

ALTIERO, Nicholas J.
 Professor and Dean Emeritus, Tulane University
 Professor and Chairman Emeritus, Michigan State University

EDUCATION

Ph.D.	Aerospace Engineering	University of Michigan	1974
M.A.	Mathematics	University of Michigan	1971
M.S.E.	Aerospace Engineering	University of Michigan	1970
B.S.	Aerospace Engineering	University of Notre Dame	1969

PROFESSIONAL EXPERIENCE

2006–2017	Dean, School of Science and Engineering, Tulane University
2000–2006	Dean, School of Engineering, Tulane University
2010-2018	Professor, Department of Physics and Engineering Physics, Tulane University
2006-2018	Professor, Department of Biomedical Engineering, Tulane University
2000–2006	Professor, Department of Mechanical Engineering, Tulane University
1998–2000	Chairman, Department of Materials Science and Mechanics, Michigan State University
1990–1998	Associate Dean for Research and Graduate Studies, College of Engineering, Michigan State University
1986–2000	Professor, Department of Materials Science and Mechanics, Michigan State University
1979–1986	Associate Professor, Department of Metallurgy, Mechanics, and Materials Science, Michigan State University
1975–1979	Assistant Professor, Department of Metallurgy, Mechanics, and Materials Science, Michigan State University
1974–1975	Postdoctoral Scholar and Lecturer, Department of Aerospace Engineering, University of Michigan
	Research Fellow, Twin Cities Research Center, Department of the Interior, Minneapolis, Minnesota
1969–1974	Graduate Research Assistant and Teaching Fellow, Department of Aerospace Engineering, University of Michigan
1968–1969	Undergraduate Research Assistant, Department of Aerospace Engineering, University of Notre Dame

TEMPORARY APPOINTMENTS

7/16-8/16	Interim Senior Vice President for Academic Affairs and Provost, Tulane University
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- 1/82–8/82 Alexander von Humboldt Fellow, University of Technology of North-Rhine Westphalia, Aachen, Germany
- 7/81–12/81 Fulbright Scholar, Politecnico di Milano, Milan, Italy

HONORS

Tau Beta Pi, The Engineering Honor Society, 1969
Sigma Xi, The Scientific Research Society, 1975
State of Michigan Teaching Excellence Award, 1991
Michigan State University Vice Provost's Lifelong Education Award, 1996
Fellow, American Society of Mechanical Engineers, 2004
Fellow, American Society for Engineering Education, 2005
FIRST Robotics Bayou Regional Community Champion, 2011
Honorary Alumnus, Tulane University, 2018

MEMBERSHIPS

American Society for Engineering Education, 1986 – lifetime member
American Society of Mechanical Engineers, 1974 – lifetime member
American Academy of Mechanics, 1979 - 2004
International Society for Boundary Elements, 1991 - 2002
Society of Engineering Science, 1980 – 2000

TECHNICAL PUBLICATIONS

D.L. Sikarskie and N. Altiero, The formation of chips in the penetration of elastic-brittle materials, *J. Applied Mechanics*, 40, 791-798 (1973).

N. Altiero and D.L. Sikarskie, Fracture initiation and propagation in elastic-brittle materials subjected to compressive stress fields -- an experimental study, *Mechanics Research Communications*, 1, 225-231 (1974).

N. Altiero and D.L. Sikarskie, Fracture initiation in elastic-brittle materials having nonlinear fracture envelopes, *Intl. J. of Fracture*, 11, 431-440 (1975).

N. Altiero and D.L. Sikarskie, Some experimental observations on the initiation and propagation of fracture in elastic-brittle materials subjected to compressive stress fields, *Developments in Mechanics*, 8, 155-170 (1975).

N. Altiero and D.L. Sikarskie, An integral-equation method applied to penetration problems in rock mechanics, *Boundary-Integral Equation Method: Computational Applications in Applied Mechanics*, AMD-11, ASME, 119- 141 (1975).

N. Altiero, On the edge-fracture problem of rock mechanics, *Mechanics Research Communications*, 3, 345-352 (1976).

N. Altiero and D.L. Sikarskie, Chip formation in anisotropic rock, *Rock Mechanics*, 10, 125-137 (1978).

N. Altiero and D.L. Sikarskie, A boundary-integral method applied to plates of arbitrary plan form, *Computers and Structures*, 9, 163-168 (1978).

A.M. Sadegh and N. Altiero, Solution of the problem of a crack in a finite plane region using an indirect boundary-integral method, *Engineering Fracture Mechanics*, 11, 831-837 (1979).

