KISHOR C. MEHTA

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POSITION/HONORS

P.W. Horn Professor of Civil Engineering
Director, Wind Science and Engineering Research Center (1988-2003)
Interim Dean of Engineering May 1994 - February 1995
Member of the National Academy of Engineering (2004)
Distinguished member of the American Society of Civil Engineers (2001)

EDUCATION

University of Michigan, 1954-57, B.S. in Civil Engineering University of Michigan, 1957-58, M.S. in Civil Engineering (Structures) University of Texas at Austin, 1961-64, Ph.D. in Civil Engineering (Structures) Wayne State University, 1966, five-week short course in Experimental Mechanics Stanford University, 1967, three-week short course in Computer Methods

EXPERIENCE

Full-Time Faculty Status at Texas Tech University

Assistant Professor of Civil Engineering, 1964-70
Member of Graduate Faculty, 1969-present
Associate Professor of Civil Engineering, 1970-77
Professor of Civil Engineering, 1977-1991
P.W. Horn Professor of Civil Engineering, 1991- Present (part-time since retirement in 2003)

Professional Non-Faculty Experience

Design Engineer, Merritt-Chapman & Scott Corp., New York City, 1958-59
Design Engineer, Merritt-Chapman & Scott Corp., Glen Canyon Dam Construction Site, Page, Arizona, 1959-61
Principal, McDonald-Mehta Engineers, 1971-present (consulting practice on special projects)

Graduate Education

Supervised 12 Ph.D. candidates and 35 M.S. candidates during the past 35 years. In addition, served on over 50 supervising committees of graduate students during the same period. Graduate advisor for the department of civil engineering 1978-1992 and wind science and engineering 2003-present.

Developed a new Ph.D. degree in Wind Science and Engineering. The multidisciplinary degree is approved by the Texas Higher Education Coordinating Board in 2007 (14 graduates and 17 current as of 2010)

HONORS AND AWARDS

Meritorious Technical Paper, Collapse of the Light Standards at Texas Tech, Texas Section, ASCE, 1969.

- Noteworthy Contribution to Civil Engineering awards for the papers by ASCE Texas Section, in 1974 for Wind Energy; in 1976 for Tornado Resistant Design of Precast Concrete Buildings; and in 1982 for Valuable Information from Wind-Caused Damage in Hurricane Frederic.
- Young Engineer of the Year, in 1969 and Engineer of the Year in 1980, South Plains Chapter of the Texas Society of Professional Engineers.
- Outstanding Engineering Professor, selected by the Engineering Student Council, Texas Tech University, in 1974 and 1980.
- Halliburton Education Foundation Award of Excellence, College of Engineering, TTU, 1985, 1987 and 1988.
- President's Award for Faculty Achievement in Teaching, Research and Service, Texas Tech University, 1986.
- P.W. Horn Professor of Civil Engineering (Highest rank awarded to faculty by the university), Texas Tech University, 1991.
- The ASCE-7 Wind Loads Task Committee, chaired by Dr. Mehta, received the 1997 Engineering Award from the National Hurricane Conference and an award of appreciation for the American Association of Wind Engineering.
- Listing in Who's Who in Science and Engineering for 1998.
- Outstanding Researcher, College of Engineering, 1993 and 1998.
- National Hurricane Conference 2000 Distinguished Service Award for life-long contributions in the field of wind engineering to mitigate the impacts of hurricanes, 2000.
- Strathmore's Who's Who listing for individuals who have demonstrated leadership and achievement in their occupation, industry or profession, 2000-2001.
- Received (with Y. Al-Menyawi) the award for "Best of Session" of the Fall 2000 meeting of the Texas Section of ASCE for the paper, "Performance of unreinforced masonry walls during wind loading".
- Elected to Distinguished Membership in American Society of Civil Engineers, October 2001. (ASCE has about 200 distinguished members out of 150,000 total members.)
- Barney E. Rushing, Jr. Award, Parents Association of Texas Tech University, 2003
- Induction into the National Academy of Engineering, 2004.

SYNERGISTIC ACTIVITES

1) As Chairman of the task committee on wind loads of the American National Standards Institute Committee A58 and of the American Society of Civil Engineers Committee ASCE 7, played a major role in the development of the wind load provisions of the national standards ANSI A58.1-1982, ASCE 7-88, and ASCE 7-95.

- 2) Organized, with the American Association for Wind Engineering, a national public policy symposium in Washington, DC in November 1999. This symposium brought together professionals from throughout the country representing different aspects of windstorm research to reach a consensus on issues to be included in a national windstorm hazard mitigation plan.
- 3) Organizer and one of a team of teachers for annual professional short course in engineering for extreme winds held at Texas Tech University (1972 2005). Also developed and taught, with Drs. Joe Minor, Jim McDonald, Dale Perry and Richard Marshall professional short course, wind loads on buildings and structures for American Society of Civil Engineers. This course was taught at 30 locations around the country on the average of six times each year (1995 2006).
- 4) Has conducted and supervised windstorm damage documentation effort of Wind Science and Engineering Research Center for the past forty years. Some of the recent efforts are the Oklahoma City tornado of May 1999; the Tuscaloosa, Alabama, tornado of 2000; the Ohio, Alabama, and Tennessee tornado outbreak of 2002; Hurricanes Charley and Ivan of 2004; Central Florida tornadoes of 2007; and Super Tuesday tornadoes of 2008.
- 5) National Science Foundation sponsored, Colorado State University/Texas Tech University Cooperative Program in Wind Engineering, 1989-2000; Principal Investigator for Texas Tech involving 7 faculty.
- 6) Organized three major conferences at Texas Tech university; Tornado Symposium in 1976, Fifth Americas Conference on Wind Engineering in 1985, and Eleventh International Conference on Wind Engineering in 2003.
- 7) Developed a doctoral degree in Multidisciplinary (engineering, atmospheric sciences, and economics) Program in Wind Science and Engineering which was funded from 2003-2008 by NSF IGERT program for graduate student fellowships. The degree curriculum has been approved by the Texas Higher Education Coordinating Board in 2007. As of 2010 the number of graduates are 14 and current number of students are 17. A dozen faculty members participate in this degree program.

PROFESSIONAL COMMITTEE ACTIVITIES

Subcommittee on Wind Loads of the American Society of Civil Engineers/SEI Standards Committee ASCE 7 on Minimum Design Loads for Buildings and Other Structures (formerly American National Standards Committee A58), 1977-1996 Chairman, 1996-2001 member, 2001-2010 Distinguished member.

President, American Association for Wind Engineering, Inc. 1985-1989; Vice President, 1982-85; Member, 1977-present.

President, International Association for Wind Engineering, 1999-2003

Chairman, Eleventh International Conference on Wind Engineering, Texas Tech University, Lubbock, Texas, 2003

Chairman, Committee on Natural Disasters, Commission on Sociotechnical Systems, National Academy of Sciences, 1984-85; Member, 1981-86.

Chairman, Symposium on Tornadoes, Texas Tech University, Lubbock, Texas, 1976.

Director, Short Course on Design for Wind, ASEE-NSF-FEMA Summer Institute, 1971, 1986, 1988 and instructor in the annual course 1989-2003.

Chairman, Fifth U.S. National Conference on Wind Engineering, held at Texas Tech University, 1985.

Chairman, National Institute of Building Science Oversight Committee for Surge in HAZUS, 2009-present

Member, The Academy of Medicine, Engineering and Sciences of Texas (TAMEST), elected in 2004

Member, National Academy of Sciences Committee on Peer Evaluation of National Bio- and Agro-Defense Facility, 2009-2010.

Member, Committee on Wind Effects, Committee on Structural Dynamics, Structural Division, American Society of Civil Engineers, 1979-1982.

Member, International Editorial Board of *Engineering Structures*, published by IPC Science and Technology Press, 1979-1982.

Member, Ad-Hoc Panel on Lifeline Engineering, National Institute of Building Science, 1988-1989.

Member, Panel on Assessment of Wind Engineering Issues in the United States, National Research Council, 1989-1992.

Member of the Advisory Panel for the Hazard Response and Recovery Center, Texas A&M University, 1990-2000.

Member of the Advisory Committee for the Natural Hazard Mitigation Center, University of Puerto Rico, 1990-1994.

Member of the Advisory Committee for Roof Uplift Research, Metal Building Manufacturers Association 1991-1993.

Member, ASCE Committee on Electrical Transmission Structures, Subcommittee on Structural Loading, 1981-2003.

Member, ASCE Aerospace Division Committee on Aerodynamics, 1984-2000.

Corresponding Member, Wind Engineering Panel, ESDU International, Inc., England, 1984-2005.

Distinguished Member, American Society of Civil Engineers, 2001-Present; Fellow 1984-2001; member, 1966-1984.

President of High Plains Branch, Texas Section ASCE, 1969-70; member, 1966-present.

