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Education:

1972-1977 Ph.D. Civil Engineering
The University of Michigan, Ann Arbor, Michigan
Advisor: Robert D. Hanson

1969-1970 M.S. Civil Engineering
Middle East Technical University, Ankara, Turkey

1965-1969 B.S. Civil Engineering
Middle East Technical University, Ankara, Turkey

Professional Organizational Memberships:

Structural Engineering Association of Michigan (SEAMi)

Chair, Publications Committee, 1998-2001

Member, Professional Issues SE Registration Committee

American Society of Civil Engineers (ASCE)

Faculty Advisor, Student Chapter at Wayne State University

Member of Performance of Structures

Member of Analysis & Computation, Structural Control Subcommittee

Member, ASCE, Materials Committee on Structural Composites and Plastics

Session co-chair and organizer, ASCE Structures Congress, Atlanta 1994

Session co-chair, ASCE-EMD Conference 1989

Member of Editorial Board, Journal of Computing 1986-1988

ASCE Michigan Chapter

Transportation Research Board

Member, Committee on Durability of Concrete, August 2000-to date

Member, Committee on Basic Research and Emerging Technologies on Concrete, March 2000-to date

Session Organizer and Chair No.:573 and 602, January 2002

American Concrete Institute (ACI)

Associate Member Committee on Nondestructive Testing

Earthquake Engineering Research Institute (EERI), 1986-1999

Member, 5th National Conference Finance Committee, 1993-94

Member, US team 2nd US-Japan Urban Hazards Reduction Workshop 1988, Japan

Member, Experimental Research Committee

Member, EERI Great Lakes Chapter

Professional Registration:

State of Michigan PE No. 29256

Honorary Society Membership:

Chi Epsilon - Civil Engineering Honor Society
Sigma Xi - Scientific Research Honor Society

**Courses Taught at Wayne State University in Last Five Years
Undergraduate:**

CEE 4300 Structures I
CEE 4310 Structures II
CEE 4420 Reinforced and Prestressed Concrete Design

Graduate:

CEE 5370 Introduction to FEA
CEE 6370 Advanced Reinforced Concrete Design
CEE 7350 Advanced Structural Dynamics
CEE 7410 Assessment and Upgrade of Structures in Service
CEE 7450 Non Destructive Testing of Structures

Ph.D. Dissertations Directed:

Attanayake, Upul "Macromechanical Modeling of Precast Orthotropic Bridge Superstructure Systems, July 2006

Birgul, Recep "Durability Investigation of Concrete Culverts Reinforced with Steel and GFRP by Acoustic Emission", July 2001.

Al-Shammari, Fallah "Monitoring Concrete structures using Fiber Optic and Laser Sensors", March 2001.

Yaman, Ozgur "Numerical Simulation Models for the Verification of NDT Procedures based on Ultrasonic Pulse Propagation in Reinforced Concrete Structure", August, 2000.

Udegbumam, Oge "Durability Assessment of Concrete Decks using Ultrasonic Measurements", March 2000.

Nayef, Ayad "Pseudo-Dynamic Testing for Rigid Structural Specimens", April 1996.

Ho, Jin Lee "Statistical Deterioration Models for Condition Assessment of Older Buildings", February 1996.

Mhaimed, Khaldoun "Upgrade Design Methodology for Buildings with Seismic Deficiencies", May 1993.

Akbay, Zekai "Actively Regulated Energy Dissipation Devices for Improving Seismic Performance of Buildings", November 1991.

Elzayat, M. Hany "Shear Stress Distribution in RC Structural Walls", June 1989.

Ahmed A. M. Hashish "Nonlinear Modeling of RC Frame-Wall Buildings under Static Lateral Loads and/or Seismic Motion", January 1988.