N. Altiero and S.D. Gavazza, An effective boundary-integral approach for the mixed boundary-value problem of linear elastostatics, *Applied Mathematical Modeling*, 3, 99-104 (1979).

A.M. Sadegh and N. Altiero, A boundary-integral approach to the problem of an elastic region weakened by an arbitrarily-shaped hole, *Mechanics Research Communications*, 6, 167-175 (1979).

B.C. Wu and N. Altiero, A boundary-integral method applied to plates of arbitrary plan form and arbitrary boundary conditions, *Computers and Structures*, 10, 703-707 (1979).

N. Altiero and S.D. Gavazza, On a unified boundary-integral method, *J. of Elasticity*, 10, 1-9 (1980).

W.N. Sharpe, N. Altiero and A.M. Sadegh, Measurements of mixed-mode crack surface displacements and comparison with theory, *J. of Applied Mechanics*, 47, 557-562 (1980). B.C. Wu and N. Altiero, A new numerical method for the analysis of anisotropic thin-plate bending problems, *Computer Methods in Applied Mechanics and Engineering*, 25, 343-353 (1981).

N. Altiero and G. Gioda, An integral equation approach to fracture propagation in rocks, *Rivista Italiana di Geotecnica*, 16, 55-69 (1982).

N. Altiero, Integral equation methods in fracture mechanics, *Engineering Mechanics in Civil Engineering*, Volume 1, 132-135 (1984).

E. Mahajerin and N. Altiero, A unified computer program for influence function methods in elasticity, *Advances in Engineering Software*, 7, 115-120 (1985).

U. Sur and N. Altiero, An alternative integral equation approach for curved and kinked cracks, *International Journal of Fracture*, 38, 25-41 (1988).

N. Liu, N. Altiero and U. Sur, An alternative integral equation approach applied to kinked cracks in finite plane bodies, *Computer Methods in Applied Mechanics and Engineering*, 84, 211-226 (1990).

N. Liu and N. Altiero, Multiple cracks and branch cracks in finite plane bodies, *Mechanics Research Communications*, 18, 233-244 (1991).

N. Liu and N. Altiero, An integral equation method applied to mode III crack problems, *Engineering Fracture Mechanics*, 41, 587-596 (1992).

N. Liu and N. Altiero, A new boundary element method for the solution of steady-state thermoelastic fracture mechanics problems, *Applied Mathematical Modeling*, 16, 618-629 (1992).

X. Li, R. Haut and N. Altiero, An analytical model to study blunt impact response of the rabbit P-F joint, *Journal of Biomechanical Engineering*, 117, 485-491 (1995).

H. Al-Gahtani and N. Altiero, Application of the boundary element method to rubber-like elasticity, *Applied Mathematical Modeling*, 20, 654-661 (1996).

T. Atkinson, R. Haut and N. Altiero, A poroelastic model that predicts some phenomenological responses of ligaments and tendons, *Journal of Biomechanical Engineering*, 119, 400-405 (1997).

T. Atkinson, R. Haut and N. Altiero, Impact induced fissuring of articular cartilage: an investigation of failure criteria, *Journal of Biomechanical Engineering*, 120, 181-187 (1998).

T. Atkinson, R. Haut and N. Altiero, An investigation of biphasic failure criteria for impact induced fissuring of articular cartilage, Technical Note, *Journal of Biomechanical Engineering*, 120, 536-537 (1998).

J. Garcia, N. Altiero and R. Haut, An approach for the stress analysis of transversely isotropic biphasic cartilage under impact load, *Journal of Biomechanical Engineering*, 120, 608-613 (1998).

J. Garcia, N. Altiero and R. Haut, Estimation of in situ elastic properties of biphasic cartilage based on a transversely isotropic hypo-elastic model, *Journal of Biomechanical Engineering*, 122, 1-8 (2000).

GRANTS AND CONTRACTS

Measurements of mixed-mode crack surface displacements and comparison with theory (with W.N. Sharpe), National Aeronautics and Space Administration, Lewis Research Center, NSG-3101, March 1976 through June 1977, \$17,708.

A general formulation of an integral-equation method for application to problems in solid mechanics, Division of Engineering Research, Michigan State University, September 1976 through June 1977.

Damage propagation in rock at high strain rates and elevated temperatures, National Science Foundation, ENG 76-18355, March 1977 through August 1979, \$54,834.