Member, National Society of Professional Engineers and Texas Society of Professional Engineers, 1967-present.

President, South Plains Chapter of TSPE, 1975-76; State Director, 1976-78; member, 1967-present.

Member Structural Engineering Association of Texas, 1985-present.

Member, American Concrete Institute, 1965 - present

Member, American Meteorological Society, 1997-present

Member, Sigma Xi and Chi Epsilon, 1968-present

Member, Wind Damage Mitigation Committee of the Insurance Institute for Property Loss Reduction, 1992-1995

Member, Advisory Board for the Global Center of Excellence in Wind Engineering, Tokyo Polytechnic University, Japan, 2009-present

Member, ASCE Policy Committee on Infrastructure, 2010 -2012

University Committee

College of Engineering Courses and Curricula, 1970-72

Texas Tech Soccer Team Faculty Sponsor, 1970-74

Texas Tech Courses and Curricula, 1972-74

Chi Epsilon Chapter Faculty Sponsor, 1974-75, 1988-2003

College of Engineering Tenure Committee, 1975-77 (Chairman), 1982-86 (Chairman)

Texas Tech Campus Emergency Committee, 1977-79

Code of Student Affairs, 1979-1982

College of Engineering Grade Appeals Committee, 1979-1985 (Chairman)

Peer Review Committee for Civil Engineering Department, 1981-82

Mediation Panel for Termination Procedure of a Tenured Faculty Member, 1982 (Chairman)

Senator from Engineering to Faculty Senate, 1982-1985; 1988-1991

College of Engineering Ad Hoc Tenure Policy Committee, 1984-1986

Financial Resources Committee of TTU for SACS report, 1992-93

Graduate Advisor for Civil Engineering Department, 1978-1991

Texas Tech University Strategic Planning Task Force, 1991-1994

Intellectual Property Committee, 1994-1998 (Chairman)

Civil Engineering Curriculum Committee, 1995-1997 (Chairman)

Faculty Workload Policy Committee, 1997-2000

The Institute of Environmental and Human Health (TIEHH) Strategic Planning Committee, 1998-99.

Chair, Faculty Research Award Committee, Whitacre College of Engineering, Texas Tech university, 2009-present

RESEARCH PROJECTS

<u>Studies in Wind Engineering</u>, sponsored by the National Science Foundation, with J.E. Minor, 1973-77, \$120,000.

Field Experiment for Wind Pressure, sponsored by the National Science Foundation, 1986-1990, \$353,000.

<u>Colorado State University/Texas Tech University Cooperative Project in Wind Engineering</u>, sponsored by the National Science Foundation, 1989-1994, \$157,000 for 1989-90, \$263,000 for 1990-91, \$380,000 for 1991-1992, \$420,000 for 1992-93, \$450,000 for 1993-94.

<u>Vibration Mitigation of Traffic Signal Structures, Luminaires, and Signs</u>, sponsored by Texas Department of Transportation, 1991-1994, \$280,000.

Wind Engineering and Fluid Mechanics Enhancement Program, sponsored by Texas Tech University, 1991-1992, \$94,000; 1992-93, \$94,000; 1993-94, \$120,000; 1994-95, \$75,000, 1995-96, \$50,000, 1996-97, \$25,000.

Mitigation of Hurricane Damage to Constructed Facilities, National Science Foundation, 1992-96, \$140,000.

Wind Load Standards Compliance, Florida Housing Finance Agency, \$275,000 for 1995-96.

Transmission Line Wind Loading, Florida Power and Light, \$104,000 for 1995-96.

<u>Colorado State University/TTU Cooperative Wind Engineering Program</u>, National Science Foundation, 1995-2000, \$1,630,747.

Design of Residential Shelters from Severe Winds, Greenhorne & O'Mara, \$90,000, 1997-1998.

<u>Evaluation and Repair of Cable-Stay Vibrations</u>, Texas Department of Transportation, \$145,277, 1997-1998.

Windstorm Mitigation Initiative, Cooperative Agreement with National Institute of Standards and Technology, PI, \$3.6 million, 1998-1999; \$1.2 million, 1999-2000; \$1,289,100, 2000-2001; \$1,588,900, 2001-2002;\$1.6 million, 2002-2003; \$1.2 million, 2003-2004; \$1.2 million 2004-2005.

Study of Stay Cable Vibrations, Texas Department of Transportation, PI, \$182,434 for 1998-1999, \$25,000 for 1999-2000.

The Development of an Integrated System of Instrumentation and Equipment to Measure Atmospheric Boundary Layer Winds and their Effects on Built Structures, National Science Foundation, Co-PI, \$212,545, 1999-2000.

<u>Technology Service in Wind Mitigation</u>, FEMA/TTU Cooperative Agreement, PI, \$100,000, 1999-2000; \$99,987 2000-2001; \$82,025, 2001-2002; \$90,000, 2002-2003; \$90,000, 2003-2004.

<u>Computer Catastrophe Insurance Loss Models</u>, (in conjunction with Texas Department of Insurance and the Weather Research Center), Foundation for Insurance Regulatory Studies in Texas (FIRST), \$99,779, 1999-2001.

<u>Investigation of Wind/Rain Induced Stay Vibrations in Cable Stayed Bridges</u>, Texas Department of Transportation, PI, \$162,000 for 1999-2000, \$120,000 for 2000-2001.

<u>IGERT: Multidisciplinary Program in Wind Science and Engineering</u>, National Science Foundation, \$2,258,557, 2002-2007.

<u>Hyperspectral Imagery: A New Frontier for Windstorm Damage Assessment, National Science Foundation, Daan Liang, PI, \$180,000, 2009-2011.</u>

<u>Field and Wind tunnel Testing of Signs</u>, International Sign Association and overhead Advertising Association of America, \$105,000, 2009-2011.

SHORT COURSES AND INVITED LECTURES

Engineering for Extreme Winds short course, Texas Tech University. Co-principal lecturer in 1972, 1973, 1974, 1975, and 1977. Director of the course in 1979, 1981, 1984, 1986, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000 2001, and 2002.

Co-principal lecturer in the ASCE Continuing Education short course on Wind Loads in Chicago, Baltimore, Boston and Honolulu in 1995; West Palm Beach, Sacramento, Irvine, Chicago, Charleston and Tampa in 1996; Raleigh, Kansas City, Orlando, Corpus Christi, Seattle and Las Vegas in 1997; Atlanta, Pittsburgh, Orlando, New York and New Orleans in 1998; Chicago, IL, Charleston, SC, New Orleans, SC, W. Palm Beach, FL, Houston, TX, and Washington D.C. in 1999; Denver, CO, Las Vegas, NV, and Charleston, SC in 2000; Dallas, TX, San Francisco, CA, Cleveland, OH, Seattle, WA, Tampa, FL, and Boston, MA, in 2001; Baltimore, MD, Orlando, FL, and Las Vegas, NV, Montgomery, AL, Cincinnati, OH and Omaha, NE,

- Philadelphia, PA and Fort Lauderdale, FL in 2002; 8 locations in 2003; 8 locations in 2004; 3 locations in 2005.
- Invited to lecture in short courses in Wind Loads on Buildings offered by the University of Missouri-Columbia in 1975 (Columbia), 1977 (St. Louis), 1978, 1981, 1982, 1983, 1984, 1985, 1986, 1990 and 1991 (Kansas City).
- Invited to lecture in short courses in Design for Wind presented as a part of the ASEE-NSF-DCPA(FEMA)-DOE Summer Institute on Multiprotection Design in 1976, 1977, 1978, 1983, 1984, 1985, 1986, 1988, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002 and 2003.
- Invited participant at the Second USA-Japan Research Seminar on Wind Effects on Structures, sponsored by the Japan Society for the Promotion of Science, the National Science Foundation, and Kyoto University, Kyoto, Japan, 1974.
- Invited to lecture in short course on Structural Design for Disaster Conditions, sponsored by Florida Technical University and the American Society of Civil Engineers, Florida Division, Florida, 1978.
- Invited to lecture in Seminar on Structural Engineering sponsored by the Nebraska Section of ASCE, Omaha, ME, 1979, 1987 and 1995.
- Invited participant at the workshop of US-USSR bilateral agreement on exchange of information on building loads, Moscow, USSR, 1979.
- Invited lecturer at short course on Modern Trends in Housing sponsored by the Structural Engineering Research Center, Adyar, Madras, India, 1980.
- Invited lecturer, Structural Seminar sponsored by the New York City Metropolitan Chapter, ASCE, New York, NY, 1981.

Principal Lecturer at one-day seminar presented to personnel of Conoco, Inc., Ponca City, OK, 1983.

Invited participant, France/USA Workshop on Research in Civil Engineering, Paris, France, 1983.

Invited lecturer at CSIRO Building Division, Melbourne, Australia, 1983.

