

CURRICULUM VITAE

NAME: **George C. Lee**
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EDUCATION: B.S. Civil Engineering, National Taiwan University 1955
 M.S. Civil Engineering, Lehigh University 1958
 Ph.D. Civil Engineering, Lehigh University 1960

PROFESSIONAL POSITIONS:

August 2003-present Special Tasks Director, Multidisciplinary Center for Earthquake Engineering

Sept.1992-Aug 2003 Director, Multidisciplinary Center for Earthquake Engineering Research
 State University of New York at Buffalo

Jan. 1978-
 June 1995 Dean, School of Engineering and Applied Sciences
 State University of New York at Buffalo

May 1989-
 Aug. 1990 Acting Director, National Center for Earthquake Engineering Research,
 State University of New York at Buffalo

1984-1990 Associate Director, Calspan-UB Research Center, Buffalo, New York

Oct. 1984-
 May 1985 Acting Director, Health-Care Instrument and Device Institute
 New York State Center of Advanced Technology
 State University of New York at Buffalo

Jan. 1977-
 Jan. 1978 Head, Engineering Mechanics Section
 National Science Foundation

1974-1977 Professor and Chairman, Department of Civil Engineering
 State University of New York at Buffalo

1961-present Department of Civil Engineering, State University of New York at Buffalo
 Professor (1967-present), Associate Professor (1963-1967)
 Assistant Professor (1961-1963)

1970-1971	Acting Chairman, Department of Civil Engineering
1973-1974	State University of New York at Buffalo
1969-1977	Senior Research Fellow National Institute of Health Department of Physiology Harvard School of Public Health Boston, Massachusetts
1960-1961	Postdoctoral Fellow, Lehigh University
1956-1960	Research Fellow, Research Assistant, Research Associate Lehigh University

AWARDS:

Adams Memorial Award, American Welding Society, 1974
 Superior Accomplishment Award, National Science Foundation, 1977
 Engineering Achievement Award, Chinese Institute of Engineers, USA, 1980
 Engineering Educator's Award, Erie-Niagara Chapter of the New York State
 Professional Engineers Society, 1983 (First Recipient)
 Man-of-the-Year Award, Niagara Frontier Technical Societies Council, 1985
 (First Recipient)
 Walter P. Cooke Award, University at Buffalo Alumni Association, 1995
 President's Medal for Distinguished University Service, University at Buffalo, 1995
 Western New York Health Care Technology/Discovery Award, Health Care Industries
 Association, 1996
 ASCE Newmark Medal, 2000
 SEAS Dean's Award for Achievement, 2004
 Lynn S. Beedle Distinguished Civil & Environmental Eng. Award, Lehigh University, 2004.

SCIENTIFIC AND PROFESSIONAL SOCIETIES MEMBERSHIP AND ACTIVITIES:

1. Member, American Society of Civil Engineers (1957-present)
 - (a) Member, Committee on Biological Flow of the Engineering
Mechanics Division (1973-1976)
 - (b) Chairman, Technical Activities Committee of Civil
Engineering in Biomedicine and Health Care Systems (1974-1981)
 - (c) Chairman, Committee on Bioengineering of the Engineering
Mechanics Division (1976-1981, 1986-1989)
 - (d) Member, Lifeline Earthquake Engineering Council (1977-1980)
 - (e) Member, ECPD Visitation Team for Civil Engineering (1975-1981)
 - (f) Member, ABET Visitation Team for Engineering for
Engineering Mechanics (1981-1984)
 - (g) Member, Executive Committee, Engineering Mechanics Division (1986-91)
 - (h) Chair, Executive Committee, Engineering Mechanics Division (1989-1990)

- (i) Member, Advisory Board, Engineering Mechanics Division (1991-95)
- (j) Chair, Advisory Board, Engineering Mechanics Division (1992-93)
- 2. Welding Research Council
 - Subcommittee Member on Tapered Members Committee (1968-present)
 - Member of Structural Steel Committee (1968-present)
- 3. Member-at-large, Structural Stability Research Council
- 4. Member, American Welding Society
- 5. Member, Chi Epsilon (elected)
- 6. Member, Tau Beta Pi (elected)
- 7. Member, American Society for Engineering Education
- 8. Member, Society of Manufacturing Engineers
- 9. Member, U.S. National Committee on Biomechanics, (1981-present)
- 10. Member of Executive Committee (1981-1988)
- 11. Member, Committee on Earthquake Engineering, National Research Council (1991-1992)
- 12. Member, Committee on Hazard Mitigation Engineering, National Research Council (1992-1995)
- 13. Co-editor-in-chief. J. Earthquake Engineering and Engineering Vibration (2001-present).

TEACHING AND RESEARCH INTERESTS:

Graduate Courses taught -

Steel Structures
Structural Stability I and II
Plasticity I and II
Plastic Analysis and Design
Advanced Topics in Reinforced Concrete Structures, Advanced Structural Analysis,
and Design (Metals) Metal Structures
Introduction to Biomechanics I and II
Experimental Mechanics
Advanced Topics in Professional Engineering
Special Topics in Cold Regions Structural Engineering
Special Topics in Modal Analysis and Testing
Special Topic in Seismic Design and Retrofit of Long Span Bridges

Undergraduate courses taught -

Mechanics of Materials
Structural Mechanics I and II

Structural Analysis and Design I and II
Civil Engineering Project (senior)
Selected Topics in Structural Systems (senior)
Professional Engineering (senior)
Man-Made World (freshman)
Introduction to Engineering (freshman)
Introduction to Engineering Design (freshman)

Reviewer for the following journals -

International Journal of Structural Engineering and Mechanics
Journal of Structural Dynamics and Earthquake Engineering
Journal of Engineering, Mechanics, ASCE
Journal of Structural Engineering, ASCE
Journal of Computing in Civil Engineering, ASCE
Journal of Cold Regions Engineering, ASCE
International Journal of Solid Mechanics
Biophysical Journal
Journal of Applied Mechanics, ASME
Journal of Biomechanical Engineering, ASME
Journal of Biomechanics
Journal of Applied Physiology
Journal of American Institute of Aeronautics and Astronautics
Journal of Earthquake Engineering and Engineering Vibration

Title of Current Research Projects -

- PI, Seismic Vulnerability of the Highway System (FHWA 1998-2005)
- A New Semi-Active Approach For Dynamic Response Modification of Helicopters (NASA, Ames Research Center)
- Seismic Design of Structures with Added (Passive and Semi-active) Response Modification Systems (MCEER-NSF)
- Rehabilitation Strategies for NY Hospitals (MCEER-NSF)
- Development of a Bridge Monitoring System (MCEER-FHWA)
- Seismic Design and Retrofit of Cable-Supported Bridges (MCEER-FHWA)
- Development of Intelligent Bridge Bearings (MCEER-FHWA)
- 3D Temporal Characteristics of Ground Motions (NSF)