Short course on failure analysis, Consumer's Power Company, December 1980, \$5,286. A numerical model of crack formation and propagation in rock subjected to stress changes and temperature gradients, Council for International Exchange of Scholars and National Research Council of Italy, July 1981 through December 1981, \$5,000.

On the optimal boundary-integral formulation, The Alexander von Humboldt Foundation, January 1982 through August 1982, \$12,000.

Three-dimensional stress analysis of mechanically-fastened components, General Dynamics Corporation, Land Systems Division, DEY 600484, December 1983 through November 1984, \$33,519.

Numerical methods in structural engineering, General Electric Faculty Development Program, A.H. Case Center for Computer-Aided Engineering and Manufacturing, June 1985 through August 1985, \$6,888.

Stress analysis of turbine blade attachments subjected to contact loads, Garrett Turbine Engine Company, June 1985 through December 1985, \$17,869.

An investigation of the mechanical response of layered metallic composites (with F.T. Fink and K. Mukherjee), Center for Composite Materials and Structures, Michigan State University, January 1985 through June 1986.

Short course on advanced strength of materials, Ford Motor Company, July 1988 through June 1989, \$10,400.

Study of the interface/interphase in thick section composites (with J. Asmussen, J. Beck, G. Cloud, M. Hawley, and L. Drzal), State of Michigan Research Excellence Fund, October 1986 through September 1989, \$328,040.

Graduate-level engineering courses, General Motors Technical Center, July 1990 through September 1990, \$10,889.

Fiber reinforced cement-based composite materials (with P. Soroushian, D. Liu, G. Baladi, K. Berglund and Y. Jasiuk), State of Michigan Research Excellence Fund, October 1986 through September 1991, \$578,687.

Science and engineering faculty for the future (with H. Anderson, M. Harrison and K. Hunt), General Electric Foundation, June 1992 through May 1995, \$340,000.

Injury to articular cartilage following blunt impact (with R. Haut and C.E. DeCamp), Centers for Disease Control, June 1992 through May 1995, \$734,928.

Graduate engineering education at Michigan State University (replaced original PI E. Grulke), National Science Foundation, EID90-18669, September 1990 through August 1997, \$1,026,000.

Building a targeted library for NIST/MEP assistance providers (with M.K. Moch), Industrial Technology Institute, January 1997 through April 1998, \$75,000.

Building a communication network linking knowledge providers, small business users and industrial extension agents (with M.K. Moch), Ameritech Corporation, September 1994 through August 1998, \$250,000.

Progressive changes in joint tissue after blunt impact (with R. Haut, C.E. DeCamp and M.A. Flynn), Centers for Disease Control and Prevention, September 1995 through August 1998, \$891,063.

Building a communication network linking knowledge providers, small business users and industrial extension agents (with M.K. Moch), ARPA/NIST Technology Reinvestment Project, National Aeronautics and Space Administration, Cooperative Agreement Number NCC7-2, Sept 1994 through Mar 1999, \$2,196,000.

Building a communication network linking knowledge providers, small business users and industrial extension agents (with M.K. Moch) State of Michigan Department of Commerce, September 1994 through March 1999, \$250,000.

Building a communication network linking knowledge providers, small business users and industrial extension agents (with M.K. Moch), The Edward Lowe Foundation, September 1995 through March 1999, \$375,000.

Blunt knee insults causing a post-traumatic osteoarthritis (with R. Haut), Centers for Disease Control and Prevention, September 1998 through May 2000, \$600,000.

Materials Science Clean Room Facility at Tulane University, Department of Energy, September 2008 through September 2010, \$2,074,000.

Wet Lab Research and Innovation Center, Economic Development Administration, Department of Commerce, May 2011 through September 2012, \$1,200,000.

REVIEWED CONFERENCE PRESENTATIONS (PRESENTER LISTED FIRST)

N. Altiero and D.L. Sikarskie, The formation of chips in the penetration of elastic-brittle materials, 1973 Applied Mechanics Western Conference, Menlo Park, California.

N. Altiero and D.L. Sikarskie, Fracture initiation in elastic-brittle materials having nonlinear fracture envelopes, Seventh U.S. National Congress of Applied Mechanics, Boulder, Colorado, 1974.

N. Altiero and D.L. Sikarskie, Some experimental observations on the initiation and propagation of fracture in elastic-brittle materials subjected to compressive stress fields, Fourteenth Midwestern Mechanics Conference, Norman, Oklahoma, 1975.

D.L. Sikarskie and N. Altiero, An integral-equation method applied to penetration problems in rock mechanics, 1975 ASME Applied Mechanics National Conference, Troy, New York.