Invited lecturer at Southern Building Code Congress International (SBCCI) Codes Institute, Athens, GA, 1983.

Invited lecturer, Conference on Design Against Wind Induced Failures, Bristol, England, 1984.

Invited participant, India-U.S. Workshop on Wind Disaster Mitigation, Madras, India, 1985.

Invited participant, U.S.-Australia Workshop on Bins, Tanks and Silos, Sydney, Australia, 1985.

- Invited keynote speaker, Third American Society of Civil Engineering Mechanics Specialty Conference on Dynamics of Structures, Los Angeles, California, 1986.
- Invited speaker on the theme of Wind Flow Around Low-Rise Buildings, Seventh International Conference on Wind Engineering, Aachen, West Germany, 1987.
- Invited speaker at the Wind Symposium sponsored by the International Conference of Building Officials, Osage, MO, 1987.

- Invited participant at the International Workshop on Sensors and Measurement Techniques for Assessing Structural Performance, National Bureau of Standards, Gaithersburg, MD, 1988.
- Invited lecturer, Wind Engineering Seminar: Overview and Perspectives, Structural Engineers Assn. of Washington, Seattle, WA, 1989.
- Invited participant, U.S.-Japan Natural Resources 21st Panel on Wind and Seismic Effects meeting, Tsukuba, Japan, 1989.
- Invited participant, UW0-MBMA Seminar on Wind Loads, London, Canada, 1989.
- Invited participant, U.S.-India Binational Workshop on Advanced Construction and Material Technology, Madras, India, December 1990.
- Invited participant, Workshop on Active Control of Structures, National Science Foundation, Washington, D.C., February 1991.
- Principal lecturer on wind loads at the Short Course, "Wind, Snow and Earthquake Loads," sponsored by the American Society of Civil Engineers, St. Louis, MO, November 1991.
- Plenary session lecturer, "Building Damage in Hurricane Andrew," National Hurricane Conference, Orlando, FL, April 1993.
- Lecturer, "Guidelines for Design of Tornadoes," a one-day seminar offered at the workshop sponsored by the Department of Energy in Washington, DC, April 1993 and April 1994.
- Presentation at NDLR in Charleston, SC, May 1993
- Presentations of progress reports to Texas Department of Transportation personnel in Lubbock, TX (March 1993) and in McAllen, TX, Sept. 1993
- Chaired a session on Wind Load Revision of ASCE 7-95 at the 7th U.S. National Conference on Wind Engineering, UCLA, Los Angeles, CA, June 1993
- Chaired session on tornadoes at ASCE National Convention, Dallas, TX, Oct. 1993
- Two presentations at Third Asia-Pacific Symposium on Wind Engineering, Hong Kong, Dec. 1993
- Task Committee on Wind Loads ASCE 7, chaired meetings to develop ASCE 7-95 in Irvine, CA, April 1993, in Los Angeles CA, July 1993, in Chicago, IL, August 1993, in Washington, DC, May 1994, and in Washington, DC, November 1994.
- Participation at NCPI Wind Damage Mitigation Committee meeting and presentation of progress report in Dallas, TX, March, June and August 1993; in Lubbock, Nov. 1993; in Amelia Island, FL, April 1994; Atlanta, GA, 1995; and Dallas, TX, 1996; and Corpus Christi, TX, 1996.
- Chaired session, Bluff Body Aerodynamics, at Second International Conference on Wind Engineering, August, 1996, Colorado Springs, CO.
- Presentation of Wind Load seminar to personnel of Texas Department of Insurance, August, 1996, Austin, TX.

- Presentation of "Wind Engineering Research at Texas Tech," to Mechanical Engineering Department of University of Auckland, New Zealand on March, 1997.
- Presentation of "Wind Load Standards in the United States," to staff of the Cyclone Testing Center, James Cook University, Townsville, Australia on March, 1997.
- Presentation of "Wind Load Provisions of U.S. Standard ASCE 7-95," seminar presented at Monash University, Melbourne, Australia; March, 1997.
- Invited lecturer, "ASCE 7-95 Standard: Consensus and Compromise," presented at Eighth U.S. National Conference on Wind Engineering, Baltimore, MD, June 5-7, 1997.
- Presentation of "Wind Engineering Research at Texas Tech," to faculty and students of University of Nevada at Las Vegas, December 4, 1997.
- Presentation at FEMA Region IV Tornado Symposium, Atlanta, GA, April, 1998.
- Presentation at National Tornado Forum, Washington, D.C., August, 1998.
- Invited Presentation on ASCE 7-95 Wind Load Criteria, ASCE Minnesota Structures Division, Minneapolis, MN, September, 1998.
- Panel moderator for "Wind speeds in tornadoes: What we know and what we don't know," as part of the Severe Weather Conference, sponsored by NWS and Wind Engineering, TTU, Lubbock, TX, February, 1999.
- Presentation of Wind Effects seminar for Chang, Patel and Larby Consulting Engineers, May, 1999.
- Short course on "Engineering for Gulf Coast Hurricanes, Galveston, TX, presented with Texas Department of Insurance personnel, May, 1999, 2000 and 2001.
- Co-principal lecturer in the ASCE Continuing Education short course on "Design and Construction Guidance for Community Shelters," Orlando, FL, and Kansas City, MO in 2001.
- Wind Loads seminar presented to personnel of Westinghouse Savannah River Co., Aiken, S.C., November 2001.
- Invited Lecture, National Conference on Wind Engineering, Roorkee, India, April 2002.
- Invited speaker, SEAOT-Houston/Gulf Coast chapter monthly meeting, K. Mehta, April 2002.
- Invited Speaker, "Wind Science and Engineering Education Experiment", Third International Symposium on Wind Engineering, Tokyo Polytechnic University, Tokyo, Japan, 2009.
- Invited Speaker, "Wind Hazard Resilient Cities: New Challenges", Fifth International Symposium on Wind engineering, Tokyo Polytechnic University, Tokyo, Japan, 2011.

PUBLICATIONS

Refereed Publications

Valvekar, A.G., Teske, C.E., and Mehta, K.C., "Optimum design of indeterminate truss using geometric programming," *Journal of Aeronautical Society of India*, 24(2), 1972.

Minor, J.E., Mehta, K.C., and McDonald, J.R., "Failures of structures due to extreme winds," *Journal of the Structural Division*, ASCE, 98(ST11), 1972, 2455-2472.

Mehta, K.C., "Wind energy," Bulletin of the New Mexico Academy of Science, 14(2), 1973, 35-40.

McDonald, J.R., Mehta, K.C., and Minor, J.E., "Tornado-resistant design of nuclear power plant structures," *Nuclear Safety*, 15(4), 1974, 432-439.

Mehta, K.C., Minor, J.E., and McDonald, J.R., "Wind speed analysis of April 3-4, 1974 tornadoes," *Journal of the Structural Division*, ASCE, 102(ST9), 1976, 1709-1724.

Minor, J.E., Mehta, K.C., and McDonald, J.R., "Air flow around buildings as reflected in failure modes," *ASHRAE Transactions*, 82(I), 1976, 1061-1071.

Minor, J.E., McDonald, J.R., and Mehta, K.C., "Hurricanes, tornadoes and extreme winds," Chapter 7 in the *Handbook of Building Security, Planning and Design*, McGraw-Hill Publisher, 1979, 7-1 through 7-19.

Minor, J.E. and Mehta, K.C., "Wind damage observations and implications," *Journal of the Structural Division*, ASCE, 105(ST11), 1979, 2279-2291.

Mehta, K.C., "Conference report on the Fifth International Conference on Wind Engineering," *Applied Mathematical Modeling*, IPC Science and Technology Press, 1979.

Peterson, R.E. and Mehta, K.C., "Meeting review: Workshop on wind climate, Asheville, NC," *Bulletin of the American Meteorological Society*, 61, 6, 1980, 573-577.

Mehta, K.C., McDonald, J.R., and Smith, D.A., "Procedure for predicting wind damage to buildings," *Journal of the Structural Division*, ASCE, 107, ST11, 1981, 2089-2096.

Peterson, R.E. and Mehta, K.C., "Climatology of tornadoes of India and Bangladesh," *Archives for Meteorology, Geophysics and Bioclimatology*, Series B, Springer-Verlag, Vienna, Austria, 1981, 345-356.

Mehta, K.C., Minor, J.E., and Reinhold, T.A., "Wind speed-damage correlation in Hurricane Frederic," *Journal of Structural Engineering*, ASCE, 109(1), 1983, 37-49.

Mehta, K.C., "Wind load provisions of the new ANSI standard," *Journal of Wind Engineering and Industrial Aerodynamics*, Elsevier Science Publishers B.V., Amsterdam, 14, 1983, 37-48.