SELECTED UNIVERSITY SERVICE ACTIVITIES

1. University Senator-at-Large (elected 1966-68).
2. Member, Faculty Advisory Council, appointed by President Meyerson, 1967-68. Subcommittee member on Faculty Tenure and related matters.
3. Screening Committee member for Provost of Engineering and Applied Sciences, 1966- 67.
4. University-wide New Campus Planning Committee appointed by President Meyerson, 1968-69.
5. Search Committee Chairman for Provost of Engineering and Applied Sciences, 1970-71.
6. Search Committee Chairman for Geology Department Chairman, 1975.
7. Public Policy Graduate Program Advisory Committee, School of Management, SUNYAB, 1971-72.
8. One of five members of University Senate's Collegium, responsible for the development of a prospectus for the academic direction and climate of SUNYAB, 1974-75.
9. Chairman, Faculty Advisory Committee to Science and Engineering Library, 1974-77.
10. University Senator (1975-77).
11. University Senate Executive Committee Member (1975-77).
12. Chairman, University Task Force on Toxic Materials and Environmental Quality, appointed by President Ketter, 1978.
13. Member of Screening Committee for Assistant Academic Vice-President, 1978.
14. Services within the Faculty of Engineering and Applied Sciences:
 - Member, Executive Committee, 1965-68
 - Member, Faculty Personnel Committee, 1971-72
 - Chairman, Civil Engineering Department
 - Curriculum Committee, 1965-68
15. Member, University Committee on the Handicapped, 1979-84.
16. Chairman, UB-Beijing Exchange Committee, 1981-present.
17. Member, University Steering Committee on SEFA Campaign, 1983-1994.
18. Member, University Undergraduate Studies Council, 1984-1988.
19. Faculty Advisor of student chapters
 - (a) American Society of Civil Engineers (1974-1977)
 - (b) Chi Epsilon (1974-1984)
 - (c) Society of Women Engineers (1980-1984)
20. Member, Calspan-UB Research Center Board of Trustees, 1984-present.

21. Member, Research Advisory Council to President Sample, 1985-1987, 1990-1992.
22. Member, President's Advisory Council (PAC), 1992-1995.
23. Member, CUBRC Strategic Planning Committee, 1993-1995.
24. University Steering Committee memberships:
 - . New York State Institute on Superconductivity
 - . Center for Industrial Effectiveness
 - . Health-care Instrument and Device Institute
 - . Center For Research in Special Environments
25. Member, Executive Board, New York State Institute for Superconductivity, 1993-1996.

PUBLICATIONS:

Journal Articles

- Lee, G.C. and Lu, L.W., "Plastic Theory of Structural Steel," J. Civil Engng., Vol. 2, No. 2, November 1959, pp. 42-62.
- Lee, G.C., "Survey of Literature on the Lateral Instability of Beams," Welding Res. Council Bulletin, No. 63, April 1960, pp. 50-59.
- Lee, G.C. and Galambos, T.V., "The Post-Buckling Strength of Wide-Flange Beams," J. Engng. Mech. Div., ASCE, Vol. 88, EM1, February 1962, pp. 59-75.
- Fisher, J.W. and Lee, G.C., "Plastic Analysis and Tests of Haunched Corner Connections," Welding Res. Council Bulletin, October 1963, pp. 1-33.
- Prawel, S.P. and Lee, G.C., "Biaxial Flexure of Columns by Analog Computers," J. Engng Mech. Div., ASCE, Vol. 90, No. EM1, February, 1964, pp. 83-111.
- Lee, G.C., Ferrara, A. and Galambos, T.V., "Experiments on Braced Wide-Flange Beams," Welding Res. Council Bulletin, No. 99, September 1964.
- Hausenbauer, G. and Lee, G.C., "Stresses in Thick-Walled Conical Shells," Nuclear Engng. and Design, Vol. 3, No. 3, April 1966, pp. 394-401.
- Lee, G.C. and Szabo, B.A., "Torsional Responses of Tapered I-Girders," J. Struct. Div., ASCE, Vol. 93, No. ST5, October 1967, pp. 233-252.
- Lee, G.C., Fine, D.S. and Hastreiter, W.R., "Inelastic Torsional Buckling of H-Columns," J. Struct. Div., ASCE, Vol. 93, No. ST5, October 1967, pp. 295-307.
- Szabo, B.A. and Lee, G.C., "Stiffness Matrix for Plates by Galerkin's Approach," J. Engng. Mech. Div., ASCE, Vol. 95, No. EM3, June 1969, pp. 571-585.

Szabo, B.A. and Lee, G.C., "Derivation of Stiffness Matrices for Problems in Plane Elasticity by Galerkin's Method," Internat. J. Numerical Methods in Engng., Vol. 1, 1969, pp. 301-310.

Tada, Y. and Lee, G.C., "Finite Element Solution to an Elasticity Problem of Beams," Internat. J. Numerical Methods in Engng., Vol. 2, 1970, pp. 229-241.

Chung, B.T. and Lee, G.C., "Buckling Strength of Columns Based on Random Parameters," J. Struct. Div., ASCE, Vol. 97, No. ST7, July 1971, pp. 1927-1945.

Lee, G.C., Morrell, M.L. and Ketter, R.L., "Design of Tapered Structural Members," Welding Res. Council Bulletin, No. 173, June 1972, pp. 1-32.

Notess, C.B. and Lee, G.C., "Social Factors in Health Care Systems Planning," ASCE Journal of Engineering Issues, January 1973.

Frankus, A. and Lee, G.C., "A Theory for Distortion Studies of Lung Parenchyma Based on Alveolar Membrane Properties," J. Biomech., January 1974.

Recker, W.W., Lee, G.C. and Paaswell, R.E., "A Program in Social and Urban Systems Engineering," J. Engng. Education, January 1974.

Morrell, M.L. and Lee, G.C., "Allowable Stress for Web-Tapered Beams With Lateral Restraints," Welding Research Council Bulletin, No. 192, February 1974.

Prawel, S.P., Morrell, M.L. and Lee, G.C., "Experiments of Tapered Members," Welding Research Journal, February 1974.

Hoppin, F.G., Lee, G.C. and Dawson, S.V., "Properties of Lung Parenchyma in Distortion," J. Appl. Physiology, Vol. 39, No. 5, November 1975.

Lee, G.C. and Morrell, M.L., "Application of AISC Design Provisions for Tapered Members," AISC Engineering Journal, Vol. 12, No. 1, 1975.

Lee, G.C. and Frankus, A., "Elasticity Properties of Lung Parenchyma Derived from Experimental Distortion Data," Biophysical J., 15:5, 1975.

Recker, W.W. and Lee, G.C., "Attitudinal Variables in Civil Engineering Design," ASCE J. Engineering Issues, January 1976.

Falby, W. and Lee, G.C., "Tension-Field Design of Tapered Webs," Engineering Journal, AISC, January 1976.

Lee, G.C., Chen, P.D. and Frankus, A., "Derivation and Application of Small Distortion Properties for Lung Parenchyma," J. Biomech., Vol. 9, pp. 641-648, 1976.

Apostal, M.C., Lee, G.C., Braun, F.W. and Jordan, S., "Anisotropic Hybrid Displacement Singularity Element," J. Struct. Div., ASCE, Vol. 103, No. ST2, February 1977, pp. 335-354.

Bakay, L., Lu, J.C., Lee, G.C. and Peng, J.R., "Experimental Cerebral Concussion," J. Neurosurg., Vol. 47, 525-

531, October 1977.

Liu, J.T. and Lee, G.C., "Static Finite Deformation Analysis of the Lung," Engng. Mech. J., ASCE, February 1978.

