsharawy, M., Stathopoulos, T., and Galal, K. (2012). Wind-induced torsional aerodynamic loads on low- and medium-height buildings. Seventh International Colloquium on Bluff Body Aerodynamics & Applications, September 2-6, Shanghai, China

**13-** Elsharawy, M., Stathopoulos, T., and Galal, K. (2011). Wind-induced torsional loads on low buildings. Proceedings of the 13th International Conference on Wind Engineering (ICWE 13), July 10-15, Amsterdam, Netherlands.

14- Elsharawy, M., Galal, K and Stathopoulos, T., (2011). Wind-induced torsional loads on lowrise buildings; Effect of Geometrical Variables. Annual General Meeting and Conference, Canadian Society of Civil Engineering (CSCE), June 14-16, Ottawa, Canada.

**15-** Elsharawy, M., Stathopoulos, T., and Galal, K. (2011). Wind-induced torsional loads on low-rise buildings. Proceedings of the 2011 Structures Congress, Sponsored by ASCE/SEI, April 14-16, Las Vegas, Nevada, USA.

**16-** Elsharawy, M., Stathopoulos, T., and Galal, K. (2011). Evaluation of wind-induced torsional loads on buildings by north American and European codes and standards. Proceedings of the 2011 Structures Congress, Sponsored by ASCE/SEI, April 14-16, Las Vegas, Nevada, USA.

17- Elsharawy, M., Elbagalaty, S., Najuib, S., Agag, Y. (2006). Static and dynamic analysis of guyed towers, Proceedings of the 5Th International Engineering Conference (5IEC) at: Sharm El-Shikh, Egypt.

#### **Completed Research Projects**

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
	Mohamed Elsharawy, Ted Stathopoulos (NSERC) Canada	Wind-induced torsional loads on buildings	April, 2014



# **Current Researches**

#	Research Title	Name of Investigator(s)
1	Hydrogen Generator from Enhanced Performance HCPV	Mohamed Elsharawy, member of the team.
2	Performance based seismic and wind design.	Mohamed Elsharawy
3	Complex effects on building structures (i.e. the combined effects of seismic excitation, damage and settlement)	Mohamed Elsharawy

# Contribution to Scientific Conferences and Symposia

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1-	Structures Engineering Congress, ASCE,	Denver, USA. April 6-8,2017	Oral Presentation titled: - Effects of Traffic on Aerodynamic Performance of Long-Span Cable Supported Bridges.
2-	Engineering Mechanics Institute Conference (EMI 2014)	McMaster University, Hamilton, Ontario, Canada. August 5-8, 2014	Oral Presentation titled: - Wind pressures on large flat roof edges and corners.
3-	Canadian Society of Civil Engineering (CSCE).	Montreal, Canada - May 29- June 1, 2013	Presented a paper titled: - Comparison of wind tunnel results with Canadian provisions for wind-induced torsion on low- and medium-rise buildings. Awarded: Best Student Paper/Presentation Award
4-	Canadian Society of Civil Engineering (CSCE).	Montreal, Canada - May 29- June 1, 2013	Presented a poster titled: - Wind-induced torsion on buildings. Awarded: Best Technical Poster Award.
5-	Canadian Society of Civil Engineering (CSCE).	Ottawa, Canada. June 14-16, 2011	<ul> <li>Presented a paper titled:</li> <li>Wind-induced torsional loads on low-rise buildings; Effect of Geometrical Variables.</li> </ul>
6-	Structures Congress, Sponsored by ASCE/SEI,	Las Vegas, Nevada, USA. April 14-16, 2011	<ul> <li>Presented two papers with the following titles:</li> <li>Wind-induced torsional loads on low-rise buildings.</li> <li>Evaluation of wind-induced torsional loads on buildings by north American and European codes and standards.</li> </ul>



#### Membership of Scientific and Professional Societies and Organizations

- Member of Professional Engineers, P.Eng. (Ontario, Canada), since 2016
- Member of the Canadian Society of Civil Engineers (CSCE), since 2011
- Member of the American Society of Civil Engineers (ASCE), since 2011
- Member of the American Association for Wind Engineering (AAWE), since 2011
- Member of the Structural Wind Engineering Committee (SWEC) of Technical Council ASCE, since 2011
- Member of Engineering Syndicate of Egypt, since 2001

# **Teaching Activities**

#### Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Statics	ENG 232	
2	Strength of Materials	ENG 351	Lab is required.
3	Analysis of Determinate Structures	CONEN 342	
4	Analysis of Indeterminate structures	CONEN 451	
5	Design of Steel Structures	CONEN 541	
6	Topics in Steel Structures	CONEN 504	
7	Topics in Structural Analysis	CONEN 573	
8	Construction Site Management	CONEN 622	Master level

#### Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Microsoft Office
2	Technical writing
3	Engineering Software (AutoCAD, Matlab, CSI Programs (ETABS, SAP, SAFE), Midas

- Gen, Robot Structures, Staad Pro.)
- 4 Wind Tunnel Measurements (Data collection and Analysis)

Last Update

05/30/2023