Behr, R.A., Mehta, K.C., and Kiesling, E.W., "Concrete barrel arches for earth sheltered housing," *Structural Engineering Practice*, 2(4), 1983-84, 319-345.

Minor, J.E., Mehta, K.C., and McDonald, J.R., "Coping with hurricane hazards," *National Development Asia*, 24(5), July 1983, 89-90, 92-94, 97.

Mehta, K.C., "Wind load provisions of ANSI #A58.1-1982," *Journal of Structural Engineering*, ASCE, 110(4), April 1984, 769-784.

Mehta, K.C., "Wind induced damage observations and their implications for design practice," *Engineering Structures*, Butterworth Scientific Publishers, England, 6(4), 1984, 242-247.

Behr, R.A., Mehta, K.C., and Kiesling, E.W., "Strength and stability of earth covered dome shells," *Journal of Structural Engineering*, ASCE, 110(1), 1984.

Mehta, K.C. and Minor, J.E., "Wind loading mechanism on masonry construction," *The Masonry Journal*, Boulder, CO, 5(1), 1986, T1-T7.

Lakas, B.D., Mehta, K.C., Kiesling, E.W., and Dunn, J.R., "Wind tunnel simulation of the Texas Tech research building: Effects of terrain features and building orientation," *Journal of Wind Engineering and Industrial Aerodynamics*, 36, 1990, 1073-1082.

Ng, H.T. and Mehta, K.C., "Pressure measuring system for wind-induced pressures on building surfaces," *Journal of Wind Engineering and Industrial Aerodynamics*, 36, 1990, 351-360.

Levitan, M.L., Mehta, K.C., Chok, C.V., and Millsaps, D.L., "An overview of Texas Tech's Wind Engineering Field Research Laboratory," *Journal of Wind Engineering and Industrial Aerodynamics*, 36, 1990, 1037-1046.

Mehta, K.C. and Kadaba, R., "Field data analysis of electrical conductor response to winds," *Journal of Wind Engineering and Industrial Aerodynamics*, 36, 1990, 329-338.

Levitan, M.L., Holmes, J.D., Mehta, K.C., and Vann, W.P., "Field measured pressures on the Texas Tech building," *Journal of Wind Engineering and Industrial Aerodynamics*, 38, 1991, 227-234.

Levitan, M.L. and Mehta, K.C., "Texas Tech field experiments for wind loads, Part 1: Building and pressure measuring system," *Journal of Wind Engineering and Industrial Aerodynamics*, 41-44, 1992, 1565-1576.

Levitan, M.L. and Mehta, K.C., "Texas Tech Field experiments for wind loads, Part 2: Meteorological Instrumentation and Terrain Parameters," *Journal of Wind Engineering and Industrial Aerodynamics*, 41-44, 1992, 1577-1588.

Mehta, K.C., Levitan, M.L., Iverson, R.E. and McDonald, J.R., "Roof corner pressures measured in the field on a low building," *Journal of Wind Engineering and Industrial Aerodynamics*, 41-44, 1992, 181-182.

Mehta, K.C., Cheshire, R.H., and McDonald, J.R., "Wind resistance categorization of buildings for insurance," *Journal of Wind Engineering and Industrial Aerodynamics*, 41-44, 1992, 2617-2628.

Harris, H.H., Mehta, K.C., and McDonald, J.R., "Taming tornado alley," Civil Engineering, 62(6), 1992, 77-78.

Letchford, C.W. and Mehta, K.C., "The distribution and correlation of fluctuating pressures on Texas Tech Building," *Journal of Wind Engineering and Industrial Aerodynamics*, 50, 1993, 225-234.

Letchford, C.W., Sandri, P., Levitan, M.L. and Mehta, K.C., "Frequency response requirements for fluctuating wind pressure measurements," *Journal of Wind Engineering and Industrial Aerodynamics*, 40, 1992, 263-276.

Harris, H.W., Mehta, K.C. and McDonald, J.R., "Design for occupant protection in schools," In: C. Church et al., eds, *The Tornado: Its Structure, Dynamics, Prediction, and Hazards*, American Geophysical Union, Washington, D.C., 1993, 545-553.

Smith, D.A. and Mehta, K.C., "Investigation of stationary and nonstationary wind data using classical Box-Jenkins models," *Journal of Wind Engineering and Industrial Aerodynamics*, 49, 1993, 319-328.

Yeatts, B.B. and Mehta, K.C., "Field experiments for building aerodynamics," *Journal of Wind Engineering and Industrial Aerodynamics*, 50, 1993, 213-224.

Smith, D.A., Mehta, K.C., Yeatts, B.B., Bhavaraju, S.V., "Area-averaged and internal pressure coefficients measured in the field," *Journal of Wind Engineering and Industrial Aerodynamics*, 53, 1994, 89-103.

Peterson, R.E., Goldstein, S.D. & Mehta, K.C., "Analysis of peak gust versus fastest-mile wind statistics," *Journal of Wind Engineering and Industrial Aerodynamics*, 54/55, 1995, 183-190.

Gupta, H., Sarkar, P.P., Mehta, K.C., "Identification of parameters for vortex-induced response in time domain," *ASCE Journal of Engineering Mechanics*, 122(11), 1996, 1031-1037.

Tieleman, H.W., Surry, D. and Mehta, K.C., "Full/model-scale comparison of surface pressures on the Texas Tech experimental building," *Journal of Wind Engineering and Industrial Aerodynamics*, 61, 1996, 1-23.

Sarkar, P.P, Zhao, Z. and Mehta, K.C., "Flow visualization and measurement on the roof of the Texas Tech building," *Journal of Wind Engineering and Industrial Aerodynamics*, 69-71, 1997, 597-606.

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.

Naderi, H., "The Jarrell, Texas, tornado of May 27, 1997," answers to Mr. Naderi's questions provided by K.C. Mehta, J.R. McDonald and E.W. Kiesling, *Building Standards*, 66 (5), 1997, 6-9.

Mehta, K.C. and Marshall, R.D., *Guide to the Use of Wind Load Provisions of ASCE* 7-95, 1998, American Society of Civil Engineers, Reston, VA.

Sarkar, P.P, Mehta, K.C., Peterson, R.E. and McDonald, J.R., "The Texas Tech project for dissemination of wind engineering research and curriculum via electronic media," *Journal of Wind Engineering and Industrial Aerodynamics*, 77 & 78, 1998, 663-672.

Unanwa, C.O., McDonald, C.O. Mehta, K.C., and Smith, D.A., "The development of wind damage bands for buildings," *Journal of Wind Engineering and Industrial Aerodynamics*, 84(1), 2000, 119-149.

Wu, F., Sarkar, P.P., Mehta, K.C. and Zhao, Z., "Influence of incident wind turbulence on pressure fluctuations near flat-roof corners," *Journal of Wind Engineering and Industrial Aerodynamics*, 89(5), 2001, 403-420.

Wu, F., Sarkar, P.P. and Mehta, K.C., "Full-scale study of conical vortices and roof corner pressures," *Wind and Structures*, 4(2): 2001, 131-146.

Mehta, K.C. and Perry, D.C., *Guide to the Use of Wind Load Provisions of ASCE 7-98*, American Society of Civil Engineers, Reston, VA, 2002.

Zhao, Z., Sarkar, P.P., Mehta, K.C. and Wu, F., "Wind flow characteristics and their loading effects on flat roofs of low-rise buildings," *Wind and Structures*, 5(1), 2002, 25-48.

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.

Ruan, D., Hau, Ha, Castanon, D. A. and Mehta, K. C. (2006). "Normalized Proper Orthagonal Decomposition (NPOD) for Building Pressure Data Compression," *Journal of Wind Engineering and Industrial Aerodynamics*, 94, 447-461.

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.

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.

Publications in Proceedings and Other Sources

Mehta, K.C., McDonald, J.R., Minor, J.E., and Sanger, A.J., "Response of structural systems to the Lubbock storm," SRR 03, Texas Tech University, Lubbock, TX, 1971, 428 pp.

Mehta, K.C. and Fincher, D., "Structural behavior of pretensioned prestressed masonry beams," *Proceedings*, Second International Brick Masonry Conference, British Ceramic Research Association, England, 1971, pp. 215-219.

Minor, J.E., Mehta, K.C., and McDonald, J.R., "Designing critical facilities for extreme wind conditions," *Proceedings*, Conference on Designing to Survive Disasters, IIT Research Institute, 1973, pp. 97-114.

McDonald, J.R., Minor, J.E., and Mehta, K.C., "Tornado generated missiles," *Proceedings*, Specialty Conference on Structural Design of Nuclear Power Plant Facilities, ASCE, 1974, pp. 543-556.

McDonald, J.R., Minor, J.E., and Mehta, K.C., *Design Manual For Tornado-Resistant Structures At the Pantex Plant Site*, U.S. AEC, 1974.