Lee, G.C., "The Solid Mechanics of Lungs," ASCE Engng. Mech. J., February 1978.

Lee, G.C., Chen, Y.C. and Hsu, T.L., "Allowable Axial Stress of Multiple-Segmented Tapered Roof Girders," Welding Research Council Bulletin, No. 248, May 1979, pp. 1-28.

Hsu, T.L. and Lee, G.C., "Design of Beam-Columns With End Restraints," Welding Research Council Bulletin, No. 272, pp. 1-14, 1981.

Lee, G.C. and Hsu, T.L., "Design of Tapered Columns With Unequal Flanges," Welding Research Council Bulletin, No. 272, pp. 15-23, 1981.

Tai, R.C. and Lee, G.C., "Isotropy and Homogeneity of Lung Tissue Deformation," J. Biomechanics, Vol. 14, No. 4, 1981.

Gellin, S., Lee, G.C. and Chern, J.H., "A Finite Element Model for Thin-Walled Members," Internat. J. Numerical Methods in Engng., Vol. 19, pp. 59-71, January 1983.

Momlouk, M.S., Yuan, Y.M., Tseng, N.T. and Lee, G.C., "Analysis of Nonlinear Behavior of Asphalt Concrete During Marshall Test," J. Testing and Evaluation, Vol. 11, No. 5, pp. 327-332, September 1983.

Lee, G.C., Tseng, N.T. and Yuan, Y.M., "Finite Element Lung Modeling Including Interlobar Fissures and Heart Cavity," J. Biomechanics, Vol. 16, No. 9, pp. 679-690, 1983.

Tseng, N.T. and Lee, G.C., "Simple Plasticity Model of Two-Surface Types," Journal Engineering Mechanics Division, American Society of Civil Engineers, Vol. 109, No. 3, pp. 795-810, 1983.

Wu, S.G., and Lee, G.C., "On Nonlinear Viscoelastic Properties of Arterial Tissue," ASME J. Biomech. Engng., Vol. 106, pp. 42-47, February 1984.

Wu, S.G., Lee, G.C. and Tseng, N.T., "Nonlinear Elastic Analysis of Blood Vessels," ASME J. Biomedical Engineering, Vol. 106, pp. 376-383, November 1984.

Tseng, N.T. and Lee, G.C., "Inelastic Finite Strain Formulation for Nonproportional Loading," International Journal of Numerical Methods in Engineering, Vol. 21, pp. 941-957, 1985.

Wu, S.G., Lee, G.C. and Tseng, N.T., "Nonlinear Elasticity of Blood Vessels," Chinese J. Biomedical Engineering, Vol. 4, No. 187, 1985.

Chang, K.C. and Lee, G.C., "Biaxial Properties of Structural Steel Under Cyclic and Nonproportional Loading," ASCE Engng. Mech. Journal, Vol. 112, No. 8, pp. 792-805, 1986.

Chang, K.C. and Lee, G.C., "Constitutive Relations of Structural Steel Subjected to Nonproportionally Applied Stresses," ASCE Engng. Mech. Journal, Vol. 112, No. 8, pp. 806-820, 1986.

- Sugiura, K., Lee, G.C. and Chang, K.C., "Application of Endochronic Theory to Structural Steel Under Nonproportional Loading," ASCE J. Eng. Mech. Div., Vol. 113, No. 12, pp. 1901-1917, December 1987.
- Lee, G.C. and Morgan, B., "SUNY Buffalo/ITM Cooperative Educational Program," Proc. ASEE Annual Conference, 1987.
- Chang, K.C. and Lee, G.C., "Strain Rate Effect on Structural Steel Under Cyclic Loading," ASCE J. Engng. Mech. Div., Vol. 113, No. 9, pp. 1292-1301, 1987.
- Shih, T.S., Lee, G.C. and Chang, K.C., "Local Concrete-steel Bond Behavior at Low Temperatures," ASCE J. Struct. Div., Vol. 113, No. 11, pp. 2278-2289, 1987.
- Lee, G.C., "Future Research Needs in Biomechanics Summary and Recommendations of the U.S. National Committee on Biomechanics," Annals of Biomedical Engineering, Vol. 15, pp. 619-626, 1987.
- Tsai, C.S. and Lee, G.C., "Arch Dam-Fluid Interactions: By FEM-BEM and Substructure Concept," International J. Numerical Methods in Engng., Vol. 24, pp. 2367-2388, 1987.
- Sang, Z.T., Lee, G.C. and Chang, K.C., "A Simple Method for Measuring Local Buckling of Thin-walled Steel Members," J. Experimental Mechanics, Vol. 28, No. 1, March 1988.
- Shih, T.S., Lee, G.C. and Chang, K.C., "High Strength Concrete-Steel Interface at Low Temperature," J. Cold Region Engng., Vol. 2, No. 4, December 1988.
- Lee, G.C., Shih, T.S. and Chang, K.C., "Mechanical Properties of High Strength Concrete at Low Temperature," J. Cold Region Engng., Vol. 2, No. 4, December 1988.
- Lee, G.C., Shih, T.S. and Chang, K.C., "On Mechanical Properties of Concrete at Low Temperature," J. Cold Region Engng., Vol. 2, No. 1, 1988.
- Shih, T.S., Lee, G.C. and Chang, K.C., "Effect of Freezing Cycles on the Bond Strength of Concrete," ASCE J. Struct. Div., Vol. 114, No. 3, 1988.
- Wu, S.G. and Lee, G.C., "Theoretical and Computational Investigations of Nonlinear Wave Propagations in Arteries: Part I, A Theoretical Model of Nonlinear Pulsatile Wave Propagations," Scientia Sinica, B, 1988.
- Wu, S.G. and Lee, G.C., "Theoretical and Computational Investigations of Nonlinear Wave Propagations in Arteries: Part II, A Numerical Study of Pulse Wave Propagations," Chinese J. Biomedical Engineering, 1988.
- Tsai, C.S., and Lee, G.C., "Hydrodynamic Pressure on Gravity Dams Subjected to Ground Motions," J. Engng. Mech. Div., ASCE, Vol. 115, No. 3, March 1989.
- Chang, K.C., Sugiura, K. and Lee, G.C., "A Rate-Dependent Material Model for Structural Steel," J. Engng. Mech. Div., ASCE, Vol. 115, No. 10, October 1989.
- Hwang, J.S., Chang, K.C. and Lee, G.C., "On Modified Frequency Domain Data Processing," J. Engng. Mech. Div., ASCE, Vol. 115, No. 10, October 1989.
- Shih, T.S., Lee, G.C. and Chang, K.C., "On Static Modulus of Elasticity of Normal Weight Concrete," J.

Structural Engineering, ASCE, Vol. 115, No. 10, October 1989.

Hwang, J.S., Chang, K.C., Lee, G.C. and Ketter, R.L., "Shaking Table Tests of A Pinned-Base Steel Gable Frame," J. of Structural Engineering, ASCE, Vol. 115, No. 12, December 1989.

Huang, X.P., Chang, K.C., Lee, G.C. and Shih, T.S., "Analytical Models of Local Concrete-Steel Bond at Low Temperature," J. of Cold Region Engng., ASCE, Vol. 3, No.4, December 1989.