External Funding at Wayne State University:

“Condition Assessment and Methods of Abatement of Prestressed Concrete Box-Beam Deterioration (Phase II)”, Michigan Department of Transportation, October 1, 2006– March 30, 2007 (Account No.: 3377908, \$196,144)

“Combining Link-slab, Deck Sliding over Back-wall and Revising Bearings,” Michigan Department of Transportation, April 16, 2006– April 15, 2008 (Account No.: 337678, \$225,131)

“Condition Assessment and Methods of Abatement of Prestressed Concrete Box-Beam Deterioration (Phase I)”, Michigan Department of Transportation, October 1, 2003– June 15, 2005 (Account No.: 337678, \$125,890)

“Center for Structural Durability Administration” Principal Investigator, Michigan Department of Transportation, February 15, 2001–October 1, 2006 (Account No.: 337679, \$110,500)

“Investigate Causes and Develop Methods to Minimize Early-Age Deck Cracking on Michigan Bridge Decks,” Principal Investigator, Michigan Department of Transportation, January 1, 2002–December 31, 2003 (Account No.: 337074, \$158,313) (Co-PI Gongkang Fu 50%)

“Causes and Cures of Cracking of Concrete Bridge Barriers,” Principal Investigator, Michigan Department of Transportation, March 1, 2002–August 31, 2003 (Account No.: 337920, \$106,766)

“Forecast and Resolve Deterioration Problems with the Ends of PC Beams,” Principal Investigator, Michigan Department of Transportation, February 15, 2000–May 31 2002 (Account No.: 337680, \$99,876)

“Criteria and Benefits of Penetrating Sealants for Bridge Decks” Principal Investigator, Michigan Department of Transportation, February 15, 2001–July 31 2002 (Account No.: 337679, \$87,059)

“Field UPV Measurements on Bridge Decks for Paste Efficiency Implementation,” Principal Investigator, Michigan Department of Transportation, July 1, 2000–December 31, 2000 (Account No.: 337693, \$61,169)

“Evaluation of Concrete Permeability by Ultrasonic Testing,” Principal Investigator, Michigan Department of Transportation, May 1, 1997–December 31, 2000 (Account No.: 337693, \$303,855)

“Information Capture for City Wide GIS for Systemic Management”, Principal Investigator, City of Detroit, July 1, 1995–December 31, 1999 (Account No.: 337115, \$990,000)

"Hybrid Pipeline Restraints", Principal Investigator, American Natural Resources, May 1, 1992-August 31, 1996. (Account No.: 441733, \$60,000)

"Nondestructive Testing Laboratory", Co-Principal Investigator, National Science Foundation, June 1, 1994 - May 31, 1996, (Account No.: 331041, \$37,192)

"Industrial Site Infrastructure Documentation and Appraisal", Principal Investigator, Gateway Associates, New York, March 1, 1994 - June 15, 1994 (Account No.: 442688, \$14,000)

"Peace Fellowship Joint Supervision Program", Principal Investigator, Government of Egypt, January 1, 1993-December 31, 1994, (Account No.: 441733, \$20,000)

"PDT for Rigid Specimens", Principal Investigator, Lehigh University, ATLSS Center, April 30, 1990-December 31, 1991, (Account No.: 443874, \$91,699)

"Uniaxial and Biaxial Strength of UNISTRUT System-III Space Structure Nodes", Principal Investigator, Unistrut Space Systems Inc., April 1, 1992-May 31, 1993, (Account No.: 442210, \$5,000)

"Experimental Evaluation of Active Wheel Chair Lift's Reliability", Co-Principal Investigator, US Department of Transportation and Michigan Department of Transportation, September 1, 1989-August 31, 1993, (Account No.'s: 338011, 338510, 448022, \$161,216)

"Research Experience for Undergraduates", Co-Principal Investigator, National Science Foundation, supplement to BCS90-05383, June 1, 1990-January 31, 1992, (\$16,000, Account No.: 331030)

"Soil-Pile Foundation-Structure Response Correlation Using Data from the Loma-Prieta Earthquake", Co-Principal Investigator, National Science Foundation, BCS90-03583, March 15, 1990-January 31, 1992, (\$77,424, Account No.: 331030)

"Scientific Research Equipment," Equipment Grant, Hewlett-Packard Corporation, Grant#17-70600, July 1987

"Research Experience for Undergraduates", National Science Foundation, supplement to DMC86-10233, September 1, 1987-May 31, 1989 (\$32,000)