Mehta, K.C., Minor, J.E., Kiesling, E.W., and McDonald, J.R., "Wind engineering research program at Texas Tech University," *Proceedings*, Second U.S. National Conference on Wind Engineering Research, 22-25 June, 1975, Colorado State University, J.E. Cermak, Ed., pp. II-7-1 through II-7-4.

Mehta, K.C., Minor, J.E., and McDonald, J.R., *Interim Guidelines for Building Occupant Protection from Tornadoes and Extreme Winds*, DCPA, Department of Defense, TR-83A, 1975 (reissued January 1980 by FEMA).

Lambert, B.K., Mehta, K.C., and Minor, J.E., "Economics of wind construction: Expected value of damage vs. additional construction costs in DCPA Region Six," DCPA Region Six, Denver, 1975, 53 pp.

Mehta, K.C., Minor, J.E., McDonald, J.R., Manning, B.R., Abernethy, J.J., and Koehler, U.F., "Engineering aspects of tornadoes of April 3-4, 1974," National Academy of Sciences, Washington, DC, 1975.

McDonald, J.R., Mehta, K.C., and Minor, J.R., *Design Guidelines for Wind Resistant Structures*, Union Carbide Corp., Oak Ridge, TN, 1975, 49 pp.

Mehta, K.C., McDonald, J.R., and Minor, J.E., "Tornadic loads on structures," *Wind Effects on Structures*, Proceedings of the Second U.S.-Japan Research Seminar on Wind Effects on Structures, University of Tokyo Press, H. Ishizaki and A.N.L. Chiu, Eds., 1976, pp. 15-25.

Mehta, K.C., "Windstorm damage," *Proceedings*, Workshop on Wind Load Requirements for Buildings, Northwestern University, Evanston, IL, R.A. Parmelee, Ed., 1976, pp. 238-244.

Mehta, K.C., "Wind speed estimates: Engineering analyses," *Proceedings*, Symposium on Tornadoes: Assessment of Knowledge and Implications for Man, Institute for Disaster Research, 22-24 June, 1976, Texas Tech University, Lubbock, TX, R.E. Peterson, Ed., pp. 89-103.

Minor, J.E., McDonald, J.R., and Mehta, K.C., "Engineering-oriented examinations of the tornado phenomenon," *Proceedings*, Tenth Conference on Severe Local Storms, American Meteorological Society, 18-21 October 1977, Omaha, NE, pp. 438-445.

Minor, J.E., McDonald, J.R., and Mehta, K.C., *The Tornado: An Engineering-Oriented Perspective*, NOAA Technical Memorandum ERL NSSL-82, National Severe Storms Laboratory, Norman, OK, 1977.

Mehta, K.C., "Windspeed estimates through damage analyses," *Proceedings*, Third U.S. National Conference on Wind Engineering Research, February 26 – March 1, 1978, University of Florida, Gainesville, FL, B.M. Leadon, Ed., p. 27.

Mehta, K.C., "Wind loads on flat roof area through full-scale experiment," *Proceedings*, Third U.S. National Conference on Wind Engineering Research, February 26 - March 1, 1978, University of Florida, Gainesville, FL, B.M. Leadon, p. 123.

Minor, J.E. and Mehta, K.C., "1972 ANSI Standard vs. foreign building codes," *Proceedings*, Third U.S. National Conference on Wind Engineering Research, February 26 - March 1, 1978, University of Florida, Gainesville, FL, B.M. Leadon, pp. VI-4-1 through VI-4-8.

Mehta, K.C., "Proposed revisions to ANSI wind load provisions," *Proceedings*, Specialty Conference on Probabilistic Mechanics and Structural Reliability, A. H-S. Ang and M. Shinozuka, Eds., ASCE, 1979, pp. 271-275.

Mehta, K.C. and Minor, J.E., Summary Report: Conference on Research Related to Wichita Falls Tornado, Institute for Disaster Research, Texas Tech University, 1979, 20 pp.

Mehta, K.C., Ed., *Proceedings of the Workshop on Wind Climate*, Electric Power Research Institute, Palo Alto, CA, 1979.

Smith, D.A., Mehta, K.C., and McDonald, J.R., *Procedure for Predicting Wind Damage to Buildings*, Institute for Disaster Research, Texas Tech University, Lubbock, TX, 1979.

Mehta, K.C., "Wind load standards and codes," *Proceedings*, Fifth International Conference on Wind Engineering, Vol. 2, Pergamon Press, J.E. Cermak, Ed., 1980, pp. 1305-1318.

Kim, S.I. and Mehta, K.C., "Full scale measurements on a flat roof area," *Proceedings*, Fifth International Conference on Wind Engineering, Vol. 1, Pergamon Press, J.E. Cermak, Ed., 1980, pp. 357-367.

Mehta, K.C., "Tornadic wind speed estimates through damage analysis," *Experimental Wind Engineering for Structures*, G.M. Sabnis and L.R.L. Wand, Eds., Papers presented at the ASCE Annual Convention, October 27-31, 1980, 15pp.

Mehta, K.C., Minor, J.E., McDonald, J.R., and Reinhold, T.A., "Valuable Information from wind caused damage in Hurricane Frederic," *Proceedings*, Fourth U.S. National Conference on Wind Engineering Research, University of Washington, Seattle, WA, 1981, Vol. 1, pp. 42-45.

Reinhold, T.A. and Mehta, K.C., "Wind damage in hurricane Frederic," *Proceedings*, Second Specialty Conference on Dynamic Response of Structures: Experimentation, Observation, Prediction and Control, ASCE, 1981, pp. 532-546.

McDonald, J.R. and Mehta, K.C., "Building response to extreme winds and tornadoes," *Proceedings*, Second Specialty Conference on Dynamic Response of Structures: Experimentation, Observation, Prediction and Control, ASCE, 1981, pp. 547-554.

Mehta, K.C., McDonald, J.R., Marshall, R.D., Abernethy, J.J., and Boggs, D., "The Kalamazoo tornado of May 13, 1980," Committee on Natural Disasters, Commission on Sociotechnical Systems, National Research Council, National Academy Press, 1981.

Mehta, K.C. and McDonald, J.R., "Predicting wind damage to buildings," *Proceedings*, International Symposium on Rehabilitation of Structures, Indian Institute of Technology, Bombay, India, 1981, Vol. I, pp. II/75-II/79.

Mehta, K.C., McDonald, J.R., and Marshall, R.D., "Kalamazoo tornado of May 13, 1980," *Preprint*, 12th Conference on Severe Local Storms, American Meteorological Society, January 11-15, 1982, San Antonio, TX, pp. 297-300.

Norville, H.S., Mehta, K.C., and Vann, W.P., "Reliability based design of transmission line for wind," *Proceedings*, Fourth Engineering Mechanics Division Specialty Conference, Purdue University, West Lafayette, IN, 1983, Vol. II, pp. 887-890.

Marshall, T.P., McDonald, J.R., and Mehta, K.C., *Utilization of Load and Resistance Statistics in a Wind Speed Assessment*, report of the Institute for Disaster Research, 1983.

Norville, H.S., Vann, W.P., Mehta, K.C., and Farwagi, A., "Full-scale wind and structural response data," *Proceedings*, Fifth Engineering Mechanics Division Specialty Conference, Laramie, Wyoming, *Engineering Mechanics in Civil Engineering*, A.P. Boresi and K.P. Chong, Eds., ASCE, 1984, Vol. 1, pp. 611-614.

McDonald, J.R. and Mehta, K.C., "Upgrading existing facilities for tornado hazard," *Engineering Mechanics in Civil Engineering*, Proceedings of the Fifth Engineering Mechanics Division Specialty Conference, Laramie, Wyoming, A.P. Boresi and K.P. Chong, Eds., ASCE, 1984, Vol. 2, pp. 1212-1215.

Vann, W.P., Mehta, K.C., and Norville, H.S., "Wind effects in reliability design of power lines," *Proceedings*, Fourth ASCE Specialty Conference on Probabilistic Mechanics and Structural Reliability, Berkeley, CA, 1984, pp. 232-235.

Mehta, K.C., "Performance of tanks and silos in windstorms," *Proceedings*, U.S.-Australia Workshop on the Loading, Analysis and Stability of Thin-Shell Bins, Tanks and Silos, March 1985, University of Sydney, Australia.

Mehta, K.C., "Wind loads on electrical transmission structures," *Proceedings*, ASCE Seminar on Innovations in the Design of Electrical Transmission Structures, G.M. Wilhoite, Ed., August 1985, Kansas City, MO, pp. 11-20.

Mehta, K.C. and Dillingham, R.A., Eds., *Proceedings*, Fifth U.S. National Conference on Wind Engineering, November 6-8, 1985, Texas Tech University, Lubbock, TX.