Tsai, C.S., Lee, G.C. and Ketter, R.L., "A Semi-Analytical Method for Time-Domain Analyses of Dam-Reservoir Interactions," International Journal for Numerical Methods in Engineering, Vol. 29, pp. 913-933, March 1990.

Hwang, J.S., Chang, K.C. and Lee, G.C., "Quasi-Static and Dynamic Sliding Characteristics of Teflon-Stainless Steel Interface," Journal of Structural Engineering, ASCE, Vol. 116, No. 10, October 1990.

Tsai, C.S., and Lee, G.C., "A Method for the Transient Analysis of Three-Dimensional Dam-Reservoir Interactions," J. Engng. Mech. Div., ASCE, Vol. 116, No. 10, October 1990.

Chang, K.C., Hwang, J.S. and Lee, G.C., "An Analytical Model for the Sliding Behavior of Teflon-Stainless Steel Interface," Journal of Engineering Mechanics, ASCE, Vol. 116, No. 12, 1990.

Hwang, J.S., Chang, K.C. and Lee, G.C., "Seismic Behavior of a Steel Gable Frame Consisting of Tapered Members," Journal of Structural Engineering, ASCE, Vol. 117, No. 3, 1991.

Liang, Z. and Lee, G.C., "On Representation of the Damping Matrix," Journal of Engineering Mechanics, ASCE, Vol. 117, No. 5, 1991.

Liou, G-S, Lee, G.C. and Ketter, R.L., "Analytic Solution for Dynamic Loading on Half-Space Medium", Journal of Engineering Mechanics, ASCE, Vol. 117, No. 7, July 1991.

Lee, G.C. and Tsai, C.S., "Time-Domain Analyses of Dam-Reservoir System During Earthquakes. Part 1: Exact Solution," Journal of Engineering Mechanics, ASCE, Vol. 117, No. 9, Sept. 1991.

Tsai, C.S. and Lee, G.C., "Time-Domain Analyses of Dam-Reservoir System. During Earthquakes. Part 2: Substructure Method," Journal of Engineering Mechanics, ASCE, Vol. 117, No. 9, Sept. 1991.

Sugiura, K., Chang, K.C. and Lee, G.C., "On Evaluation of Low Cycle Fatigue Strength of Structural Metals," J. Engng. Mech. Div., ASCE, Vol. 117, No. 10, 1991.

Liang, Z., Tong, M. and Lee, G.C., "Complex Modes in Damped Linear Dynamic Systems," International Journal of Analytical and Experimental Modal Analysis, Vol. 6, No. 4, pp. 237-250, 1991.

Tong, M., Liang, Z. and Lee, G.C., "Correction Criteria of Finite Element Modeling in Structural Dynamics," Journal of Engineering Mechanics, ASCE, Vol. 118, No. 4, pp. 663-682, April 1992.

Liou, Gin-Show and Lee, G.C., "Impedance Matrices For Axial Symmetric Foundations on Layered Media", Structural Eng./Earthquake Eng., Vol. 9, No. 1, pp. 21-32, 1992.

- Tsai, C.S., Lee, G.C. and Ketter, R.L., "Solution of the Dam-Reservoir Interaction Problem Using a Combination of FEM, BEM With Particular Integrals, Modal Analysis and Substructuring," Engineering Analysis with Boundary Elements, Vol. 9, No. 3, pp. 219-232, 1992.
- Yao, G.C., Chang, K.C., and Lee, G.C., "Damage Diagnosis of Steel Frames Using Vibrational Signature Analysis," Journal of Engineering Mechanics, ASCE, Vol. 118, No. 9, pp. 1949-1961, Sept. 1992.
- Tsai, C.S., Lee, G.C. and Yeh, C.S., "Time-Domain Analyses of Three Dimensional Dam-Reservoir Interactions by BEM and Semi-Analytical Method," International Journal of Engineering Analysis With Boundary Elements, Vol. 10, No. 2, pp. 107-118, 1992.
- Ma, X.S., Lee, G.C. and Wu, S.G., "Numerical Simulation for the Propagation of Nonlinear Pulsatile Waves in Arteries," Journal of Biomechanical Engineering, Vol. 114, No. 4, pp 490-496, Nov. 1992.
- Elkordy, M.F., Chang, K.C., and Lee, G.C., "Neural Networks Trained by Analytically Simulated Damage States", ASCE, J. of Computing in Civil Engineering, Vol. 7, No. 1, pp. 130-145, April 1993.
- Yang, R., Tsai, C.S., and Lee, G.C., "Explicit Time-domain Transmitting Boundary for Dam-Reservoir Interaction Analysis," Numerical Methods in Engineering, Vol. 36, No. 11, pp. 1789-1804, June 15, 1993.
- Yang, R., Tsai, C.S., and Lee, G.C., "Far-Field Modeling in 3D Dam-Reservoir Interaction Analysis", Journal of Engineering Mechanics, Vol. 119, No. 8, August, 1993.
- Tong, M., Liang, Z. and Lee, G.C., "An Index of Damping Nonproportionality For Discrete Vibrating Systems", J. of Sound and Vibration, Vol. 174, No. 1, pp 37-55, 1994.
- Elkordy, M.F., Chang, K.C., and Lee, G.C., "A Structural Damage Neural Network Monitoring System", International Journal of Microcomputers in Civil Engineering, Vol. 9, pp 83-96, 1994.
- Elkordy, M., Chang, K.C., and Lee, G.C., "Application of Neural Networks in Vibrational Signatures Analysis", Journal of Engineering Mechanics, ASCE, Vol. 120, No. 2, pp 250-265, February, 1994.
- Lee, G.C. and Lee, E.T., "Local Buckling of Steel Sections Under Cyclic Loading", J. Construct. Steel Research, Vol. 29, pp. 55-70, 1994.
- Yang, C.F., Lee, E.T., Chang, K.C., and Lee, G.C., "Inelastic Behavior of Steel Members under Nonproportional Loading", Journal of Engineering Mechanics, ASCE, Vol. 121, No. 1, pp. 131-141, January 1995.
- Kim, M.C., Lee, G.C. and Chang, K.C. "Inelastic Buckling of Tapered Members with Accumulated Strain" International Journal of Structural Engineering and Mechanics, Vol. 3, No. 6, Nov. 1995.
- Yang, R., Tsai, C.S., and Lee, G.C., "Procedure for Time-Domain Seismic Analysis of Concrete Dams," Journal of Engineering Mechanics, ASCE, Vol. 122, No. 2, pp. 116-122, February, 1996.
- Pong, W.S., Tsai, C.C., and Lee, G.C., "Seismic Study of Visoelastic Dampers and TPEA Devices for Buildings," ASCE Journal of Engineering Mechanics, 1996.

