

ARMIN B. MEHRABI, Ph.D., P.E., MBA

10555 West Flagler Street, EC 3627
Miami, FL 33174
Email: AMehrabi@FIU.edu

Education

- Ph.D. Civil Engineering, University of Colorado, Boulder, Colorado, 1994, GPA=4
Winner of the 1997 TMS Award for Outstanding Doctoral Dissertation.
- M.S. Civil Engineering, University of Tehran, Iran, 1985, GPA=3.8
- MBA Niagara University, 2010, GPA=4.27, Emphasis on International Business

Professional Employment History

- Florida International University
College of Engineering and Computing
Civil and Environmental Engineering Department
2017-present Associate Professor
- Bridge Engineering Solutions, PC
2004- 2017 President and Principal Engineer, Bridge Evaluation
- Construction Technology Laboratories, Inc.
2004-2009 Consultant
2002-2004 Senior Principal Engineer
2000-2002 Principal Engineer and Group Manager
1996-2000 Associate Engineer, Engineer, Senior Engineer
- US Army Engineer Research and Development Center (USAERDC)
2003- 2005 Contractor/Consultant, Seismic Modeling of Masonry Walls
- University of Nebraska-Lincoln
1994-1996 Research Associate – Post-doctoral Position
- University of Colorado at Boulder
1990-1994 Research Assistant – Doctoral Candidate
- University of Sistan Baluchestan, Iran
University of Azad Islamic, Iran
Technical University of Sharif, Iran
1985-1990 Lecturer
- Sazeh Consulting Engineers, Tehran, Iran
1984-1990 Senior Design Engineer
- Japan Gas Corporation, JGC, Yokohama, Japan
1990-1990 Visiting Design Engineer

Summary Expertise and Specialization

- Bridges in general, specialized in Long-Span, Cable-supported Bridges
 - Inspection, Evaluation, Health monitoring, Investigation on cause of failure
 - NDE testing, Cable force & damping measurement, Vibration/Wind analysis & Damper design
 - Life-cycle-cost analysis, Rehab/Mitigation Design, Construction Support Services, QC and QA
 - Corrosion Control Plan, Bridge field testing and bridge/building component laboratory testing
- Masonry and Infilled Frames
 - Lateral/Seismic Load Resistance evaluation and Analysis (modal, FE, and simple), & lab testing

Experiences and Achievements

Dr. Mehrabi's experience spans a wide range of engineering and research activities. Graduated among top 2 percent of his undergraduate and graduate class from the University of Tehran, Iran, the highest ranking civil engineering school at the time in the country, he entered industry as a designer and field engineer. He also taught civil engineering courses in various universities for five years. In 1990, he moved to the US to pursue his Ph.D. degree and received a full scholarship from the University of Colorado at Boulder, where he graduated in 1994. His thesis on Seismic Behavior of Masonry Infilled RC Frames won the Most Outstanding Thesis Award by The Masonry Society. He then moved to the University of Nebraska, Lincoln, for his post-doctoral studies. There, he began his research work in the area of bridge engineering, and contributed to several outstanding projects.

In 1996, Dr. Mehrabi was recruited by Construction Technology Laboratories, Inc. (CTL), where he began his work as co-investigator for the first comprehensive research project in the US for condition assessment of cable-stayed bridges sponsored by FHWA. During his tenure, he successfully combined his research and industry experiences and recorded significant achievements. For his contribution to development of a new non-destructive laser-based condition assessment method for cable-stayed bridges, he was awarded by Engineering News Record as One of Top 25 Newsmakers of the Year, 1997. In 2004, he established the Bridge Engineering Solutions (BES), and currently serves as its president and chief technical engineer. He also earned his MBA from Niagara University in 2010.

For the last two decades, Dr. Mehrabi has worked on research and development, project development and management, and technical activities related to structural evaluation and health monitoring, laboratory and field testing, inspection, vibration and wind-effect evaluation, life-cycle-cost analysis, and rehabilitation of bridges. He has pioneered special inspection programs in the US for cable-stayed bridges starting in 1998, and has been involved in inspection and evaluation of 14 cable-stayed and 11 other cable supported bridges in the US and abroad. Dr. Mehrabi has used his innovative techniques to address unique problems in some of the world's monumental bridges. These include among others; evaluation of post-tensioning external tendons in the Second Vivekananda Bridge in India, instrumentation, testing, and fatigue/failure analysis of the Bosphorus Bridge in Turkey, vibration, force measurement, and integrity analysis of stay cables of QEII Bridge in London, UK, and more recently, inspection, evaluation, rehabilitation design and construction support for the complete cable replacement of the Luling Bridge in LA, the first of its kind in North America. His recent projects included Inspection and Rehabilitation of External Post-tensioning Tendons and Stay Cables of the Second Vivekananda Bridge in Kolkata, India, and Stay Cable Force Measurement and Professional Consulting Services for the Dames Point and Sunshine Skyway Bridges in Florida. He worked for eight years, three years as manager, at the CTL Structures Laboratory, the largest, privately-owned structural laboratory in the US.