Mehta, K.C., "Revision considerations of ANSI wind loads," *Proceedings*, Fifth U.S. National Conference on Wind Engineering, November 6-8, 1985, Texas Tech University, Lubbock, TX, pp. 5A-59 through 5A-64.

Mehta, K.C., "Analysis of wind induced damage," *Proceedings*, India/U.S. Workshop on Wind Disaster Mitigation, Madras, India, December 1985.

Mehta, K.C., Das, N.K., and McDonald, J.R., "Comparative study of wind load standards," *Proceedings*, Asia-Pacific Symposium on Wind Engineering, Roorkee, India, December 1985, pp. 329-336.

Mehta, K.C. and Norville, H.S., "Electrical transmission line structure response to wind," *Proceedings*, Asia-Pacific Symposium on Wind Engineering, Roorkee, India, December 1985, pp. 59-64.

Norville, H.S., Mehta, K.C., and Farwagi, A.F., 500kV Transmission Tower/Conductor Wind Response (Phase I), final project report submitted to Bonneville Power Administration, March 1985, Institute for Disaster Research, Texas Tech University, 116 pp.

Norville, H.S., Mehta, K.C., and Vann, W.P., "Analysis and interpretation of field data of wind and response of transmission line," *Proceedings*, Fifth U.S. National Conference on Wind Engineering, November 6-8, 1985, Texas Tech University, Lubbock, TX, pp. 3B-33 through 3B-40.

Das, N.K., Mehta, K.C., and McDonald, J.R., "A low-rise building case study using American, Australian, British and Canadian standards," *Proceedings*, Fifth U.S. National Conference on Wind Engineering, Texas Tech University, November 1985, pp. 5A-35 through 5A-42.

Mehta, K.C. and McDonald, J.R., "Structural dynamics in hurricanes and tornadoes," *Proceedings*, Third ASCE Engineering Mechanics Specialty Conference on Dynamic Response of Structures, March 31-April 2, 1986, Los Angeles, CA, G.C. Hart and R.B. Nelson, Eds., New York, NY, pp. 28-43.

Mehta, K.C., Norville, H.S., and Kempner, L., "Electrical transmission structure response to wind," *Proceedings*, First International Symposium on Probabilistic Methods Applied to Electric Power Systems (Toronto, Canada; July 11-13, 1986), S.G. Krishnasamy, Ed., Pergamon Press, pp. 495-502.

Mehta, K.C. and McDonald, J.R., "Study of national wind load standards," *Proceedings*, 10th Triennial Congress of the International Council for Building Research, Studies and Documentation, CIB.86, September 1986, Washington, DC, National Bureau of Standards, Gaithersburg, MD, pp. 4185-4192.

Norville, H.S., Mehta, K.C., and Vann, W.P., "Wind load data for reliability based transmission line design," *Proceedings*, First International Symposium on Probabilistic Methods Applied to Electric Power Systems, July 11-13, 1986, Toronto, Canada; S.G. Krishnasamy, Ed., Pergamon Press, pp. 393-397.

Mehta, K.C., "Low-rise structures--wind loading and wind flow," *Proceedings*, Seventh International Conference on Wind Engineering, July 6-10, 1987, Aachen, West Germany, C. Kramer, Ed.

Mehta, K.C. and Levitan, M.L., "Field experiments for wind pressures," *Dynamics of Structures, Proceedings*, ASCE Structures Congress, August 17-20, 1987, Orlando, FL; J.M. Roesset, Ed., New York, pp. 687-697.

Mehta, K.C., Kadaba, R., and Kempner, L., "Analysis of field measured data," *Preprint*, ASCE Spring Convention & Energy Specialty Conference, Atlantic City, New Jersey; April 27-29, 1987.

Mehta, K.C., "Mitigation of wind hazard in America," *Proceedings*, Mitigation of Hazard Due to Extreme Natural Events in America, January 20-22, 1987 Puerto Rico; published University of Puerto Rico, 1988, pp. 322-338.

Harris, H. and Mehta, K.C., "Team teaching approach to reinforced concrete design," *Proceedings*, 1988 Annual Conference, June 19-23, 1988, Portland, OR; L. Grayson and J. Biedenbach, Eds., American Society for Engineering Education, Vol. 4, pp. 1455-1458.

Mehta, K.C., "A58.1 provisions of the future," *Proceedings*, Symposium on High Winds and Building Codes, H. Liu, Ed., November 2-4, 1987, Kansas City, MO, University of Missouri-Columbia, MO, 1988.

Mehta, K.C., Ed., *Guide to the Use of the Wind Load Provisions of ANSI A58.1*, National Science Foundation, Washington, DC and Institute for Disaster Research, Texas Tech University, Lubbock, TX, 1988, 109 pp.

Mehta, K.C., "Wind load provisions of the future," *Proceedings*, WERC/NSF Symposium on High Winds and Building Codes, November 2-4, 1987, Kansas City, MO; published University of Missouri--Columbia, Columbia, MO, 1988, pp. 47-52.

McDonald, J.R. and Mehta, K.C., "Wind characteristics of tornadoes," *Proceedings*, Symposium on High Winds and Building Codes, H. Liu, Ed., November 2-4, 1987, Kansas City, MO, published University of Missouri-Columbia, Columbia, MO, 1988, pp. 325-332.

Vann, W.P., Levitan, M.L., Mehta, K.C., and Lo, A.L., "Microcomputers for field experiments on structures," *Proceedings*, Sixth National Conference on Microcomputers in Civil Engineering, W.E. Carroll, Ed., University of Central Florida, Orlando, FL, November 1988, pp. 20-24.

Mehta, K.C., Kadaba, R., and Kempner, L., "Conductor response to extreme winds," *Proceedings*, Second International Symposium on Probability Methods Applied to Electric Power Systems, September 20-23, 1988, Oakland, CA; published November 1989, pp. 9-1 through 9-11.

Mehta, K.C., Levitan, M.L., and Millsaps, D.L., "Pressure measuring system for wind loads," *Proceedings*, ASCE Structures Congress, May 1-5, 1989; San Francisco, CA, *Structural Design, Analysis and Testing*, A. H-S. Ang, Ed., 1989, pp. 886-893.

Mehta, K.C. and Levitan, M., "Field measurements of wind induced pressures," *Recent Advances in Wind Engineering*, Proceedings of the Second Asia-Pacific Symposium on Wind Engineering, June 26-29, 1989, Beijing, China; Pergamon Press, T.F. Sun, Ed., 1, 469-476.

Mehta, K.C. and Kadaba, R., "Wind induced response of transmission line conductors," *Recent Advances in Wind Engineering*, Proceedings of the Second Asia-Pacific Symposium on Wind Engineering, June 26-29, 1989, Beijing, China; Pergamon Press, T.F. Sun, Ed., 2, 748-755.

Mehta, K.C., "Performance of building and structures in Puerto Rico," *Proceedings*, Six Months After Hurricane Hugo - Preliminary Findings, University of Puerto Rico, Mayaguez, PR, March 1990.

Harris, H.W. and Mehta, K.C., "Design of tornado protective areas in schools," *Proceedings*, ASCE Structures Congress, April-May 1991, Indianapolis, IN, pp. 705-708.

McDonald, J.R. and Mehta, K.C., "Procedures for windstorm damage documentation," *Proceedings*, ASCE Structures Congress, April-May 1991, Indianapolis, IN, pp. 71-74.

Mehta, K.C. and McDonald, J.R., "Identifying safe areas in buildings," *Proceedings*, ASCE Structures Congress, April-May 1991, Indianapolis, IN, pp. 75-78.

Mehta, K.C., Cheshire, R.H. and McDonald, J.R. "Wind resistance categorization of buildings for insurance," *Proceedings*, Eighth International Conference on Wind Engineering, July 8-12, 1991, London, Canada, pp. 20-10 - 20-11.

Mehta, K.C., Levitan, M.L., Smith, D.A. and Sandri, P., "Instrumentation for Texas Tech Field Site," *Proceedings*, ASCE Structures Congress 1992, April 13-15, 1992, San Antonio, TX, pp. 238-241.

Wind Forces," Chapter 3 in the book *Guidelines for Design of Low-Rise Buildings Subjected to Lateral Forces*, A.K. Gupta and P.J. Moss, Ed., CRC Press, Boca Raton, FL, 1993, pp. 43-68 (co-authors J.R. McDonald and M.E. Criswell).

Mehta, K.C. and Gregory, J.M., "Research experiences for undergraduates in wind engineering," paper presented at Gulf-Southwest Section of ASEE, April 1-2, 1993, Austin, TX.

Smith, D.A. and Mehta, K.C., "Stochastic models for stationary and nonstationary wind data," *Proceedings*, 7th U.S. National Conference on Wind Engineering, June 27-30, 1993, UCLA, Los Angeles, CA, pp. 699-707.