- Lee, G.C., Tong, M., and Liang, Z., "A Damping Criterion for Distributed Parameter Systems and its Application in Damping Identification," *The Chinese Journal of Mechanics*, **12(1)**, pp. 15-24, March 1996.
- Lee, G. C. and Liang, L., "On cross effects of seismic responses of structures." *Engineering Structures*, Vol. 20 4-6, 503-509, 1998.
- Bontea, D. M., Chung, D. D. L. and Lee, G. C. (1999). "Damage in carbon fiber-reinforced concrete, monitored by electrical resistance measurement", *Cement and Concrete Research*, Vol. 30, 651-659.
- Liang, Z., Tong, M., and Lee, G. C. (1999). "A Real-time Structural Parameter Modification (RSPM) Approach for Random Vibration Reduction: Part I – Principle," *J. Probabilistic Engineering*, June 1999, 349-362.
- Liang, Z., Tong, M., and Lee, G. C. (1999). "A Real-time Structural Parameter Modification (RSPM) Approach for Random Vibration Reduction: Part II– Experimental Verification," *J. Probabilistic Engineering*, June 1999, 362-385.
- Tong, M. and Lee, G. C. (1999). "3D Temporal Characteristics of Earthquake Ground Motion at a Single Point," *J. Mech Eng.*, October 1999, **125(10)**, 1099-1105.
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- Lee, G. C., Tong, M. and Wu, Y. H. (2002). "Some Design Issues for Building Seismic Retrofit Using Energy Dissipation Devices." *Structural Engineering and Mechanics, A International Journal*, Techno-Press, Taejon, Korea.
- Tong, M., Qi, J. and Lee, G. C. (2002). "Temporal a_n and a_t in earthquake ground motion analysis," *ASCE J. Eng. Mech.*, May 2002, **128(5)**, 502-510.
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- Tong, M., Lee, G., Hong, F., Di, J. and Qi, X.Z. (2002). "Temporal characteristics of near-field ground motions and damage of structures." *Proc. US-PRC Workshop on Seismic Analysis and Design of Special Bridges*, Shanghai, PRC, September 12-15, 2002.
- Lee, G. C., Sun, J. and Seim, J. (2002). "Seismic Design and Retrofit Strategies of Cable-Supported Bridges: A Preliminary Review of Recent Practice in USA." *Proc. US-PRC Workshop on Seismic Design and Retrofit of Special Bridges*, October 8-10, 2002.
- Liang, Z. and Lee, G. C. (2002). "Response of seismic isolated bridges using MDOF model and 2D excitation." *Proc. US-PRC Workshop on Seismic Design and Retrofit of Special Bridges*, October 8-10, 2002.
- Cho, S., Eguchi, R. and Lee, G. C. (2002). "The earthquake loss estimation program of MCEER for highway systems," 4th China-Japan-US Trilateral Symposium on Lifeline Earthquake Engineering, Qingdao, China, October 28-31, 2002.
- Lee, G. C., Tong, M. and Wu, Y. (2002). "Hybrid response control of closely spaced buildings." *Proc ABT2002*, Hong Kong, December, 2002.
- Chen, S. W., Tong, M. and Lee, G. C. (2003). "Building seismic response control by velocity-based and displacement-based energy dissipation devices," *ASCE Eng. Mech. Conference*, Seattle, WA, July 16-17, 2003.
- Bruneau, M., Chang, S. E., Eguchi, R. T., Lee, G. C., O'Rourke, T. D., Reinhorn, A. M., Shinozuka, M., Tierney, K., Wallace, W. A. and von Winterfeldt, D. (2003). "A framework to quantitatively assess and enhance seismic resilience," *Seminar on Seismic Design, Performance and Retrofit of Nonstructural components in Critical Facilities*, ATC-29-2, October 23-24, 2003.
- Spencer, B. F., Lee, G. C. and Yang, G. (2003). "Seismic protection of nonstructural components using semi-active devices," *Seminar on Seismic Design, Performance and Retrofit of Nonstructural components in Critical Facilities*, ATC-29-2, October 23-24, 2003.
- Lee, G. C. and Liang, Z. (2003). "A sloping surface roller bearing and its lateral stiffness measurement," 19th US-Japan Bridge Engineering Workshop, Tsukuba, Japan, October 27-28, 2003.
- Lee, G. C., Li, G-Q, Chen, S.W. and Tong, M. (2003). "An approach for performance-based design of steel structures under fire and earthquake hazards", 2nd National Symposium on Fire Protection of Steel Structures, HangZhou, China, October 30-31, 2003.
- Tong, M., Lee, G. C., Rzhnevsky, V., Qi, J., Shinozuka, M. and Middleton, J. (2003). "A Comparison of Seismic Risk of Non-structural Systems in a Hospital before and after a Major Structural Retrofit", ATC-29-2, October 23-24, 2003.
- Dai, J., Tong, M., Lee, G. C. and Qi, X. (2004). "Structural responses under pulse-dominant excitations."

Proceedings of the ANCER Annual Meeting, Honolulu, Hawaii, July 30-31, 2004.

Chen, S. W., Tong, M. and Lee, G. C. (2004). Inelastic response modification of structures using semi-active and passive control devices. *Proceedings 13th World Conference on Earthquake Engineering*, Vancouver, Canada, August 2004.

Lee, G. C. (2004). "Multi-hazard engineering for critical facilities: A new challenge for the earthquake engineering community." *Proceedings of Int'l Symposium on Earthquake Engineering—The past and Future 50 years*. August 20-21, 2004, Harbin, China.

Liu, W., Tong, and Lee, G. C. (2004). Simple procedure for preliminary design of structural dampers. *Proceedings 13th World Conference on Earthquake Engineering*, Vancouver, Canada, August 2004.

Lee, G. C. and Z. Liang (2004). On modeling of nonlinear responses of seismic isolation bridge bearings. *Proceedings of the US/PRC Bridge Workshop*, Shanghai, October 2004.

Lee, G. C., Tong, M. and Dong, T. (2004). "On Design of Highway Bridges against Unintentional Hazards and Hazards and Malicious Attacks." *Proceedings of US-Japan Workshop on Bridge Engineering*, Washington, D.C., October 4-6, 2004.

Chen, S. W., Tong, M. and Lee, G. C. (2004). Structural response modification using displacement-based and velocity-based devices, *Proceedings of the 3ICEE*, October 19-20, 2004, Nanjing, China

Lee, G. C., Liang, Z. and Ou, Y-C (2005). "Low-cycle fatigue in limit state seismic design of steel structures," *Proceedings of the ISSS'05*, March 10-11, 2005, Seoul, Korea.

FUNDING SUMMARY:

PI of Major Educational Contract: Malaysia Educational Program, 1986-91, approx. \$16M

PI of Major Research Center Grant: NCEER - Phase II, 1991-96, \$21M, MCEER, 1997-2002, \$10M

PI of FHWA Contract on Seismic Vulnerability of the Highway System, 1998-2005 \$10.8M

PI or Co-PI of over 60 individual research and equipment grants, 1963-present, approx. \$5M

POST DOCTORAL FELLOWS AND GRADUATE STUDENTS DIRECTED:

Postdoctoral Fellows:	18
Ph.D. Dissertations:	41
Master Thesis:	75

CURRENT POST DOCTORAL FELLOWS AND GRADUATE STUDENTS:

Ph.D. Dissertations:	4
Master Thesis:	1

RECORDS OF RESEARCH AND EDUCATION GRANTS/CONTRACTS:

(as the Principal Investigator or one of the Co-principal Investigators)