"Innovative Design Method," Co-Principal Investigator, National Science Foundation, DMC86-10233, August 1, 1986 - July 31, 1988, (\$163,455)

"A Computer Laboratory for Freshmen and Sophomore Level Civil Engineering Education," Co-Principal Investigator, National Science Foundation, SDPE-8263032, Jan. 1, 1983-June 30, 1986, (\$55,000)

"Experimental Investigation of Dowel and Aggregate Interlock Mechanisms of Shear Transfer under Constant Axial Pressure States," Principal Investigator, National Science Foundation, CEE-8203042, June 1982-Nov. 1984, (\$48,000)

"Enrichment Project for Civil Engineering Material and Geotechnical Engineering Courses at Wayne State University", Faculty Associate, National Science Foundation, SER-8162048, Sept. 1, 1981-Nov. 30, 1982, (\$39,000)

Journal and Refereed Conference Articles:

Yaman, I.O., Akbay, Z. and Aktan, H.M. "Numerical Modeling and Finite Element Analysis of Stress Wave Propagation for Ultrasonic Pulse Velocity Testing of Concrete," Computers and Concrete, Vol.3 No.6, December 2006, pp. 423 – 437.

Attanayaka, U., Liang, X., Ng, K. Y. S. and Aktan, H. M. "Penetrating Sealants for Bridge Decks – Selection Procedure," ASCE Journal of Bridge Engineering, September/October 2006, pp. 533-540.

Attanayake, U., and Aktan, H. M. "Side-by-Side Box-Beam Bridge - Performance and Design Issues," *7th International Conference on Short & Medium Span Bridges*, Montreal, Quebec, Canada, August 23 – 25, 2006.

Attanayake, U., and Aktan, H. M. "Side-by-side box-beam bridges – design for durability", *Third International Conference on Bridge Maintenance, Safety and Management, IABMAS 2006*, Porto, Portugal, July 16 – 19, 2006.

Attanayake, U., and Aktan, H. M. "Durability Performance of Concrete Bridge Components," *The Second fib Congress*, Naples, Italy, June 5 – 8, 2006.

Gilbertson, C. G., Attanayake, U., Ahlborn, T. M., and Aktan, H. "Prestressed Concrete Box-Beam Performance: Condition Assessment and Design Analysis," *85th TRB Annual Meeting (CD – ROM)*, No: 06-2432, January 22-26, 2006.

Aktan, H.M. "Performance Based Bridge Design by Infusion," *Proc. 2nd International Conference on Structural Health Monitoring of Intelligent Infrastructure*, Shenzhen, P.R. of China, November 16-18, 2005.

Attanayaka, U. and Aktan, H. M. "Inspection Based Condition Assessment for Health Monitoring of Highway Bridges," Keynote Paper, *Proc. Condition Monitoring 2005*, British Institute of NDT, Kings College, Cambridge. England, 10-21 July 2005.

Birgul, R., Al-shammari, F. M. W., Yaman, I. O. and Aktan, H. M. "Acoustic Emission Evaluation Of Concrete Culverts," Research in Nondestructive Evaluation, Volume 15, No.:4. February 2005, pp. 41-58.

Yaman, I.O., Aktan, H., "Ultrasonic Testing on an Imperfect Medium: Analysis and Simulation of Intrinsic Parameters on Concrete," *Proc. TRB Annual Meeting (CD – ROM)*, No: 04-2381, January 11-15, 2004.

Attanayaka, U., Duyar, O., and Aktan, H. M., "Early-Age Cracking Potential of Slip-formed Concrete Bridge Barriers", *Proc. TRB Annual Meeting (CD – ROM)*, No: 04-2381, January 11-15, 2004.

Chowdhury, R., Attanayaka, A.M.U.B., and Aktan, H.M., "Heat Transfer Fundamentals Applicable to Infrared Thermography of Concrete Structures", *Proc. Review of Progress in Quantitative NDE*, Vol. 23, Greenbay, Wisconsin, July 27-31, 2003.