Dr. Mehrabi was principal investigator, co-investigator, or consultant for several federally funded research projects sponsored by FHWA and NCHRP (DTFH-61-96-C-00029, NCHRP IDEA 50 and 71, NCHRP 10-64, NCHRP 12-69), and other research projects

related to development of new evaluation, monitoring, and construction methods for bridge structures. Dr. Mehrabi has distinguished himself from his peers by his strong academic and practical experiences, and by turning research products into effective and practical tools. He also has a strong background in analytical methods, advanced FE and FD analysis and modeling. Along with bridge-related activities, Dr. Mehrabi has continued his involvement in the field of numerical and seismic analysis of masonry-infilled frames cooperating with other research organizations as well as review of work of others. His research work on infilled frames is being used worldwide as a comprehensive reference on the subject.

Dr. Mehrabi is currently serving as associate professor in the Civil and Environmental Engineering Department of the College of Engineering and Computing in the Florida International University.

Federally Funded Research Projects

Co-investigator, FHWA Contract No. DTFH61-96-R-00029, Condition Assessment of Cable-Stayed Bridges, 1996-1999

Principal Investigator (Later Consultant)-, NCHRP #12-69, Design and Construction Guidelines for Long-Span Decked Precast, Prestressed Concrete Girder Bridges, 2004

Consultant, NCHRP #10-64, Field Inspection of FRP Bridge Decks, 2003-2005

Principal Investigator, NCHRP IDEA Project #71, Field Implementation of Tuned Mass Dampers for Suppression of Stay Cable Vibration, 2000-2001

Co-investigator, NCHRP IDEA Project #50, Tuned Dampers and Cable Fillers for Suppression of Bridge Stay Cable Vibrations, 1998-1999

Ph.D. Studies, NSF Grant Nos. MSM-8914008 and MSM-9011065, Seismic Performance of Masonry-Infilled RC Frames, 1990-1994.

Other Research Projects

- Co-investigator, "Finite Element Modeling and Experimental Verification of Masonry-Infilled R/C Frames," US Army Engineer Research and Development Center, 2003-5.
- Principal Engineer and Co-Investigator, "Francis Memorial Bridge, Structural Evaluation of Case Bridge, Shear Cracking of the Prestressed Concrete Girders," for Legion Design/Campbell & Assoc., & The Washington, D.C. Dept. of Public Works, 2002.
- Principal Investigator, Construction and Testing of a laboratory model for feasibility studies of "A Precast Segmental Post-tensioned Concrete Shelf Pylon," for Washington Metropolitan Area Transit Authority (WMATA), 2001-2002.
- Principal investigator, "Evaluation of Insulated Concrete Form Walls (ICF) for Lateral Loading including Earthquake," for Portland Cement Association, 1999-2000.
- Co-Investigator, "Evaluation and Retrofitting of Historic Steel Truss Bridges," for Nebraska Department of Roads Research Project No. STB-STWB (13); University of Nebraska-Lincoln, 1997

- Co-Investigator, “Development of a Non-destructive Technique to Measure the Available Prestress in Prestressed Concrete Girders,” for Nebraska Department of Roads, University of Nebraska-Lincoln, 1994-1996.
- Co-Investigator, “Strength Capacity of Steel Girder Bridges,” for Nebraska Department of Roads, University of Nebraska-Lincoln, 1995-1996.

Sample Bridge Projects:

- Consultant, Principal Investigator for NDT inspection of external post-tensioning tendons and stay cables of Second Vivekananda Cable-Stayed Bridge in Kolkata, India (2015-ongoing).
- Project manager and engineer for stay cable force evaluation of the Leonard Zakim (Charles River) Bridge in Boston, MA (2015).
- Resident Engineer and Consultant to Louisiana DOTD for construction support services and QC/QA consulting activities related to complete cable replacement and other repairs in the Hale Boggs Bridge Cable-Stayed Bridge in Luling, Louisiana (2009-ongoing).
- Consultant for Instrumentation and Structural Health Monitoring of the Sunshine Skyway Bridge in St. Petersburg, Florida (2009-ongoing).
- Principal investigator and project manager for evaluation of cables and vibration susceptibility analysis of the Dames Point Bridge in Jacksonville, FL, 2008, 2012, 2016.
- Principal Investigator and Project Manager for cable integrity check using force and damping measurement for the Sunshine Skyway Bridge in Tampa, FL, 2009-2010.
- Project manager for cable replacement design for the Luling Bridge, 2008.
- Principal Investigator and Project Manager for inspection, safety assessment and life-cycle-cost-analysis of stay cables of the Luling Bridge for Louisiana DOTD, 2002-2007.
- Principal Investigator and project manager for evaluation of cables and wind-induced vibration susceptibility analysis of several cable-stayed bridges including Talmadge Bridge in GA, Sunshine Skyway Bridge in FL, Cochrane Bridge in AL, SR1 Bridge C&D Canal, DE, Varina-Enon Bridge, VA, Fitchburg Bridge, MA, Maumee River Crossing Bridge, OH, and QEII Bridge in London, UK (1998-2007).
- Project Manager and Principal Investigator for the cause of hanger plate fracture and remaining service life analysis of the Bosphorus Bridge in Istanbul for Turkish Highway Directorate, 2004.
- Project manager for evaluation of cables in suspension bridges including Tazlina and Tanana Bridges along Trans-Alaskan Oil Pipeline, Paseo Suspension Bridge in Kansas City, and Carquinez Bridge (1999 – 2004).
- Project manager for force measurement and evaluation of hangers in arch bridges including Hoan and Cass-Street Bridges, WI, Belle-Vernon Bridge, PA, Telegraph Rd Bridge, MI, Troup Howell Bridge, NY, & Sherman Minton Bridge, KY (2000-11).
- Performed numerical assessment of seismic response and ductility of nuclear facilities in Savannah River Site (1998), and analytical evaluation of structural defects in prestressed trestles and decks at Naval Weapons Station, Colts Neck, NJ (1997-1999).