Yeatts, B.B. and Mehta, K.C., "Field study of internal pressures," *Proceedings*, 7th U.S. National Conference on Wind Engineering, June 27-30, 1993, UCLA, Los Angeles, CA, pp. 889-897.

Thomas, G., Cochran, L., Cermak, J., and Mehta, K.C., "Comparison of field and wind-tunnel measured spectra," *Proceedings*, 7th U.S. National Conference on Wind Engineering, June 27-30, 1993, UCLA, Los Angeles, CA, pp. 793-802.

Tieleman, H.W., Surry, D., and Mehta, K.C., "Full/model scale comparison of surface pressures on the Texas Tech experimental building", *Proceedings*, 7th U.S. National Conference on Wind Engineering, June 27-30, 1993, UCLA, Los Angeles, CA, pp. 783-792.

Mehta, K.C., "Wind-induced loads and vibrations," *Proceedings*, International Workshop on Structural Control, August 5-7, 1993, Honolulu, HI.

Mehta, K.C., Smith, D.A. and Cheshire, R., "Knowledge-based system for wind damage to buildings," *Proceedings*, ASCE Conference on Hurricanes of 1992, Dec. 1-3, 1993, Miami, FL, pp. 726-735.

Mehta, K.C., Yeatts, B.B. and Smith, D.A., "Analysis of wind-induced roof pressure data acquired in the field," *Proceedings*, Third Asia-Pacific Symposium on Wind Engineering, Dec. 13-15, 1993, Hong Kong, pp. 693-698.

Peterson, R.E., Goldstein, S.D. and Mehta, K.C., "Analysis of peak gust vs. fastest-miles wind statistics," *Proceedings*, Third Asia-Pacific Symposium on Wind Engineering, Dec. 13-15, 1993, Hong Kong, pp. 513-518.

Mehta, K.C. and Cheshire, R., "Wind damage expert system for insurance industry," *Proceedings*, Third Asia-Pacific Symposium on Wind Engineering, Dec. 13-15, 1993, Hong Kong, pp. 805-810.

Mehta, K.C. and Peterson, R.E. (1994). "Mitigation of hurricane damage in a changing climate of storm activity," *Proceedings*, Fifth Global Warming International Conference, San Francisco, California.

Smith, D.A. and Mehta, K.C., "An empirical autoregressive model for wind data", *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. I, pp. 56-66.

Yeatts, B.B., Mehta, K.C. and Smith, D.A., "Field experiments for wind effects on low buildings," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. I, pp. 500-511.

Ginger, J.D., Yeatts, B.B. and Mehta, K.C., "Internal pressures in a low-rise full scale building," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. I, pp. 512-523.

Kamarajan, J., Smith, D.A. and Mehta, K.C., "Investigations of wind pressure data in time domain using ARMA models," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. II, pp. 649-658.

- Xu, Y.L., Mehta, K.C. and Reardon, G.F., "Fatigue of metal roof cladding subject to wind loading, Part I: Fatigue-related characteristics of roof pressures," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. III, pp. 1067-1078.
- Womble, J.A., Yeatts, B.B., Cermak, J.E. and Mehta, K.C., "Internal wind pressure in a full- and small-scale building," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. III, pp. 1979-1090.
- Thomas, G., Sarkar, P.P. and Mehta, K.C., "Identification of admittance functions for wind pressures from full-scale measurements," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. III, pp. 1219-1230.
- Sandri, P. and Mehta, K.C., "Using a backpropagation neural network for predicting wind-induced damage to buildings," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. IV, pp. 1989-1999.
- Smith, D.A., Mehta, K.C., McDonald, J.R. and Cheshire, R.H., "Wind resistance categorization of buildings with a knowledge-based system," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. IV, pp. 2000-2010.
- Pulipaka, N., McDonald, J.R. and Mehta, K.C., "Wind effects on cantilevered traffic signal structures," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. IV, pp. 2043-2050.
- Peterson, R.E. and Mehta, K.C., "Tornadoes of the Indian subcontinent," *Proceedings*, Ninth International Conference on Wind Engineering, Jan. 9-13, 1995, New Delhi, India, Vol. IV, pp. 2077-2081.
- Smith, D.A., Mehta, K.C. and Sandri, P., "An overview of field experiments on a low-rise building," *Building an International Community for Structural Engineers, Proceedings*, Structures Congress XIV, pp. 1029-1036, Chicago, Illinois, April 1996.
- McDonald, J.R., Smith, D.A. and Mehta, K.C., "An expert system for wind-resistant residential construction," *Building an International Community for Structural Engineers: Proceedings*, Structures Congress XIV," pp. 982-988, Chicago, Illinois, April 1996.
- Sarkar, P.P., Mehta, K.C., McDonald, J.R. and Kiesling, E.W., "Integrating wind engineering research to curriculum through multimedia", *Proceedings*, ASEE Annual Conference, Washington, D.C., June 1996.
- Smith, D.A., Mehta, K.C. and Campbell, J.A., "The effects of wind speed and direction stationarity on wind parameters measured in the field," *Proceedings*, Third International Colloquium on Bluff Body Aerodynamics and Applications, BBAA III, Blacksburg, Virginia, July 28-August 1, 1996, pp. C IV 11-14.
- Mehta, K.C., "New American wind load provisions", *Proceedings*, Third UK Conference on Wind Engineering, Oxford, UK, Sept. 1996, pp. 39-42.
- Mehta, K.C., Smith, D.A. and Yin, J.M., "Field measurements of structural member response in wind," *Proceedings*, Third UK Conference on Wind Engineering, Oxford, UK, Sept. 1996, pp. 177-181.
- Mehta, K.C. "Wind load criteria for design of essential facilities." Paper presented at the American Concrete Institute Annual Convention, New Orleans, LA, Nov. 3-8, 1996.

McDonald, J.R., Smith, D.A. and Mehta, K.C., "An expert system for wind-resistant residential construction," *Proceedings*, Natural Disaster Reduction Conference, Washington, D.C., December 3-5, 1996, pp. 315-316.

Mehta, K.C. and Kiesling, E.W., "Mitigation of windstorm disasters," *Proceedings*, Natural Disaster Reduction Conference, Washington, D.C., December 3-5, 1996, pp.205-206.

Mehta, K.C., McDonald, J.R. and Smith, D.A., "Hurricanes Erin, Marilyn and Opal," *Proceedings*, Natural Disaster Reduction Conference, Washington, D.C., December 3-5, 1996, pp. 46-47.

Mehta, K.C. "ASCE 7-95: New provisions for calculating wind loads," *Codes Forum*, BOCA, ICBO and SBCCI, Jan. - Feb., 1997, pp. 17-21.

Mehta, K.C. "Impact of wind load provisions of ASCE 7-95," *Proceedings*, ASCE Structures Congress XV, Portland, OR, April 13-16, 1997, pp. 483-487.

Mehta, K.C., Smith, D.A. and Bird, M. "Overall building load measurements in the field," *Proceedings*, ASCE Structures Congress XV, Portland, OR, April 13-16, 1997, pp. 1295-1299.

Womble, J.A., Cermak, J.E. and Mehta, K.C. "Internal wind-pressure comparisons for a full-scale and model building," *Proceedings*, ASCE Structures Congress XV, Portland, OR, April 13-16, 1997, pp. 860-864.

Vann, W.P., Wong, J. Shimpi, R.M., and Mehta, K.C. "Three-second gust effect factors for transmission lines," *Proceedings*, ASCE Structures Congress XV, Portland, OR, April 13-16, 1997, pp. 1037-1041.

Yin, J., Smith, D.A. and Mehta, K.C. "Wind-induced response of a roof purlin," *Proceedings*, 29th Joint Meeting of U.S.-Japan Panel on Wind and Seismic Effects, UJNR, Tsukuba, Japan, May 13-16, 1997, pp. 499-511.

Gardner, A., Mehta, K.C. and Kiesling, E.W. "Residential shelter design criteria," *Proceedings*, 8th U.S. National Conference on Wind Engineering, Baltimore, MD, June 5-7, 1997, pp. 166-167.

Sarkar, P.P., Mehta, K.C., Peterson, R.E. and McDonald, J.R. "Disseminating wind engineering research and curriculum via electronic media," *Proceedings*, 8th U.S. National Conference on Wind Engineering, Baltimore, MD, June 5-7, 1997, pp. 1-2.

Womble, A., Cermak, J. and Mehta, K.C. "Internal wind pressure comparisons for a full scale model building," *Proceedings*, 8th U.S. National Conference on Wind Engineering, Baltimore, MD, June 5-7, 1997, pp. 84-85.

Yin, Y., Mehta, K.C. and Smith, D.A. "Effects of non-Gaussian wind pressures on reliability assessment," *Proceedings*, 8th U.S. National Conference on Wind Engineering, Baltimore, MD, June 5-7, 1997, pp. 70-71.