Skholnik, I., Aktan, H., Birgul, R. "Nonlinear Nondestructive Methods of Evaluating Strength of Concrete," *Proc. Non-Destructive Testing in Civil Engineering (NDT-CE)*, September 16-19, 2003, Berlin, Germany

- Birgul, R., Koyuncu, Y., Ahlborn, T. M., Aktan, H. M. "40-Year Performance Assessment of Prestressed Concrete (PC) I-Girder Bridges In Michigan" Proc. *TRB Annual Meeting (CD – ROM)*, No.: 03-2888, January 2003
- Koyuncu, Y., Birgul, R., Ahlborn T. M., Aktan, H. M. "Identifying Causes for Distress Patterns in Prestressed Concrete (PC) -Girder Bridges," Proc. *TRB Annual Meeting (CD – ROM)*, No.: 03-2682, January 2003
- Attanayaka, U., Duyar, O., Liang, X., Aktan, H. M. and Ng, K. Y. S. "Fundamentals of Use of Penetrating Sealants for Concrete Bridge Deck Protection," Proc. *TRB Annual Meeting (CD – ROM)*, No: 03-2575, January 2003
- Aktan, H. M., Ahlborn T. M., "Performance Assessment of Prestressed Concrete I-Beam Bridges in Michigan" *Proc. Structural Engineering World Congress, SEWC 2002*, October 9-12, Yokohama, Japan.
- Aktan, H. M., Ahlborn T. M., Koyuncu, Y. "Prestressed Concrete Bridge Beam Health Monitoring In Michigan," Keynote Paper, *Concrete Structures in the 21st Century*, FIB Congress 2002, October 13-19 2002, Osaka, Japan.
- Birgul, R., Sayed, G.A., and Aktan, H.M., "Durability Evaluation of GFRP Reinforced Concrete Specimens Using Acoustic Emission", *Proc. International Congress on Challenges of Concrete Construction*, Dundee, Scotland, September 5-11, 2002.
- Yaman, I.O., Aktan, H., "Monitoring And Assessment Of R/C Bridge Decks" *First International Conference on Bridge Maintenance, Safety and Management, IABMAS 2002*, 14 – 17 July 2002, Barcelona, Spain.
- Ahlborn T. M., Ovanosova A. V., Kasper, J. M. and Aktan, H. M. "Prestressed Concrete Bridge Beam Health Monitoring In Michigan," *First International Conference on Bridge Maintenance, Safety and Management, IABMAS 2002*, 14 – 17 July 2002, Barcelona, Spain.
- Ahlborn T. M., Ovanosova A. V., Kasper, J. M. and Aktan, H. M. "Prestressed Concrete Bridge Beam Health Monitoring In Michigan," *First European Workshop on Structural Health Monitoring*, July 10-12 2002, Chatillon, Cedex, France.
- Yaman, I.O., Birgul, R., Aktan, H.M., Hearn, N., Staton, J.F. "A Test Method to Appraise Future Durability of New Concrete Bridge Decks," *Transportation Research Record*, Concrete 2002, No: 1798, 2002, pp. 56-63.
- Yaman, I.O., Aktan, H.M. and Hearn, N. "Active and Non-active Porosity in Concrete-Experimental Evidence," *RILEM Journal of Materials and Structures*, Vol. 35., March 2002, pp 102-109.
- Yaman, I.O., Hearn, N. and Aktan, H.M., "Active and Non-active Porosity in Concrete-Evaluation of Existing Models," *RILEM Journal of Materials and Structures*, Vol. 35., March 2002, pp 110-116.
- Ahlborn, M.T., Kasper, J.M., Ovanosova, A., Aktan, H.M. "Inspection and Repair of Prestressed Concrete I-Beam Bridges with End Deterioration in Michigan," *Proc. 5th National Science Foundation Workshop on Bridge Research in Progress*, Minneapolis, October 8-10, 2001.
- Birgul, R., Yaman, I.O., Aktan, H., "Durability of RC Culverts Reinforced with Steel and GFRP", *Proc. CICE 2001 International Conference on FRP Composites in Civil Engineering*, Hong Kong, December 12-15, 2001.