While at CTL, Dr. Mehrabi led the building product R&D, testing, and certification programs, and worked with building code organizations, and Miami Metro Dade County. Through this experience, he has developed a strong familiarity with material standards and Quality Control/Quality Assurance procedures. Some of his involvements in this field are:

- Consultant for ICC evaluation programs for Cold-formed Truss Members for Dietrich Industries (2004-7), and Aegis Metal Framing (2007-2008).
- Development and qualification testing for Cement Based Glass Fiber Composites for strengthening of Unreinforced Masonry Walls for Saint Gobain Technical Fabrics, 2002-2004. Developed acceptance criteria for evaluation, ICC AC218.
- Principal investigator for Performance of Thermoplastic Fiber Reinforced Polymer Rebars sponsored by Dow Chemicals, 2001-2003.
- Project manager for ICBO and SSBCI Code certification of Aerated Autoclaved Concrete blocks and reinforced panels for Contec Mexicana (1998) and AACO (2002).

Employment History- Continued

Bridge Engineering Solutions, PC (BES) 2004-Present

Serves as the President of BES. Has managed and performed projects on inspection and evaluation, testing, life-cycle-cost analysis, instrumentation, rehabilitation design and construction support services for cable-stayed and other cable supported bridges.

Construction Technology Laboratories, Inc. 1996- 2009

In a leadership position, was involved in bridge engineering field and led the long-span bridge engineering marketing, client relation, and technical activities. Managed the CTL Structures Laboratory, the largest, privately-owned structural laboratory in the US. Performed large-scale testing of bridge, building, and transit system components as well as bridge inspection and evaluation projects. Continued cooperation with CTLGroup as consultant from 2004 through 2009.

US Army Engineer Research & Development Center (USAERDC) 2003-2005

Consultant to USAERDC for development of NL finite element models and analytical methods for behavior of masonry walls (emphasis on infills) under earthquake loading.

University of Nebraska-Lincoln 1994-96, Research Associate- Post Doctoral Studies.

Conducted field and laboratory experiments, FE modeling and analysis related to evaluation and maintenance of historic bridges, reliability-based rating procedure for concrete slabs, development of NDT for prestressed concrete bridges, skew concrete slab bridges, seismic performance of concrete filled steel tube columns and steel frame connections, and bond performance of high strength concrete. Supervised undergraduate and graduate students.

University of Colorado at Boulder, 1990-94 Research Assistant – Doctoral Studies

Research work at the University of Colorado at Boulder focused on the seismic performance of reinforced concrete frames infilled with masonry walls. His work included 14 large-scale laboratory tests, development of non-linear finite element constitutive

models, non-linear FE analysis, and development of simplified seismic analysis methods. Winner of 1997 TMS Doctoral Thesis Award. The research was sponsored by NSF.

Japan Gas Corp. (JGC)- Yokohama, Japan

1990-90 Visiting Design Engineer

Participated in analysis and design of oil and gas storage tanks, pressure vessels, towers, platforms and pipe supports for the Seventh Oil Refinery of Iran.

Sazeh Consulting Engineers- Tehran, Iran

1984-90 Senior Design Engineer

Analysis and design of steel and reinforced concrete structures including conventional buildings, hospitals, and special industrial constructions such as those related to water, oil and gas industry.

University of Sistan & Baluchestan-Iran;

Azad University-Iran; and Sharif Technical University-Iran

1985-90 Lecturer, Civil Engineering Undergraduate Courses

Professional Affiliations

American Society of Civil Engineers (ASCE)

Former Member of The Masonry Society (TMS), Member of TMS Research Committee

Former Member of The Society of Experimental Mechanics (SEM) 1997-2002

Former Member of The International Society for Optical Engineering (SPIE) 1997-1999

Professional Registrations and Certificates

Professional Engineer Licenses in Florida, Nebraska, Louisiana, and New York.