Peterson, R.E., McDonald, J.R. and Mehta, K.C. "Wind engineering research applications," *Proceedings*, 2nd European and African Conference on Wind Engineering, Genova, Italy, June 22-26, 1997, pp. 873-878.

Yin, J., Smith, D.A., Mehta, K.C. and Wang, W. "Quasi-steady theory and standard PDF's for wind-induced pressures on buildings," *Proceedings*, 4th Asia-Pacific Symposium on Wind Engineering, Gold Coast, Australia, July 14-16, 1997, pp. 131-134.

Sarkar, P.P. and Mehta, K.C. (1997). *Educational Modules on Wind Engineering*, A CD-ROM publication sponsored by the National Science Foundation, August, 1997.

Mehta, K.C., "Wind engineering research at Texas Tech," *Proceedings*, First U.S.-Japan Workshop on Design for Wind and Wind Hazard Mitigation, Task Committee E, U.S.-Japan Panel on Wind and Seismic Effects, UJNR, Honolulu, Hawaii, October 7-9, 1997.

Mehta, K.C., "Wind load standards," In: Jorge D. Riera and Alan G. Davenport, **Wind Effects on Buildings and Structures**, *Proceedings*, Jubileum Conference on Wind Effects on Buildings and Structures, Porto Alegre, Brazil, May 25-29, 1998, pp. 307-313.

Sarkar, P.P., Mehta, K.C., Zhao, Z. and Gardner, T., "Aerodynamic solutions to cable vibrations," *Proceedings*, Texas Section of the American Society of Civil Engineers, Fall meeting, Dallas, TX, September 9-12, 1998, pp. 257-268.

Mehta, K.C. "Tornado events with numerous fatalities," *Proceedings*, 19th American Meteorological Society's Severe Local Storms Conference, Minneapolis, MN, Sept. 14-17, 1998.

Mehta, K.C., "Engineering research needs for severe storms," Presentation at the Severe Weather Conference, Lubbock, TX, 9-11 February, 1999.

Mehta, K.C. and Carter, R.R., "Assessment of tornado wind speed from damage to Jefferson County, Alabama," *Wind Engineering into the 21st Century: Proceedings*, 10th International Conference on Wind Engineering, A. Larsen, G.L. Larose and F.M. Livesey, Eds., Copenhagen, Denmark, 21-24 June, 1999, pp. 265-271.

Wu, F., Sarkar, P.P. and Mehta, K.C., "Understanding the conical-vortex flow on roofs," *Wind Engineering into the 21st Century: Proceedings*, 10th International Conference on Wind Engineering, A. Larsen, G.L. Larose and F.M. Livesey, Eds., Copenhagen, Denmark, 21-24 June, 1999, pp. 1867-1874.

Peterson, R.E. and Mehta, K.C., "Occupant protection in tornadoes," Presentation at Conference on European Tornadoes and Severe Weather, Toulouse, France, 1-4 February, 2000.

Mehta, K.C., "Uncertainties in hurricane wind forces on buildings," Presentation at the National Hurricane Conference, New Orleans, LA, 17-21 April, 2000.

Gardner, A. and Mehta, K.C., "Single-family residential damage and estimated wind speeds," Presentation at the National Symposium on the Great Plains Tornado Outbreak of 3 May 1999, Oklahoma City, OK, 1-3 May, 2000.

Gardner, A., Mehta, K.C., Tanner, L.J., Zhao, Z., Conder, M., Howard, R., Martinez, M. and Weinbeck, S., *The Tornadoes of Oklahoma City of May 3, 1999*, Report of the Wind Science and Engineering Research Center, Lubbock, TX, 2000.

Mehta, K.C., Smith, D.A. and Jokhu, U., "Understanding of roof corner pressures through field measurement," *Proceedings*, Fourth International Colloquium on Bluff Body Aerodynamics & Applications (BBAA IV), Bochum, Germany, 11-14 September, 2000.

Al-Menyawi, Y., Carter, R., Kiesling, E and Mehta, K., "Wind pressure on storm shelters according to FEMA 361 and ASCE 7-98," *Proceedings, America's Conference on Wind Engineering*, Clemson University, Clemson, S.C., 4-6 June 2001.

Al-Menyawi, Y., Carter, R., Kiesling, E and Mehta, K., "Wind pressure on storm shelters according to FEMA 361 and ASCE 7-98," *Proceedings, Texas Section, ASCE Annual meeting*, San Antonio, TX, April, 2001.

Al-Menyawi, Y. and Mehta, K.C., "Reserve strength and failure probabilities of unreinforced masonry walls," *Proceedings, Americas Conference on Wind Engineering*, Clemson University, Clemson, S.C., 4-6 June 2001.

Peterson, R.E., *Dewan, A.M.*, and Mehta, K.C. (2001). "Destructive thunderstorms in Bangladesh," *Journal of Wind Engineering, Japan Association of Wind Engineering*, 89: 368-371; also *Proceedings, Fifth Asia-Pacific Conference on Wind Engineering*, Kyoto, Japan, 21-24 October.

Selvam, R.P., Roy, U.K., Jung, Y., and Mehta, K.C. (2002). "Investigation of tornado forces on a 2D cylinder using computer modeling," *Proceedings, National Conference on Wind Engineering*, Roorkee, India, 4-6 April, pp. 342-353.

Mehta, K.C., "Wind engineering: A multidisciplinary approach," In: *Wind Engineering: Proceedings of NCWE 2002, April 4-6, 2002*, ed. by K. Kumar, Phoenix Publishing House, Pvt, Ltd., New Delhi, India, 2002, 3-10.

Mehta, K.C., "Tornadic wind speeds through engineering analysis," *Preprints, 21st Conference on Severe Local Storms*, AMS, San Antonio, 12-16 August 2002.

Mehta. K.C. and Delahay, J. (2003). *Guide to the Use of Wind Load Provisions of ASCE 7-02*, American Society of Civil Engineers, Reston, VA, 110 p.

Smith, D.A., Chappell, K., Mehta, K.C., and Letchford, C.W. (2003). "Full-Scale Testing of a Manufactured House in the Propwash of a C130 Aircraft." 11th International Conference of Wind Engineering, Lubbock, TX.

Mehta, K.C. (2004). "The Importance of Field Testing in Wind Engineering," *Proceedings*, Second National Conference on Wind Engineering -04, Nagpur, Phoenix Publication, New Delhi, India.

Mehta, K.C., and Smith, D. A. (2004). "Full-Scale Measurements for Wind Effects on Buildings." *Proceedings of Earth and Space: Engineering, Construction, and Operations in Challenging Environments*, League City/Houston, TX, United States, pps. 190-194.

Womble, J.A., Adams, B.J., Mehta, K.C. (2005), "Windstorm Damage Surveys Using High-Resolution Satellite Images," Proceedings of the Tenth Americas Conference on Wind Engineering, Baton Rouge, LA (CD Format)

Smith, D.A., Mehta, K.C., Letchford, C.W. and Zhu, H. (2005). "Testing of structures using the prop-wash of a C130 aircraft." *Ninth International Conference on Structural Safety and Reliability*, Rome, Italy.

Mehta, K.C., Letchford, C. and Cruzado, H. (2006). "Multidisciplinary Doctoral Degree in Wind Science and Engineering", *Proceedings*, International Conference on Engineering Education (ICEE 2006), July 23-29, San Juan, Puerto Rico, USA.

McDonald, J.R. and Mehta, K.C. (2006). "A Recommendation for an Enhanced Fujita Scale (EF-Scale)", a report published by the Wind Science and Engineering Research Center, Texas Tech University, Lubbock, TX, 104p.

Mehta, K.C. (2008). "Wind Damage Using Satellite Images and Education Experiment", Preprints for the Third International Symposium on Wind Effects on Buildings and Urban Environment, Tokyo Polytechnic University, Kanagawa, Japan, pp.29 - 38.

Mehta, K.C. (2009). "Wind Science and Engineering Education Experiment", Preprints for the Third International Symposium on Wind Effects on Buildings and Urban Environment, Tokyo Polytechnic University, Kanagawa, Japan.

McDonald, J.R., Mehta, K.C., Smith, D.A. and Womble, J.A.(2009): "The Enhanced Fujita Scale: Development and Implementation", Proceedings of ASCE Fifth Congress on Forensic Engineering, Washington, D.C.

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.

Mehta, K.C., Swift, A.H.P., Walker, R.P. and Kelsy, S.L.(2010): "Development of Work Force for Wind Energy", Proceedings of the ASME 2010 Fourth International Conference on Sustainable Energy, ES 2010, May 17-22, Phoenix, Arizona, USA.

Mehta, K.C. (2010): "Wind Loads History: ANSI A58.1-1972 to ASCE 7-05" Proceedings of the ASCE/SEI Structures Congress, Orlando, Florida