Aktan, H. M.; Yaman, O., Staton, J., “Ultrasonic Pulse Velocity Method for the Quantification of New Concrete Bridge Deck Durability,” *Proc. International Conference on Application of Geophysical & NDT-Methodologies to Transportation Facilities and Infrastructure*, Federal Highway Administration, St. Louis, MO, Dec 11-15, 2000.

Aktan, H.; Yaman O.; Udegbunam, O. and Hearn, N. “Durability Assessment Procedure for Bridge Decks,” *Proc. SPIE, Health Monitoring of Highway Transportation Infrastructure*, Newport Beach, California, March 5-9, 2000.

Yaman, I.O., Udegbunam, O. and, Aktan. H. “Assessing Concrete Permeability from Ultrasonic Pulse Velocity Measurements,” *Proc. TRB Annual Meeting (CD – ROM)*, January 2000, Paper No.: 001190.

Aktan, A.E. and Aktan, H.M. “Issues in Bridge Health Monitoring” *Proc. Structural Faults + Repair-99*, London, G. Britain, July 12-14, 1999.

Yaman, I.O., Aktan, H.M. and Udegbunam, O. “Durability of New R.C. Bridge Decks” *Proc. Structural Faults + Repair-99*, London, G. Britain, July 12-14, 1999.

Aktan, H.; O., Yaman, Udegbunam, O “Early-Age Durability Assessment of Cast-in-Place R/C Bridge Decks”, *Proc. Conference on New Frontiers and Challenges*, AIT, Thailand, November 8-12, 1999.

Udegbunam, O., Yaman, I.O., Aktan, H. “Developing a Rapid Measure of Concrete Permeability for use in QA/QC Specifications,” *Proc. TRB Annual Meeting (CD – ROM)*, Paper No.: 990565, January 1999.

Yaman, I.O., Udegbunam, O. and, Aktan, H. “Ultrasonic Pulse Propagation Simulation in Concrete Specimens” *Proc. 12th Engineering Mechanics Conference*, La Jolla, CA, May 17-21, 1998.

Jin, L. H., Arisoy, Y. Aktan, H.M., and Usmen M. ”Building Infrastructure Management in Urban Areas” *Proc. SEWC Structural Engineering World Congress*, San Francisco, CA, July 18-23, 1998.

Lee, J. H. and Aktan, H.M. “Systemic Management Tool for Buildings in Urban Areas” *Proc. International Conference on Computing in Civil and Building Engineering (ICCCBE-VII)*, Vol. 1, Seoul, Korea, 19-21 August, 1997, pp. 633 - 639.

Lee, J. H. and Aktan, H.M. “A Study of Building Deterioration” *Infrastructure Condition Assessment: Art, Science, Practice*, Ed.: M. Sato, American Society of Civil Engineers, ISBN # 0784402671, 1997, pp. 1-10.

Raad, J., Aktan, H. and Usmen, M. “A Laboratory for Nondestructive Evaluation of Civil Structures” *Proc. ASEE Annual Conference*, Milwaukee, Wisconsin, June 15-18, 1997.

Shkolnik, I.E., Udegbunam, O.C. and Aktan H.M. “ Ultrasonic Methods of Evaluating Concrete Permeability”, *Proc. 4th International Conference on Nondestructive Testing in Civil Engineering*, Vol. 1, University of Liverpool, 8-11 April 1997, pp. 111-121.

Pandya, J., Akbay, Z., Uras, M. and Aktan, H. M. “Experimental Implementation of Hybrid Control,” *Proc. ASCE Structures Congress XIV*, American Society of Civil Engineers, Chicago, April 15-18, 1996.