The National Council of Examiners for Engineering and Surveying

Awards and Patents

The Outstanding Doctoral Dissertation Award of The Masonry Society, 1997.

Awarded by Engineering News Record as One of Top 25 Newsmakers of the Year, 1997.

Outstanding Paper Award of 8th North American Masonry Conference, 1999.

Co-inventor of A New Damping System for Cables, Patented (2000).

Listed in The Marquis Who's Who Publication, 2000/2001.

Outstanding reviewer award by ASCE Bridge Engineering Journal, 2009.

Reviewer for:

ASCE Journal of Performance of Constructed Facilities, 2014-present

ASCE Journal of Structural Engineering. 2016-present

Engineering Structures, Elsevier, 2007-present

The TMS Journal, 1999-present

The TMS Outstanding Thesis Award, 1999

ASCE Bridge Engineering Journal, 2003-present

ASCE Architectural Engineering Journal, 2003-present

Estonian Science Foundation, Grant Proposals, 2005

Ph.D. Thesis Committee Member

University of Illinois at Chicago, Department of Civil and Material Engineering, “Static and Fatigue Behavior of Reinforced Concrete Beams Strengthened by CFRP”, Yangtao Dang, under supervision of Professor Farhad Ansari, 2003.

Publications

Journal Papers

1. Mehrabi, A., "Performance of Cable-Stayed Bridges: Evaluation Methods, Observations, and a Rehabilitation Case." ASCE, *J. Perform. Constr. Facil.*, 30 (1), February 2016. Also on-line [10.1061/\(ASCE\)CF.1943-5509.0000715](https://doi.org/10.1061/(ASCE)CF.1943-5509.0000715) , C4014007.
2. Mehrabi, A.B., Ligozio, C.A., Ciolko, A.T., and Wyatt, S.T., "Evaluation, Rehabilitation Planning, and Stay-Cable Replacement Design for the Hale Boggs Bridge in Luling, Louisiana," *J. of Bridge Engineering*, ASCE, 15(4), July-August 2010, pp. 364-372.
3. Al-Chaar, G, Mehrabi, A.B., and Manzouri, T., "Finite Element Interface Modeling and Experimental Verification of Masonry-Infilled R/C Frames," *The Masonry Society Journal*, TMS, 26(1), July 2008, pp. 47-65.
4. Mehrabi, A.B., "In-Service Evaluation of Cable-Stayed Bridges, Overview of Available Methods and Findings," *J. of Bridge Engineering*, ASCE, 11(6) Nov.-Dec. 2006, pp. 716-724.
5. Mehrabi, A.B., "A Monumental Bridge with a Problem Caused by Oversights in Design," *Bridge Structures* , June 2006, 2(2), pp.79-95.
6. Mehrabi, A.B., and Shing, P.B., "Seismic Analysis of Masonry-Infilled RC Frames," *The Masonry Society Journal*, September 2003, 21(1), pp. 81-94.
7. Shing, P.B., and Mehrabi, A.B., "Behavior and Analysis of Masonry-Infilled Frames," *J. of Progress in Structural Engineering and Material*, 4(3), July-September 2002, pp. 320-331.
8. Mehrabi, A.B., and Corley, W.G., "Cable Supported Bridges and Structures: Health and Safety Monitoring and Problem Solving," *The Structural Engineer, Journal of the Institution of Structural Engineers*, 78(9), May 2, 2000, pp. 17-20.
9. Tabatabai, H., and Mehrabi, A.B., "Design of Mechanical Viscous Dampers for Stay Cables," *Journal of Bridge Engineering*, ASCE, 5(2), May 2000, pp. 114-123.
10. Mehrabi, A.B., Tabatabai, H., and Lotfi, H. R., "Damage Detection in Structures Using Precursor Transformation Method," *Journal of Intelligent Material Systems and Structures*, Vol. 9, October 1999, pp. 808-817.
11. Mehrabi, A.B., and Tabatabai, H., "A Unified Finite Difference Formulation for Free Vibration of Cables," *Journal of Structural Engineering*, ASCE, 124(11), 1998, pp. 1313-1322.
12. Mehrabi, A.B., and Shing, P.B., "Finite Element Analysis of Masonry-Infilled R/C Frames," *Journal of Structural Engineering*, ASCE, 123(5), 1997, pp. 604-613.
13. Azizinamini, A, Keeler, B., Rohde, J., and Mehrabi, A.B., "Implementation of a New Non-Destructive Technique on a 25-Year Old Prestressed Girder," *PCI Journal*, Vol. 41, No. 3, May-June 1996, pp. 82-95.
14. Mehrabi, A.B., Shing, P.B., Schuller, M., and Noland, J.L., "Experimental Evaluation of Masonry-Infilled RC Frames," *Journal of Structural Engineering*, ASCE, 122(3), 1996, pp. 228-237.

