

KISHOR C. MEHTA
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Professional Preparation

B.S.E. in Civil Engineering, the University of Michigan, 1957
M.S.E. in Civil Engineering, the University of Michigan, 1958
Ph. D. in Civil Engineering (structures), the University of Texas-Austin, 1965

Professional Chronology

Director, NSF IUCRC Wind Hazard and Infrastructure Performance (WHIP) Center (2019-present)
P. W. Horn Professor of Civil Engineering, Texas Tech University (1964-2011; 2015-present)
Program Director, Structural and Architectural Engineering, Engineering Directorate, the National Science Foundation, Washington, DC (2011-2015)
Research Assistant, Civil Engineering, the University of Texas-Austin (1961-1964)
Design Engineer, M C & S Corp., Glen Canyon Dam Construction Site, Page, Arizona (1958-1961)

Research Interests

Wind loads on buildings and structures
Wind load standards and codes
Interdisciplinary research in natural hazard mitigation
Design for hurricanes and tornadoes
Damage investigation caused by windstorms

Honors/Awards

Elected to the National Academy of Engineering (2004)
Distinguished Member of American Society of Civil Engineers (2001)
Elected to Indian National Academy of Engineering (2009)
Elected to the National Academy of Inventors (2018)
International Association of Wind Engineering President Award (2021)
ASCE Cermak Medal for Wind Engineering (2014)
ASCE Walter P. Moore award for Load Standard (2002)
Life-time Service Award-Texas Section of ASCE (2013)
Academy of CAEE-University of Texas-Austin (2007)
Barnie E. Rushing Research Award; Halliburton Education Award of Excellence; Texas Tech (2003)
Texas Tech University Commencement Speaker (May 2005)

Synergistic Activities/Committee Membership

1. Program Director in the Civil, Mechanical and Manufacturing Innovation Division in the Engineering Directorate at the National Science Foundation. Developed new program in Structural and Architectural Engineering (2011-2015).
2. Co-directed development of EF-scale that is used by the U.S. National Weather Service since 2007 to rate intensity of each tornado.
3. Developed a doctoral degree in Multidisciplinary (engineering, atmospheric sciences, and economics) Program in Wind Science and Engineering which was funded from 2003-2008 by the NSF IGERT program

for graduate student fellowships. The degree curriculum was approved by the Texas Higher Education Coordinating Board in 2007. Thirty three students have completed Ph.D. in Wind Science and Engineering and are working in academic, government, and industrial sectors.

4. Chaired Wind Loads Committee that produced ANSI A58.1-1982, ASCE 7-85, ASCE 7-88, and ASCE 7-95 national standards

5. Organized three major conferences on wind engineering at Texas Tech University; the Tornado Symposium in 1976, the Fifth Americas Conference on Wind Engineering in 1985, and the Eleventh International Conference on Wind Engineering in 2003.

6. Conducted in the field windstorm damage documentation in eight different events during 1970s and 1980s and has directed damage documentation effort of Wind Science and Engineering Research Center for forty years.

7. Organized and instructed in annual professional short course on *Engineering for Extreme Winds* held at Texas Tech University (1972 – 2005). Also developed and instructed, with Drs. Joe Minor, Jim McDonald, Dale Perry and Richard Marshall professional short course, *Wind Loads on Buildings and Structures* for ASCE (1995 – 2006; 50 locations).

8. Senior author for *Guide to the Use of Wind Load Provisions* of ASCE 7-95, ASCE 7-98, ASCE 7-02, ASCE 7-05 and ASCE 7-10, published by the American Society of Civil Engineers.

Selected Publications

1. Mehta, K.C., Zisis, I., Liang, D. (2019): "A Multi-institutional Center on Wind hazard and Infrastructure Performance", *Proceedings of the 15th International Conference on Wind Engineering*, Beijing, China.
2. Mehta, K.C.(2013), "Development of EF-Scale for Tornado Intensity", *Journal of Disaster Research*, Vol. 8, No. 6, Fuji Technology Press, Tokyo, Japan
3. Mehta, K.C. and Coulbourne, B., *Guide to the Use of Wind Load Provisions of ASCE 7-10*, American Society of Civil Engineers, Reston, VA, 2012, 176 p.
4. Mehta, K.C. (2013): "Tornado Disaster Mitigation", *Proceedings of the Sixth International Symposium on Wind Engineering*, Tokyo Polytechnic University, Tokyo, Japan
5. Mehta, K.C., Womble, J.A. and Liang, D. (2008). "Use of Satellite Images to Document Windstorm Damage: A Future Trend?" *Journal of Wind and Engineering, ISWE Publication*, 5(1):1-7.
6. He, H., Ruan, D., Mehta, K. C., Gilliam, X. and Wu, F. (2007). "Nonparametric Independent Component Analysis for Detecting Pressure Fluctuations Induced by Roof Corner Vortex," *Journal of Wind Engineering and Industrial Aerodynamics*, 95 -6 pp. 429-443.
7. Phelan, R.C., Sarkar, P.P. and Mehta, K.C. (2006). "Full-Scale Measurements to Investigate Rain- Wind Induced Cable-Stay Vibration and its Mitigation", *ASCE Journal of Bridge Engineering*, Vol. 11, No. 3, May/June 2006, 293-304.
8. Wu, F., Sarkar, P.P. and Mehta, K.C. (2001). "Full-scale study of conical vortices and roof corner pressures," *Wind and Structures*, 4(2), 131-146.
9. Unanwa, C.O., McDonald, J.R., Mehta, K.C., and Smith, D.A. (2000). "The development of wind damage bands for buildings," *Journal of Wind Engineering and Industrial Aerodynamics*, 84(1), 119-149.
10. Ginger, J.D., Yeatts, B.B. and Mehta, K.C., "Internal pressures in a low-rise full-scale building," *Journal of Wind Engineering and Industrial Aerodynamics*, 72, 1997, 163-174.
11. Womble, J.A., Smith, D.A., Mehta, K.C. and McDonald, J.R. (2009): "The Enhanced Fujita Scale: For Use Beyond Tornadoes", *Proceedings of the Fifth Congress on Forensic Engineering*, Washington, D.C.
12. Levitan, M.L. and Mehta, K.C. (1992). "Texas Tech field experiments for wind loads, Part 1: Building and pressure measuring system," and "Part 2: Meteorological Instrumentation and Terrain Parameters," *Journal of Wind Engineering and Industrial Aerodynamics*, 41-44, 1565-1588.