- Nayef, A. and Aktan, H. M. "Pseudo-Dynamic Testing Software", *Proc. Research Transformed into Practice, Implementation of National Science Foundation Research*, Eds. James Colville and Amde M. Amde, ASCE Press, Washington, D.C., June 1995, pp. 257-268.
- Uras, H. M. and Aktan, H. M. "Design and Prototype Manufacture of a Wheelchair Lift for Transit Buses", *Journal of Transportation Engineering*, Vol. 121, No.2, March/April 1995.
- Kannan, S., Uras, H.M. and Aktan, H.M. "Active Control of Building Seismic Response by Energy Dissipation," *Journal of Earthquake Engineering and Structural Dynamics*, March/April 1995.
- Akbay, Z. and Aktan, H. M. "Abating Earthquake Effects on Buildings by Active Slip Brace Devices," *Shock and Vibration*, Vol. 2, No. 2, 1995.
- Deming, B. and Aktan, H.M., Usmen, M. "Interface Strength of Epoxy Overlays in Concrete ", *Proc. 10th ASM ESD Advanced Composites Conference*, Dearborn, MI, Nov. 7-10, 1994, pp.5-10.
- Deming, B. and Aktan, H.M., Usmen, M. "Test for Polymer Overlay Interface on Concrete," *Proc. Third ASCE Materials Conference, Infrastructure: New Materials and Repair Methods*, San Diego, CA, Nov. 14-16, 1994, pp.709-715.
- Riley, M.A.; Aktan, H.M., Nagarajaiah,S. and Reinhorn, A.M. "Hybrid Structural Control for Seismic Safety," *Proc. 11th Analysis & Computation Conference*, Structures Congress, Atlanta, Georgia, April 24-28, 1994.
- Uras, H. M. and Aktan, H. M. "A Hybrid Energy Dissipation Device for Intelligent Buildings," *Experimental Mechanics*, March 1993, pp.15-20.
- Khasnabis, S., Aktan, H., Kambhatla, A., And Lin, Q. "A Procedure for Reliability Analysis of Wheelchair Lifts," *Proc. TRB Annual Meeting (CD – ROM)*, No. 1378, 1993, pp.59-67.
- Aktan H., Khasnabis, S., Lin, Q., And Kambhatla, A. "An Engineering Appraisal of Wheelchair Lifts," *Proc. TRB Annual Meeting (CD – ROM)*, No. 1378, 1993, pp. 52-58.
- Akbay, Z. and Aktan, H. M. "Improving Seismic Performance of Buildings by Actively Regulated Friction Slip Braces," *Proc. 63rd Shock and Vibration Symposium*, Las Cruces, New Mexico, October 1992.
- Salih, N., Aktan, H., Usmen, M., and Smith, J. "An Experimental Appraisal of the Load-Deformation Properties of A325 High Strength Bolts," *ASTM Journal of Testing and Evaluation*, Vol. 20, No.6, November 1992, pp.440-449.
- Aktan, H., Kagawa, T., Kambhatla, A., and Celebi, M. "Measured and Analytical Response of a Pile Supported Building," *Proc. 10th World Conference on Earthquake Engineering*, Madrid, Spain, July, 1992, pp. 1791-1796.
- Aktan, H., Kagawa, T., Kambhatla, A., and Celebi, M. "Verification of Simple Soil-Pile Foundation Models," *Proc. Structures Congress 92*, San Antonio, Texas, April 1992, pp. 721-724.
- Akbay, Z. and Aktan, H. M. "Seismic Safety Assessment of RC Frame-Wall Buildings," *Journal of American Concrete Institute*, Vol. 88, No. 6, Nov/Dec 1991.