Conference Papers

1. Mehrabi, A.B., "Cable-Stayed Bridges; Health Monitoring, Evaluation, and Rehabilitation," Proceedings of 2nd International Conference on Bridge Testing, Monitoring & Assessment, HBRC-ISHMII, Cairo, Egypt, December 27-29, 2015.
2. Mehrabi, A.B., "Cable-Stayed Bridges; inspection, Evaluation, and Rehabilitation," Proceedings of Geo-Hubei 2014 International Conference on Sustainable Civil Infrastructure, ASCE (ISBN: 978-0-7844-7851-6), July 20-22, Yichang, Hubei, China, pp.61-68.
3. Mehrabi, A.B., "Complete Stay cable Replacement for the Luling Bridge, First of its Kind in North America," Proceedings of the 2013 International Bridge Conference, June 2013, Pittsburgh, PA.
4. Mehrabi, A.B., "Stay Cable Replacement of the Hale Boggs Bridge," Proceedings of the 26th US-Japan Bridge Engineering Workshop, September 20-22, 2010, New Orleans, LA.
5. Mehrabi, A.B., and McGain, Z., "Design of Stay Cable Replacement for the Luling Bridge," Proceedings of the 2009 International Bridge Conference, June 14-17, 2009, Pittsburgh, PA.
6. Mehrabi, A.B., "Luling Bridge Stay Cable Replacement," Proceedings of the 2009 Structures Congress & Exposition, ASCE Structures Cong. 2009, Apr.30-May 2, Austin, TX.
7. Mehrabi, A.B., Ligozio, C.A., Ciolko, A.T., and Wyatt, S.T., "Condition Assessment, rehabilitation Planning, and Stay Cable Replacement Design for the Hale Boggs Bridge in Luling, Louisiana," 10th International Bridge and Structure Management Conference, IBSME, Transportation Research Board, October 2008, Buffalo, NY.
8. Mehrabi, A.B., "Stay Cables of the Luling Bridge are to be Replaced," Proceedings of the 2008 International Bridge Conference, June 2-4, 2008, Pittsburgh, PA.
9. Mehrabi, A.B., and Ligozio, C.A., "Cable-Stayed Bridges – Discovering Alarming Distress and Damage," Proceedings of the 2007 International Bridge Conference, June 4-7, 2007, Pittsburgh, PA.
10. Mehrabi, A.B., "A Monumental Bridge with a Problem Left by Design," 5th International Cable-Supported Bridge Operators' Conference (ICSBOC) & LRFD Workshop, August 28-29, 2006, New York, NY.
11. Mehrabi, A.B., and Ciolko, A.T. "A Non-destructive Method for Structural Evaluation of Pipeline Suspension Bridges," Proc. of Pipelines 2006, ASCE, July 30-August 2, Chicago, IL.
12. Mehrabi, A.B., "Assessment of In-Service Cable-Stayed Bridges, Approach and Findings," Proceedings of the 2006 Structures Congress & Exposition, ASCE Structures Congress 2006, May 18-20, Saint Louis, MO.
13. Mehrabi, A.B., "A Unique Bridge with a Unique Problem," Proceedings of the 2005 International Bridge Conference, June 13-15, Pittsburgh, PA.
14. Ligozio, C.A., and Mehrabi, A.B., "Development and Verification of a NDT Method for Detection of Flaws in PE Sheathing of Stay Cables." Proceedings of the 2005 International Bridge Conference, June 13-15, Pittsburgh, PA.
15. Mehrabi, A.B., "In-Service Evaluation of Cable-Stayed Bridges, Overview of Available