1. "Design Study of a Thin Plate, Ribbon Fuel type Fission Fragment Chemonuclear Reactor for Use in the Production of Fixed Nitrogen," 1963-1964, Brookhaven National Laboratory (with R.L. Ketter).
2. "Elastic Behavior of Bi-axially Loaded Tapered Columns," 1964-1966, Department of the Navy (with R.L. Ketter).
3. "Study of Tapered Structured Members," 1966-1970, Naval Facilities Engineering Command (with R.L. Ketter).
4. "Development of Design Specifications for Tapered Members," 1966-1973, American Institute of Steel Construction, American Iron and Steel Institute, Metal Building Manufacturers Association.
5. "Stochastic Modeling and Analysis of Lung Tissue Elasticity," 1971-1973, National Science Foundation; Renewal, 1973-1975 (with T.T. Soong).
6. "Development of a Socio-Engineering Program", 1972-1977, National Science Foundation Science Curriculum Development Program.
7. "Engineering Investigation of Structures Designed to Consist of Tapered Members," 1973-1976, Department of the Navy; Renewal, 1976-1978.
8. "Continued Study of Tapered Members," 1973-1974, Metal Building Manufacturers Association.
9. "Solid and Structural Mechanics of Lungs," 1973-1975, National Heart and Lung Institute; Renewal, 1976-1979.
10. "Tension Flange Bracing Requirements," 1974-1975, American Institute of Steel Construction and Metal Building Manufacturers Association.
11. "Seismic Risk Analysis of High Rise Buildings in Western New York," 1974-1975, New York State Science and Technology Foundation.
12. "Out-of Plane Buckling of Tapered Beam Columns," 1976-1977, Metal Building Manufacturers Association; Renewal, 1977-1978.

13. "Snow Load on Structures in Western New York, 1977-1978, U.S. Army (with D. Tang).
14. "Tapered Columns of Unequal Flanges," 1978-1979, Metal Building Manufacturers Association.
15. "Design of Single Story Rigid Frames," 1979-1980, Metal Building Manufacturers Association.
16. "Earthquake Analysis of Flow-Rise Frames, 1978-1980, National Science Foundation (with D. Tang)
17. "Solid and Structural Mechanics of Lungs," 1979-1982, National Heart, Lung and Blood Institutes.
18. "Web Crippling of Plate Girders Under Concentrated Load," 1981-1982, Building Manufacturers Association.
19. "Automated Control/Data Acquisition System for Buffalo Earthquake Simulator", 1982, National Science Foundation.
20. "Inelastic Behavior of Steel Structures Subjected to Nonproportional Loading," 1983-1985, National Science Foundation.
21. "Pilot study on the Dynamic Behavior of Steel Gable Frames," 1983-1984, Welding Research Council.
22. "Microcomputers for Engineering Education at Buffalo", 1983; and 1986, Digital Equipment Corporation.
23. "Engineering CAD/CAM Facility", 1984, PRIME Computer, Inc.
24. "Funding Issues of Civil Engineering Education and Research", Engineering Foundation Conference, 1984-1986, National Science Foundation.
25. "Dynamic Testing System for Structural Members and Subassemblages", 1985, National Science Foundation.
26. "Workshop on Future Research in Biomechanics," 1985-1986, National Science Foundation.
27. "Material Research for SDIO," 1985-1986, Office of Naval Research (with W. Anderson).
28. "Local Concrete-Steel Interface at Low Temperatures," 1985-1988, National Science Foundation.
29. "Space Power and Power Conditioning Research", 1985-1990, Nuclear Defense Agency (with W.J. Sarjeant).
30. "Pre-Freshmen Engineering Program for Minorities", 1986-1987, 1987-1988, 1988-1991, 1992-1994, Department of Energy (with R. Palmer).
31. "Earthquake Resisting Strength of Frames with Locally Buckled Members," 1986-1989, National Science Foundation.
32. "Seismic Behavior of Low Rise Metal Building Structures", 1986-1990, National Science Foundation (National Center for Earthquake Engineering Research), (with K.C. Chang and R.L. Ketter).

33. "US-China Cooperative Research", 1986-1991, National Science Foundation (National Center for Earthquake Engineering Research), (with R.L. Ketter).
34. "SUNY Buffalo/ITM Cooperative Education Program", Government of Malaysia, 1986-1991 (with S. Dunnett).
35. "Dam-Reservoir Interaction," 1988-1990, National Science Foundation (National Center for Earthquake Engineering Research).
36. "Workshop on Engineering Mechanics: Research Emphasis for Civil Engineering Systems," 1989-1990, National Science Foundation, (with the Executive Committee, of the Engineering Mechanics Division ASCE).
37. International Symposium on Building Technology and Earthquake Hazard Mitigation, 1989-1990, National Science Foundation, (National Center for Earthquake Engineering Research).
38. "Effect of Freezing Cycles on Mechanical Properties of Concrete," 1989-1991, National Science Foundation, (with D. Chung).
39. US-Japan Seminar: Cyclic Buckling of Steel Structures and Structural Elements Under Dynamic Loading Conditions, 1990-1991, National Science Foundation, (National Center for Earthquake Engineering Research).
40. "Innovative Joint Design for Arch Dams", 1990-1992, National Science Foundation, (National Center for Earthquake Engineering Research), (with C.S. Tsai).
41. National Center for Earthquake Engineering Research - Phase II, 1991-1996, National Science Foundation (with M. Shinozuka and I. Buckle).
42. "Application of Viscoelastic Dampers to Frame Structures", 1992-1993, National Science Foundation, (National Center for Earthquake Engineering Research), (with C.S. Tsai).
43. International Cooperative Activities, 1992-1993, National Science Foundation,(National Center for Earthquake Engineering Research).
44. US-Taiwan Cooperative Research, 1992-1993, National Science Foundation, (National Center for Earthquake Engineering Research).
45. Conference on Economic Consequences of Earthquakes, 1992-1993, National Science Foundation, (National Center for Earthquake Engineering Research).
46. "Generalized Structural Analysis Algorithm with Learning Capacity", 1992-1993, National Science Foundation.
47. "A Dynamic Monitoring System for Steel Structures", 1992-1995, National Science Foundation.
48. "Feasibility Study of a Condition Assessment Methodology for Highway Bridges", 1994-1996, Department of Transportation, Federal Highway Administration (National Center for Earthquake Engineering Research).

49. "Behavior and Design of Steel Structures with Added Dampers", 1993-1996, National Science Foundation, (National Center for Earthquake Engineering Research).
50. Greater Regional Industrial Technology Program, Small Business Association, 1995-1998.
51. "Aseismic Behavior of Concrete-Filled Steel Tubular Columns," 1995-1998, National Science Foundation.
52. ISMIS Intelligent Shock Mitigation and Isolation System through applied RSPM Technology, TRP, 1996-1999.
53. US-PRC Annex III Protocol Research Exchange Program, National Science Foundation, 1996-1997.
54. Frontiers in Earthquake Engineering and Loss Reduction: Intelligent Structural Systems and Information Service in Earthquake Hazard Mitigation, National Science Foundation, 1997-1998.
55. "Post-Earthquake Reconstruction Strategies - A Center-to-Center Approach," 1995-1998, National Science Foundation.
56. US/Chinese Exchange Program Protocol, National Science Foundation, 1998-2003.
57. Multidisciplinary Center for Earthquake Engineering Research, National Science Foundation, 1997-2005.
58. NASA Ames Research Center, A New Semi-Active Approach For Dynamic Response Modification of Helicopters, Sept 15, 2000 - Sept 14, 2004
59. NSF Temporal Analysis of Earthquake Ground Motions and Structural Responses, 10/02 – 9/05