- Uras, H.M., Aktan, H.M. and Akbay, Z. "Design and Manufacture of a Hybrid Energy Dissipation Device," *Dynamics and Control of Large Structures*, Ed. L. Meirovitch, *Proc. Eight VPI&SU Symposium*, Blacksburg, Virginia, May 1991, pp.255-266.
- Olowokere, D., Aktan, H.M. and Akanni, A.N. "Towards an Exact Value for the Flexural Stiffness of Tall Rigid Frames," *Computers & Structures*, Vol.39 No.1/2, pp. 57-62, 1991.
- Akbay, Z. and Aktan, H. M. "Actively Regulated Slip Braces," *Proc. 6th Canadian Conference on Earthquake Engineering*, Toronto, pp. 367-374, June 12-14 1991.
- Youssef-Agha, W., Aktan, H.M., and Olowokere, O.D. "Effect of Fabrication Errors on Seismic Response of Low Rise Steel Frames," *Journal of ASCE, ST Division*, Vol. 117, No. 1, Jan 1991.
- Akbay, Z. and Aktan, H. M. "Vibration Control of Building Structures by Active Energy Dissipation," *Proc. US National Workshop on Structural Control Research*, Los Angeles, October 25-26 1990, pp. 74-78.
- Akbay, Z. and Aktan, H. M. "Intelligent Energy Dissipation Devices," *Proc.4th. U.S. National Conference on Earthquake Engineering*, Palm Springs, May 20-24, 1990.
- Mhaimed, K. and Aktan, H. M., "Upgrade Design Methodology for Buildings with Seismic Deficiencies", *Proc. 4th U.S. National Conference on Earthquake Engineering*, May 20-24, Palm Springs, 1990.
- Giacchetti, R. Whittaker, A.S., Bertero, V.V. and Aktan, H.M. "Seismic Response of a DMRSF Retrofitted with Friction-Slip Devices", *Proc. International Meeting on Base Isolation and Passive Energy Dissipation*, Assisi, Italy June 8-9, 1989, pp. 12.01-12.12.
- Youssef-Agha, W., Aktan, H.M., and Olowokere, O.D., "Seismic Response of Low Rise Steel Frames", *Journal of ASCE, ST Division*, Vol. 115, No. 3, March 1989, pp. 594-607.
- Whittaker, A.S., Bertero, V.V., Aktan, H.M. and Giacchetti, R. "Seismic Response of a DMRSF Retrofitted with Friction-Slip Devices", *Proc. Earthquake Engineering Research Institute*, Feb. 9-12, San Francisco 1989.
- Youssef-Agha, W., and Aktan, H.M., "Effect of Joint Flexibility on Seismic Response of Low Rise Steel Frames", *Proc. 9th World Conference on Earthquake Engineering*, Vol. IV, Tokyo-Kyoto, Japan, Aug. 2-9,1988, pp. 207-212.
- Hashish, A.A., and Aktan, H.M., "Idealization of Shear Mechanism in RC Structural Walls", *Proc. 9th World Conference on Earthquake Engineering*, Vol. V, Tokyo-Kyoto, Japan, Aug. 2-9, 1988, pp. 453-459.
- Hajdo, P., Arciszewski, T., Wocjciech, Z., and Aktan. H.M., "Inductive Shallow Approach for Generation of Engineering Models", *Proc. Cybernetics and Systems*, R.L.Trappl ed., Klower Academic Publishers, 1988, pp.933-980.
- Aktan, H.M., Khasnabis, S., And Gupta, A., "Use of Microcomputers for Self-Teaching of Civil Engineering Principles", *Proc. 3rd International Conference on Civil and Structural Engineering Computing*, London, England. September 22-24, 1987, pp. 279-285.
- Hashish, A.A., and Aktan, H.M., "Nonlinear Response of RC Frame Wall Structures", *Proc. 5th Canadian Conference on Earthquake Engineering*, Vol. I, Ottawa, June 1987, pp. 231-241.

Aktan, H.M., and Khasnabis, S., "Application of Microcomputer Technology in Transportation Systems Analysis", Transportation Systems Analysis, Ed. P.T. Satsangi and A.L. Agarwal, McGraw-Hill, 1987, pp.449-454.

Aktan, H.M., and Klement, K.P., "Shear Stiffness of RC Structural Walls", *Proc. 8th Symposium on Earthquake Engineering*, Vol. 1, Roorkee, India, Dec. 29-31, 1986 pp. 1728-1732

Aktan, H.M., Sabak, S., and Klement, K.P., "Shear Stiffness Degradation of RC Structural Wall Boundary Members", *Proc. 8th European Conference on Earthquake Engineering*, Vol. 4, Lisbon, Portugal, September 7-16, 1986, pp. 7.4-103-7.4-110.

Aktan, H.M., and Hashish, A.M., "Pseudo-Dynamic Testing of Structures and Structural Components", *Proc. 3rd ASCE-EM Conference on Dynamic Response of Structures*, Los Angeles, March 31 - April 2, 1986, pp. 131-137.

Aktan, H.M., "Pseudo-Dynamic Testing of Structures", Journal of ASCE, EM Division, Vol. 112, No. 2, Feb. 1986, pp. 183-197.