- Methods and Findings,” Proceedings of the 2005 Structures Congress & Exposition, ASCE Structures Congress 2005, April 20-24, New York, NY.
16. Mehrabi, A.B., and Telang, N.M., “Health Monitoring of Cable-Stayed Bridges- A Case Study,” Proceedings of the 2004 Structures Congress & Exposition, ASCE Structures Congress 2004, May 23-26, Nashville, TN.
 17. Oesterle, R.G., Mehrabi, A.B., Tabatabai, H., Scanlon, A., and Ligozio, C.A., “Continuity Considerations in Prestressed Concrete Jointless Bridges,” Proceedings of the 2004 Structures Congress & Exposition, ASCE Structures Congress 2004, May 23-26, Nashville, TN.
 18. Telang, N.M., and Mehrabi, A.B., “The Case of the Case Bridge,” Proceedings, 2nd New York City Bridge Conference, October 20-21, 2003.
 19. Telang, N.M., and Mehrabi, A.B., “Assessment of In-Service Cable-Stayed Bridges - Lessons from the Field,” Proceedings of the 2003 International Bridge Conference, June 9-11, Pittsburgh, PA.
 20. Mehrabi, A.B., and Telang, N.M., “Cable-Stayed Bridge Performance Evaluation- Lessons from the Field,” Proceedings of the 2003 Structures Congress & Exposition, ASCE Structures Congress 2003, May 29-June 1, Seattle, WA.
 21. Mehrabi, A.B., Ligozio, C.A., Elremaily, A.F., and Vanderpool, D.R., “Performance of Thermoplastic Fiber Reinforced Polymer Rebars,” Proceedings of 6th International Symposium on Fibre Reinforced Polymer (FRP) Reinforcement for Concrete Structures (FRPRCS6), Singapore, July 8-10, 2003, pp 79-88.
 22. Ligozio, C.A., Mehrabi, A.B., Gauvreau, and Bilow, D.N., “Design, Construction, and Testing of a Quarter Scale Model Precast Segmental Concrete Shelf Pylon for WMATA,” Proceedings of 1st Annual Concrete Bridge Conference, Nashville, Tennessee, Oct. 6-9, 2002.
 23. Mehrabi, A.B., Elremaily, A.F., and Vanderpool, D.R., “Mechanical Performance of Thermoplastic Fiber Reinforced Polymer Rebars,” Proceedings of 9th International Conference on Composite Engineering, San Diego, CA, July 1-6, 2002, pp 521-522.
 24. Mehrabi, A.B., and Ciolko, A.T., “Health Monitoring and Problem Solving for Cable Supported Bridges,” Proceedings of the 4th Symposium on Strait Crossing, Bergen, Norway, September 2-5, 2001, pp. 55-60.
 25. Mehrabi, A.B., and Ciolko, A.T., “Health Monitoring of Aging Cable Structures,” Proceedings of the 2001 Structures Congress & Exposition, ASCE Structures Congress 2001, May 2001.
 26. Tabatabai, H., and Mehrabi, A.B., “Evaluation of Various Damping Treatments for Stay Cables,” Proceedings, 18th International Modal Analysis Conference, SEM, Feb. 7-10, 2000, San Antonio, Texas, pp. 836-841.
 27. Mehrabi, A.B., and Shing, P.B., “Seismic Resistance of Masonry-Infilled RC Frames,” Proceedings, 8th North American Masonry Conference, June 6-9, 1999, Austin, TX.
 28. Mehrabi, A.B., and Tabatabai, H., “Damage Detection Using Precursor Transformation Method,” Proceedings, ASCE Structures Congress, April 18-21, 1999, New Orleans, LA, pp. 723-726.

29. Tabatabai, H., and Mehrabi, A.B., "Vibration Suppression Measures for Stay Cables," Proceedings, 17th International Modal Analysis Conference, SEM, Feb. 8-11, 1999, Kissimmee, FL, pp. 1237-1243.
30. Tabatabai, H., and Mehrabi, A.B., "Combining Sag and Bending Stiffness Effects on Cable Vibrations," Proceedings, ASCE 12th Engineering Mechanics Division Conference, May 17-20, 1998, La Jolla, CA, pp. 390-393.
31. Mehrabi, A.B., Tabatabai, H., and Lotfi, H. R., "Precursor Transformation Method for Damage Detection in Structures," Proceedings, 5th Annual International Symposium on Smart Structures and Materials, SPIE, March 1-5, 1998, San Diego, CA, pp. 232-243.
32. Tabatabai, H., Mehrabi, A.B., and Yen, W.P., "Bridge Stay Cable Condition Assessment Using Vibration Measurement Techniques," Proc., Struct. Materials Technology Conference on Bridges and Highways, SPIE, 31 March-2 April, 1998, San Antonio, Texas, pp. 194-204.
33. Mehrabi, A. B., and Shing, P. B., "Analysis of Masonry Infilled R/C Frames with Interface Model," Proceedings, 1998 World Congress on Structural Engineering, ASCE, July 18-23, 1998, Elsevier, San Francisco, CA, T126-1.
34. Yen, W.P., Mehrabi, A.B., and Tabatabai, H., "Evaluation of Stay Cable Tension Using a Non-Destructive Vibration Technique," Proc., ASCE Struct. Cong., Apr. 1997, pp. 503-507.
35. Azizinamini, A, Mehrabi, A.B., Keeler, B., and Rohde, J., "A Non-Destructive Method of Prestress Evaluation," Proceedings, ASCE Structures Congress, Vol. 2, April 1996, 900-907.
36. Shing, P.B., and Mehrabi, A.B., "Influence of Masonry Infill on Lateral Resistance of Reinforced Concrete Frames," Proceedings, NIST Seismic Rehabilitation Workshop on Lightly Reinforced Concrete Frames, Gaithersburg, MD, June 12-13, 1995.
37. Shing, P.B., Mehrabi, A.B., Schuller, M., and Noland, J., "Experimental Evaluation and Finite Element Analysis of Masonry Infilled R/C Frames," Proceedings, Conference on Analysis and Computation, ASCE, Atlanta, GA, 1994, pp. 84-93.
38. Schuller, M., Mehrabi, A.B., Noland, J.L., and Shing, P.B., "Performance of Masonry Infilled R/C Frames Under In-Plane Lateral Loads: Experiments," Proceedings, NCEER Workshop on Seismic Response of Masonry Infills, San Francisco, CA, 1994.
39. Mehrabi, A.B., and Shing, P.B., "Performance of Masonry-Infilled R/C Frames Under In-Plane Lateral Loads: Analytical Modeling," Proceedings, NCEER Workshop on Seismic Response of Masonry Infills, San Francisco, CA, 1994.
40. Shing, P.B., Lotfi, H.R., Mehrabi, A.B., and Brunner, J., "Failure Analysis of Masonry Structures," Proceedings, 9th ASCE Engineering Mechanics Conference, L.D. Lutes and J.M. Niedzwecki, editors, New York, NY, 1992, pp. 780-783.
41. Shing, P.B., Lotfi, H.R., Mehrabi, A.B., and Brunner, J., "Finite Element Analysis of Resistance of Masonry Wall Panels With and Without Confining Frames," Proceedings, 10th Conference on Earthquake Engineering, Madrid, Spain, July 1992, pp. 2581-2586.
42. Mehrabi, A.B., Lotfi, H.M., and Shing, P.B., "Analysis of Infilled Reinforced Concrete Frames Subjected to Lateral Loads," Proceedings, International Conference on Concrete, Research and Standards Bureau, Tehran, Iran, 1992, pp. 482-496.