GRADUATE STUDENT THESIS DIRECTED

Ph.D. Students

- R.H. Gallagher - The Development and Evaluation of Matrix Methods for Thin Shell Structural Analysis, May 1966
(Presently President Emeritus, Clarkson University)
- M.W. Amlak - Dynamic Response of Anisotropic Cylindrical Shells,
May 1968 (Presently Professor and Dean of Engineering, University of Ethiopia)
- N.P. Theophilos - Inelastic Characteristics of Spherical Shells with Axisymmetric Boundaries,
May 1968 (Presently Engineering Manager, Praxair Corporation)
- B.A. Szabo - Principles of Discretization of Continuous Structures, February 1969
(Presently Greensfelder Endowed Chair Professor of Civil Engineering at Washington University, St. Louis)
- B. T-K. Chung - Random Parameter Analysis of the Stability of Inelastic Structures, February 1969 (Presently Vice President of systems and operations in a metal fabrication company, Chicago)
- D.S. Fine - Parametric Stability of Thin Cylindrical Shells in Non-Stationary Temperature Field, June 1969 (Presently Senior Research Engineer, General Motors Research Lab)
- M.L. Morrell - Equilibrium Element for Finite Elasticity Problems, September 1972
(Presently on faculty of Civil Engineering Department, Clemson University, South Carolina)
- A. Frankus - Estimation of Alveolar Membrane Properties and Subsequent Determination of Macro-Distortion Behavior of the Lung Parenchyma, September 1972.(Presently Partner of a Consulting firm in Indiana)
- P.S. Chen - Strain Energy Functions for Highly Compressible Continuum of Finite Deformation with Special Application to Lung Parenchyma, May 1973
(Presently Chief Engineer of a Consulting Company in Calgary, Canada)
- M.C. Apostol - Development of an Anisotropic Singularity Finite Element Utilizing the Hybrid Displacement Method, May 1974 (Presently Senior Research Engineer, Marc Analysis Research Corporation, Rhode Island)
- C.J. Wang - Refined Finite element Stability Analysis of Thin-Walled Members, May 1975 (Presently Senior Design Engineer at NASA, Florida)

- J.T. Liu - Regional Structural Behavior of Mammalian Lungs, May 1975 (Presently design engineer, Ebasco Consulting Engineers)
- D.O. Olowokere - Towards the Optimum Stability Design of Tapered Columns, May 1978 (Presently on faculty of Engineering at University of Ethiopia)
- N.T. Tseng - Inelastic Finite Strain Analysis of Structural Metals Subjected to Nonproportional Loading, May 1981 (Presently Chairman of the Board, China Systems Corporation, Taiwan)
- T.L. Hsu - Finite element Analysis of the Time Dependent Earthwork Design and Construction Problems in Geotechnical Engineering, September 1981 (Presently Senior Structural Engineer, Baker Marine Corporation, Texas)
- H.C. Chern - Nonlinear Finite Element Analysis of Frames with Unstiffened Thin-Web Girder, May 1982 (Presently Research Engineer, Texas Instruments)
- K.C. Chang - Inelastic Behavior of Structural Steel Subjected to Nonproportional Loading, May 1985 (Presently Professor of Civil Engineering, National Taiwan University)
- C.S. Tsai - An Improved Solution Procedure for the Fluid-Structure Interaction Problem as Applied to Dam-Reservoir Systems, September 1987 (Presently Associate Professor, Fung-Jia University, Taiwan)
- J.S. Hwang - Shaking Table Study of Steel Gable Frames, September 1987 (Presently Associate Professor, National Institute of Engineering, Taiwan)
- K. Sugiura - Low-cycle Fatigue of Structural Steel, September 1988 (Presently Associate Professor, Kyoto University, Japan)
- H. Liu - Pseudodynamic Testing of Low Rise Steel Frames, January 1990 (Presently Assistant Professor, University of Alaska)
- C.F. Yang - Plastic Hinge Behavior of Locally Buckled Steel Members Under Nonproportional Loading, February 1991 (Presently Research Engineer, Imbsen Associates, CA)
- X.S. Ma - On Eigen-Matrix and Identification of Non-Proportional Damping Matrix, May 1991 (Presently engineer, Strippit, Inc., Akron, NY)
- G.C. Yao - A Structural Monitoring Technique for Shell Structures, May 1991 (Presently Associate Professor, National Cheng Kung University, Taiwan)
- E.T. Lee - Plastic Hinge Behavior of Locally Built Steel Members, May 1992 (Presently Structural Engineer working in Seoul, Korea)
- M. Elkordy - Application of Neural Networks in Vibrational Signature Analysis and Structural Damage Diagnoses, May 1992 (Presently Research Engineer, NYS

Dept. of Transportation)

- W.K. Chen - Optimum Plastic Design of Steel Structures September 1992 (Presently working in a Consulting Engineering Office in NYC)
- M.C. Kim - Inelastic Cyclic Behavior of Thin-Walled Tapered Steel Members, September 1992 (Presently lecturer, Seoul National University, Korea)
- R.H. Yang - Time-Domain Seismic Analyses of Concrete Dams, September 1993 (Presently Design Engineer working in Boston, MA)
- S.H. Kim - A GIS Based Regional Risk Analysis Approach For Bridges Against Natural Hazards, September 1993 (Presently Engineer in Seoul, South Korea)
- W.S. Pong - Seismic Performance of High-Rise Building Frames with Added Energy-Absorbing Devices, March 1994 (Presently Structural Engineer, SDE, San Francisco, CA)
- J. Shen - Seismic and Wind Load Response Control of Structures by Using Combinations of Different Energy-Absorbing Devices, January 1996 (Presently Structural Engineer, Pittsburgh Engineering, Inc.)
- N.-H. Pan - Automatic Data Processing Technologies and Industry-Wide Information Transfer Standards in the Construction Industry, 1996
- F. Kong - The Application of Energy Transfer Ratio in Bridge Condition Assessment, August 1996
- S. Ruan - Animated Control of Base Isolation Systems, August 1997 (Presently Test/Design Engineer, Enidine, Inc., Orchard Park, NY)
- T.-J. Huang - Damage Probes in Structures and Mechanisms Utilizing Energy-Based Modal Parameter Identification, November 1997
- Jia-Dzwan Shen - Structural Response Reduction Using Tuned Mass Dampers with Variable Passive Control, May 2001
- Ran Tao - Temporal Characteristics of Earthquake Ground Motions and Their Possible Implications on Structural Damage, May 2001
- Wen-Chin Liu - Low Cycle Fatigue of A36 Steel Bars Subjected to Bending with Variable Amplitudes, August 2001
- Yasuo Kitane - Development of Hybrid FRP-Concrete Bridge Superstructure System, January 2003
- Wei Liu - Optimization Strategy for Damper Configurations of Buildings based on Performance Indices, January 2003

M.S. Students

Between 1963 and 2002, 74 Master of Science degree students have been advised (thesis or project).