Aktan, H.M., Khasnabis, S., Gupta, A.K., and Zielinski, K.M., "Modeling of Civil Engineering Principles for Microcomputer Applications", *Proc. ASCE Civil Engineering Education Conference*, Columbus, Ohio, March 1985, pp.435-443.

Hsu, B.P. and Aktan, H.M., "Nonlinear Finite Element Model for Reinforced Concrete", *Proc. 5th ASCE EMD Specialty Conference*, Laramie, Wyoming, August 1-3 1984, pp.1523-1526.

Tebbe, J. and Aktan, H.M., "Dowel and Aggregate Interlock Mechanisms of Shear Transfer Under Constant Axial Pressure States," *Proc. 8th World Conference on Earthquake Engineering*, Prentice-Hall, Vol. 6, San Francisco, July 21-28 1984, pp. 291-298.

Aktan, H.M., and Van Schieveen, H.M., "An Evaluation of Pseudo-Dynamic Testing for Seismic Performance" *Proc. 7th European Conference on Earthquake Engineering*, Vol.3, Greece, Sep. 1982, pp. 333-338.

Aktan, H.M., and Kaldijan, M.J., "Cyclic analysis of Reinforced Concrete Plane Stress Member," *Proc. 7th World Conference on Earthquake Engineering*, Vol. 7, Istanbul, Sep. 1980, pp. 421-448.

Aktan, H.M., and Hanson, R.D., "Non-Linear Analysis of Reinforced Concrete Plane Stress Members" Reinforced Concrete Structures Subjected to Wind and Earthquake Forces, ACI SP. 63, pp. 135-152, 1980.

Aktan, H.M., and Hanson, R.D., "The Damage Analysis of the Intercontinental Hotel in the Managua Earthquake", *Proc. Managua Earthquake Symposium*, Earthquake Engineering Research Institute, San Francisco, November 1974, pp. 586-603.

Aktan, H.M., and Tabban, A., "Correlation of Structural Damage and Foundation Characteristics", Turkish Chamber of Civil Engineers Technical Bulletin No. 70/7, 1970, pp. 74-88

Tabban, A., And Aktan, H.M., "Evaluation of Microzone Maps from Post Earthquake Macroseismic Observations", Turkish Chamber of Civil Engineers Technical Bulletin No. 69/3-4, 1969, pp. 69-74.

Reports:

Attanayaka, U., Aktan, H.M., Dekelbab, W., and Fu, G. "Investigate Causes and Develop Methods to Minimize Early-Age Deck Cracking on Michigan Bridge Decks," *CSD 2003-02*, Report to the Michigan Department of Transportation, Detroit, MI 48226, November 2003.

Attanayaka, U., and Aktan, H.M. "Causes and Cures for Cracking of Concrete Barriers," *CSD 2003-01*, Report to the Michigan Department of Transportation, Detroit, MI 48226, September 2003.

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University Service (at Wayne State):

University, Information Technology Strategic Plan Oversight Committee, 2006

University, Centers and Institutes Advisory Committee, 2006-07

University, Academic Senate 2001-to date

University, 2006-2011 Strategic Planning Committee

University, Chair, Academic Senate Research Committee 2004 – 2006

University, Academic Senate Research Committee 2002 – 2004

University, Academic Senate Facilities Committee 2001 - 2002

University, Tenure and Promotion Committee 2000-2001

College, Chair of the Faculty Assembly 1996-1998

College, Academic Operations Committee 1981-1983, 1989-91

College, Executive Committee of Faculty Assembly 1981-1982, 1993-present

College, Computer Resources Advisory Committee 1982-1984 1988-present

College, Tenure and Promotion Committee 1986-87, 1990-92, 1995-98, 2001-02, 2002-03

College, Executive Associate Dean Selection Committee 1986-1987

College, Research Advisory Committee 1987-1988, 1993-97

College, Chemical Engineering Chair Review Committee, 1992

Department, Graduate Program Coordinator 1983-88, 1990-91

Department, Chair Selection Committee 1988-1989

Department, Selective Salary Committee, 1982-1987, 1990-1991, 1991-1992, 2001-2002, 2002-03