N. Altiero and D.L. Sikarskie, Chip formation in anisotropic rock, ASME Energy Technology Conference, Houston, Texas, 1977.

N. Altiero and D.L. Sikarskie, A boundary-integral method applied to plates of arbitrary plan form, International Symposium on Innovative Numerical Analysis in Applied Engineering Science, Paris, France, 1977.

N. Altiero and S.D. Gavazza, An effective boundary-integral approach for the mixed boundary-value problem of linear elastostatics, International Seminar on Recent Advances in Boundary Element Methods, Southampton, England, 1978.

A.M. Sadegh and N. Altiero, A boundary-integral approach to the problem of an elastic region weakened by an arbitrarily-shaped hole, Eighth U.S. National Congress of Applied Mechanics, Los Angeles, California, 1978.

S.D. Gavazza and N. Altiero, On a unified boundary-integral method, Eighth U.S. National Congress of Applied Mechanics, Los Angeles, California, 1978.

N. Altiero, W.N. Sharpe and A.M. Sadegh, Measurements of mixed-mode crack surface displacements and comparison with theory, Fifteenth Midwestern Mechanics Conference, Chicago, Illinois, 1977.

N. Altiero and B.C. Wu, A new numerical method for the analysis of anisotropic thin-plate bending problems, Fifteenth International Congress of Theoretical and Applied Mechanics, Toronto, Canada, 1980.

N. Altiero, Integral equation methods in fracture mechanics, Fifth ASCE Engineering Mechanics Division Specialty Conference, Laramie, Wyoming, 1984.

R. Haut, D. Shelp, X. Li and N. Altiero, Studies on the impact response of articular cartilage to blunt impact, Second World Conference on Injury Control, Atlanta, Georgia, 1993.

R. Haut, R.T. Dalimonte, X. Li and N. Altiero, Mechanical damage in the human P-F joint after blunt impact loading on the knee, Second World Congress of Biomechanics, Amsterdam, The Netherlands, podium presentation, 1994.

R. Haut, X. Li and N. Altiero, Response of a small animal P-F joint to blunt impact, Second World Congress of Biomechanics, Amsterdam, The Netherlands, poster presentation, 1994.

J. Garcia, W. Newberry, P. Atkinson, R. Haut and N. Altiero, Comparison of stresses in human and rabbit knees as they pertain to injuries observed during impact experiments, 1997 ASME/AIChE/ ASCE Summer Bioengineering Conference, Sunriver, Oregon, 1997.

T. Atkinson, R. Haut and N. Altiero, A microstructural poroelastic model for patellar tendon, 1997 ASME/AIChE/ASCE Summer Bioengineering Conference, Sunriver, Oregon, 1997.

P. Atkinson, J. Garcia, N. Altiero and R. Haut, The influence of impact interface on human knee injury: implications for instrument panel design and the lower extremity injury criterion, 41st STAPP Car Crash Conference, Lake Buena Vista, Florida, 1997.

R. Haut, P. Atkinson, J. Garcia and N. Altiero, Impact model for the human patellofemoral joint, Third World Congress of Biomechanics, Sapporo, Japan, 1998.

B. Ewers, J. Garcia, N. Altiero and R. Haut, Modeling of the rabbit's patello-femoral joint for studies of acute blunt injury to the knee, 1999 ASME Summer Bioengineering Conference, Annual Meeting, Big Sky, Montana, 1999.

B. Ewers, D. Dvoracek-Driksna, M. Orth, N. Altiero and R. Haut, Matrix damage and chondrocyte death in articular cartilage depends on loading rate, podium presentation, 46th Annual Meeting, Orthopaedic Research Society, 2000.

NON-REVIEWED CONFERENCE PRESENTATIONS (PRESENTER LISTED FIRST)

N. Altiero and M. Khodadad, Characterization of the interior of an inhomogeneous body using surface temperature and/or heat flux measurements, Third Annual Inverse Problems in Engineering Seminar, East Lansing, Michigan, 1990.

D. Shelp, W. Newberry, X. Li, R. Dalimonte, C. DeCamp, N. Altiero and R. Haut, Tissue damage resulting from blunt impact on the knee: animal and cadaver studies, Fourth CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1994.

W. Newberry, P. Atkinson, X. Li, C. DeCamp, N. Altiero and R. Haut, Tissue injuries resulting from blunt impact on the knee, Fifth CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1995.

P. Atkinson, W. Newberry, T. Staton, J. Garcia, N. Altiero and R. Haut, Animal and human studies on injury mechanisms during blunt insult to the knee, Sixth CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1996.