Articles

1. Mehrabi, A.B., and Ligozio, C.A., "Traveling by Buggy," Roads and Bridges, November 2006, Volume 44, No. 11, pp. 58-61.
2. Mehrabi, A.B., and Ciolko, A.T., "Heart of the Matter," Bridge design & engineering, Forth Quarter 2004, pp. 67-69.
3. Telang, N.M., and Mehrabi, A.B., "Cracked Girders," Public Roads, U.S. Department of Transportation, Federal Highway Administration, November/December 2003, pp. 12-15.
4. Mehrabi, A.B., "Force Field, Cable Technology," Bridge design & engineering, Fourth Quarter 2003, pp. 59-60.
5. Mehrabi, A.B., and Lim, M.K., "NDT Verifies Garage Barrier Safety," Parking Today, Volume 8, Number 6- June 2003.
6. Ciolko, A.T., & Mehrabi, A.B., "A Real Glassy Bridge," World Highways, Mar. 2003, PP. 28.
7. Ciolko, A.T., and Mehrabi, A.B., "Toledo's New Signature Structure," Public Roads, U.S. Department of Transportation, Federal Highway Administration, Sept./Oct. 2002, pp. 30-34.
8. Mehrabi, A.B., and Ciolko, A.T., "Put to the Test," Bridge design & engineering, Second Quarter 2001, pp. 64-65.

Web Seminars

National Highway Institute (NHI) Web Seminar, Bridge Life Cycle Benefit and Cost Analysis; Fundamentals and Application, February 25, 2010.

Invited Speaker and Presentations

- Civil Engineering Symposium, May 17, 2013, Civil Engineering Department, Autonomous University of Nuevo León, San Nicolas de los Garza, Nuevo León, México
- 2013, Louisiana Transportation Engineering Conference, Baton Rouge, LA, February 17-20, 2013, "Stay Cable Replacement of the Luling Bridge."
- Louisiana Engineering Society, New Orleans Chapter, Monthly Meeting, "Cable-Stayed Bridges in Louisiana," New Orleans, LA, May 18, 2011.
- 26th US-Japan Bridge Engineering Workshop, "Stay cable Replacement of the Hale Boggs Bridge," New Orleans, Louisiana, September 20-22, 2010.
- 10th Annual Tulane Engineering Forum, "Stay Cable Replacement for the Luling Bridge," New Orleans, Louisiana, April 16, 2010.
- 2009 AASHTO Subcommittee on Bridges and Structures, New Orleans, LA, July 5, "Stay Cable Replacement for the Luling Bridge."
- 2009, Louisiana Transportation Engineering Conference, Baton Rouge, LA, February 9, 2009, "Stay Cable Replacement of the Luling Bridge."
- 5th Annual SEAIO Midwest Bridge Symposium, "Stay Cable Replacement of the Luling/Hale Boggs Bridge," Chicago, IL, April 24, 2008.
- LTRC Seminar Series, Bridge Structures, New Orleans, LA, February 20-21, 2008, "Luling Cable Stay Replacement."

2006 Cable Stay Workshop, Missouri Department of Transportation, “Structural Evaluation of Stay Cables of the Luling Bridge,” April 25-27, 2006, Saint Louis, MO.

Keynote Speaker for The First National Conference on the Strengthening of Historical and Unreinforced Masonry Buildings, December 18 and 19, 2005, Shiraz, Iran.

Delaware Department of Transportation, Dover, Delaware, “Condition Evaluation of Stay Cables in Cable-Stayed Bridges,” September 21, 2004.