- | | |
|------------------|---|
| W.R. Hastreiter | - Inelastic Torsional Buckling of H-Shaped Columns,
February 1964 |
| G.F. Hausenbauer | - Stress Analysis of Thick-Walled Conical Pipes,
May 1964 |
| B. T-K Chung | - Ultimate Strength of Portal Frames, February 1965 |
| R.H. Smith | - Control of Drying Shrinkage in Cement and Concrete,
June 1965 |
| F.E. Jenkins | - Lateral Stability of Vertically Loaded and
Horizontally Spring Restrained Arches, February 1966 |
| R.J. Hartman | - Inelastic Buckling of Linearly Tapered H-Columns,
May 1966 |
| B.A. Szabo | - Torsion of Tapered I Girders, May 1966 |
| S. Ahman | - Influence of Residual Stress on the Loss of Chambers
in Highway Bridges, May 1967 |
| A. Frankus | - Minimum Weight Design Synthesis of Structures
Subjected to Dynamic Loads, May 1967 |
| P.J. Cacciatore | - The Flexural-Torsional Stability of Arbitrary
Thin-Walled Members of Finite Element Approach,
February 1968 |
| K.F. Smolinski | - A General Method of Solution for Thermal Stress
Problems in Plates by the Application of Energy Principles, May 1968 |
| R.C. Cipolla | - Local Buckling of Tapered Sections by the Finite
Element Procedure, February 1969 |
| R.J. Kosloski | - Fatigue Characteristics of Unsymmetrically Welded
Thin Web Plate Girders, February 1969 |
| T. Jansen | - Ultimate Performance of Reinforced Concrete Beams
with Large Holes, Subjected to Moment, Shear and Torsion, May 1969 |
| A.C. Shaw | - Analysis of Guyed Structures, May 1969 |
| Y. Tada | - Finite Element Solution to an Elastica Problem of
Beams, May 1969 |

- G.E. Sabak - Development and Application of an Eighteen Degree of Freedom Finite Element for Plate Bending Based on Galerkin's Method, January 1970
- M.L. Morrell - Lateral Stability of Inelastic Tapered Beam-Columns, May 1970
- M. Nicolau - A Study of Large Motions of Some Simple Dynamic Systems, May 1970
- H.H. Lee - Effective Length Factors of Tapered Columns, September 1970
- H. Izumi - Finite Element Elastica Solutions for Compressible Beam-Columns, January 1971
- C.J. Wang - Large Displacement Analysis of 2-D Structure by Using a Modified Stiffness Method, January 1971
- S.Y. Hu - Lateral Buckling of Planar Rigid Frames, May 1971.
- P. Chhedda - Comparative Study of Finite Element Solutions to Thin-Walled Members by Ritz's and Galerkin's Approaches, May 1972
- R. Rao - Orthotropic Plate Theory as Applied to Long Spans, May 1973
- R. Regilski - Nonprismatic Beam Columns, May 1973
- P. Tandon - Analysis of Design and Multistoried Multibay Structures, May 1973
- J.R. Pentz - Mechanical Properties of Sponge, September 1973
- J. Zell - Approximate Analysis of Multi-Story Structures Using Finite Element Approach, May 1973
- R. Rao - Orthotropic Decking System Consisting of Open Web Joists, June 1973
- S. Cuvuoto - Yield Line Analysis of 2-Way Floor Slabs- Development of a Creep Function, February 1974
- B. Knawli - Design of Tall Buildings Under Lateral Loading, February 1974
- R. Sumar - Approximate Design Procedures for Multi-Story Structures, February, 1974
- F. Frandina - Orthotropic Design of Low Structures Under Gravity Loads, May 1974
- V. Stack - A Finite Element Approach to the Problems of Lamellar Tearing, February 1975

- K.B. Chang - The Cm Factors of Tapered Beam-Columns, May 1975
- J.C. Lee - A Cylindrical Problem in Lung Elasticity, May 1985
- K. Van Avery - The Effect of Lateral and Rotational Bracing on the Buckling Capacity of Prismatic and Tapered Members Using a Finite Element Approach, May 1975
- V. Crabbe - Ultimate Strength Design Information of Tapered R.C. Members with Respect to Moment Shear and Bond, January 1976
- B. Butler - Finite Element Modeling of Elasto-Plastic Planar Frames, May 1976
- J. Cajigas - Design of Tapered Boxed Girders, January 1976
- M. Murga-Elexpuru - On the Seismic Response of Low-Rise Framed Structures, February 1976
- Y. Sawada - Analysis of Shear Strength of Plate Girders by Finite Element Method, September 1976
- A. Moutros - Approximate Model Analysis of Tall Asymmetric Buildings, June 1977
- Y.C. Chen - Finite Element Analysis of Frame with Semi-Rigid Connections, February 1977
- T.L. Hsu - Design of Beam-Columns with End Restraints Against Lateral-Torsional Buckling, September 1978
- W.J. Giambrone - A Comparison of the Seismic Provisions of U.S. and Canadian Codes, 1979
- B. Silver - Residual Stresses in Castellated Steel I-Beams, 1979
- A. Nwokedi - Residual Stresses in Tapered Columns of Unequal Flanges, 1980
- K.C. Chang - Shear Center Analysis of Tapered Channel Shapes, 1980
- M.M. Abusahra - Properties of Under-reinforced Ferrocement Plates and Hypars, 1980

- G. Wolde-Tinsae - Elastic Lateral-Torsional Stability of Capped I-Beam Connections, 1981
- E. Agai - The SAP-IV Preprocessor for Static Truss Analysis, 1981
- S.M. Hasan - An Investigation of Present-Day Design of Open Web Steel Joist, 1981
- R. Hamid - Effect of Non-prestressed Steel on Time-dependent Losses and Deflections, 1983
- K.C. Li - Three-dimensional Finite Element Analysis of Low-rise Steel Frames by using Tapered Elements, 1983
- J.S. Hwang - Spectrum Analysis of Gable Frames, 1983
- Y.M. Yuan - A Finite Element Algorithm for Nonlinear Analysis of Lungs, 1983
- B. Mahmoodzadegan - Deflection and Cracking analysis of Two-way Reinforced Concrete Floor Slabs, 1984
- C.L. Sun - A Program for the Application of the PRIME CAD/CAM System to Shop Drawings of Steel Structures, May 1987
- T.F. Smith - Gable - An Expert System to Perform a Seismic Evaluation of a Single Story Steel Gable Frame, September 1988
- K.K. Li - Application of KES - An Expert System Shell for Seismic Evaluation of Low-rise Steel Structures, September 1988
- C. Shen - Development of a Bridge Monitoring System, May 1991
- T. Jiang - Study of Structural and Tuned Mass Damper Parameters for Control of Wind-Induced Random Vibration of High-Rise Buildings, September 1995
- J. Shen - Steel-concrete interactions of concrete filled steel tubular columns, June 1997
- M. M. Bontea - Analysis of Along-Wind Response of Medium-Rise Structures Using Synthetic Wind Records, June 1999
- W. Liu - Performance based Seismic Analysis of a Steel Frame Structure, June 1999
- J. Wang - An Evaluation of Seismic Retrofit Strategies for Selected Nonstructural Components based on a Typical Hospital in New York State, August 2000
- H-F Chou - Seismic Responses of Straight and Curved Highway Bridges, August 2002