Iowa Department of Transportation, Ames, IA, April 26, 2004, “Evaluation of Stay Cables of the Mississippi River Bridge at Luling.”

2004, Louisiana Transportation Engineering Conference, Baton Rouge, LA, February 17, 2004, “Evaluation of Stay Cables of the Mississippi River Bridge at Luling.”

Midwest Bridge Working Group, Winter Conference, Nashville, TN, December 4, 2003, “Health Monitoring of Cable-Stayed Bridges.”

Illinois Department of Transportation, Bureau of Bridges and Structures, June 4, 2003, “Cable-Stayed Bridge Performance Evaluation- Lessons from Laboratory and Field,”

ACI Convention, Vancouver, Canada, March 30-April 3, 2003, “Diagnostic Field and Laboratory Load Testing of 60-ft Prestressed Double Tee Beams,” Evaluating Existing Structures-Methods and Case Histories, Part II

ABCD-NWNY Conference, Nov. 15, 2002, “Experimental Evaluation of Jointless Bridges”

ABCD-NWNY Conference, Nov. 17, 2000, “Measurement of Stay Cable Forces Using Laser.”

Research Reports

1. Al-Chaar, G., and Mehrabi, A.B., “Constitutive models for nonlinear finite element analysis of masonry prisms and infill walls,” United States. Army. Corps of Engineers.; Engineer Research and Development Center (U.S.); Construction Engineering Research Laboratory (U.S.), Computer file: National government publication, ERDC/CERL TR, 08-19, 2008.
2. Telang, N.M., Dumlao, C., Mehrabi, A.B., Ciolko, A.T., and Gutierrez, J., “Field Inspection of In-Service FRP Bridge Decks,” NCHRP Project No. 10-64, Report 564, 2006.
3. Mehrabi, A.B., Telang, N.M., and Tabatabai, H., “Implementation of Tuned Dampers for Suppression of Bridge Stay Cable Vibration,” NCHRP-IDEA Project No. 71, 2002.
4. Telang, N. M., and Mehrabi, A.B., “Francis Case Memorial Bridge, Structural Evaluation of Case Bridge,” Report to Legion Design/Campbell & Associates, Inc., and the Washington, D.C. Department of Public Works, Construction Technology Laboratories, IL, 2002.
5. Mehrabi, A.B., “In-Plane Lateral Load Resistance of Wall Panels in Residential Buildings,” Portland Cement Association, PCA R&D Serial No. 2403, 2000.
6. Tabatabai, H., and Mehrabi, “Tuned Dampers and Cable Fillers for Suppression of Bridge Stay Cable Vibrations,” NCHRP-IDEA Project No. 50, 1999.
7. Azizinamini, A., Lotfi, H.R., Elremaily, A., Mehrabi, A.B., Mans, P., and Luedke, J., “Assessing Strength Capacity of Prestressed Concrete Girders,” SPR-PL-1(031)P481, University of Nebraska, Lincoln, Nebraska Department of Roads, Federal Highway Administration, 2001-6.
8. Azizinamini, A., Luedke, J., Mehrabi, A.B., Kathol, S., and Keeler, B., “Strength Capacity of

- Steel Girder Bridges,” Report to Nebraska Department of Roads.
9. Azizinamini, A., Mehrabi, Lofti, H.R., and Mans, P. “Evaluation and Retrofitting of Historic Steel Truss Bridges,” Report to Nebraska Department of Roads Research Project No. STB-STWB (13); Center for Infrastructure Research; University of Nebraska-Lincoln, 1997.
 10. Tabatabai, H., Mehrabi, A.B., Morgan, B.J., and Lotfi, H.R., "Non-destructive bridge evaluation technology: bridge stay cable condition assessment." Report submitted to the Federal Highway Administration, Construction Technology Laboratories, Inc., IL, 1998.
 11. Keeler, B., Mehrabi, A.B., Azizinamini, A., and Rohde, J., "Toward Development of a Non-Destructive Technique to Measure the Available Prestress in Prestressed Concrete Girders," Report No. 12801, Civil Engineering Department, University of Nebraska-Lincoln, Lincoln, NE, 1994.
 12. Mehrabi, A.B., Shing, P.B., Schuller, M., and Noland, J., "Performance of Masonry Infilled R/C Frames Under In-Plane Lateral Loads" CU/SR-94-6, Civil, Environmental and Architectural Engineering Department, University of Colorado, Boulder, CO, 1994.
 13. Mehrabi, A.B., and Hendawi, S., "Application of T-Generalized Hybrid Elements to Incipient Collapse Analysis," CU/CSSC-92-12, Aerospace Engineering Department, University of Colorado, Boulder, CO, 1992.
 14. Abedzadeh, F., Mehrabi, A.B., and Lotfi, H.R., "Correspondence Between Total Lagrangian Formulation and Core-Congruential Formulation in Non-Linear Finite Element Methods,” CU/CSSC-91-12, Aerospace Engrg. Dept., Univ. of Colorado, Boulder, CO, 1991.