P. Atkinson, J. Garcia, R. Haut and N. Altiero, Impact experiments on the knee: the influence of padding and flexion angle, Seventh CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1997.

W. Newberry, J. Garcia, N. Altiero and R. Haut, Post-traumatic osteoarthritis: a stress-based criterion, Seventh CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1997.

T. Atkinson, N. Altiero and R. Haut, An investigation of failure criteria for impact induced fissuring of articular cartilage, Seventh CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1997.

J. Garcia, N. Altiero and R. Haut, An approach for the analysis of anisotropic articular cartilage under impact load, Seventh CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1997.

W. Newberry, J. Garcia, N. Altiero and R. Haut, Alteration of the stress state in subchondral bone due to a padded interface and the effect on subsequent chronic remodeling in an in vivo animal model of post-traumatic osteoarthritis, Eighth CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1998.

P. Atkinson, J. Garcia, H. Ali, N. Altiero and R. Haut, Variation of human knee impact injury thresholds and location with flexion angle and impact interface, Eighth CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1998.

J. Garcia, N. Altiero and R. Haut, A method to determine material properties of biphasic cartilage based on a transversely isotropic model, Eighth CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1998.

P. Atkinson, N. Altiero, R. Haut, C. Eusebi, V. Maripudi, T. Hill and K. Sambatur, A proposed model to transform cadaver knee injury criteria to the Hybrid III dummy, Eighth CDC Injury Prevention through Biomechanics Symposium, Detroit, Michigan, 1998.

INVITED SEMINAR PRESENTATIONS

Chip formation in rock, Twin Cities Mining Research Center, U.S. Bureau of Mines, Minneapolis, Minnesota, 17 May 1974.

Fracture initiation and propagation in nonuniform compressive stress fields, University of Houston, Department of Mechanical Engineering, Houston, Texas, 22 May 1975.

Fracture initiation and propagation in nonuniform compressive stress fields, Illinois Institute of Technology Research Institute, Chicago, Illinois, 10 June 1975.

Damage propagation in elastic-brittle materials subjected to quasi-static load, Michigan State University, Engineering Mechanics Council, East Lansing, Michigan, 9 November 1976.

Mixed-mode crack surface displacements, National Aeronautics and Space Administration, Lewis Research Center, Cleveland, Ohio, 30 June 1977.

Boundary integral methods applied to crack problems, Cornell University, Department of Civil Engineering, Ithaca, New York, 2 June 1978.

On the boundary integral method, General Motors Technical Center, Mathematics Department, Warren, Michigan, 8 March 1979.

Anisotropic plates and fracture mechanics, General Motors Technical Center, Engineering Mechanics Department, Warren, Michigan, 3 June 1980.

Physical interpretation of some boundary element techniques, Politecnico di Milano, Istituto di Scienza e Tecnica delle Costruzioni, Milan, Italy, 29 October 1981.

Integral methods in fracture mechanics, Politecnico di Milano, Istituto di Scienza e Tecnica delle Costruzioni, Milan, Italy, 10 December 1981.

Modeling of cracks using dislocation dipoles, University of Technology of North-Rhine Westphalia, Institut für Technische Mechanik, Aachen, Germany, 6 July 1982.

Coupling of the finite element and boundary integral methods, Michigan State University, MMM Society, 26 February 1985.

Mechanics research applied to materials problems, Michigan State University, Materials Research Symposium, 9 May 1985.

Coupling of the finite element and boundary integral methods, Garrett Turbine Engine Company, Phoenix, Arizona, 11 June 1985.

An introduction to integral-equation methods, Garrett Turbine Engine Company, Phoenix, Arizona, 11 June 1985.

Application of the boundary element method to contact of anisotropic bodies, Garrett Turbine Engine Company, Phoenix, Arizona, 12 December 1985.

Introduction to the boundary element method, Engineering Technology Associates, Troy, Michigan, 27 June 1986.

Stress analysis of turbine blade attachments subjected to contact loads, Michigan State University, AIAA Aerospace Seminar Series, 29 September 1986.

On the relationship between the finite element and boundary element methods, Ford Motor Company, Dearborn, Michigan, 8 December 1989.

Finite element analysis: the engineering perspective, FEA Executive Briefing, Research and Technology Institute, Grand Rapids, Michigan, 11 November 1991.

An alternative boundary element formulation for fracture mechanics problems, Michigan Technological University, Houghton, Michigan, 12 October 1993.

Alterations in the mechanical properties of bone underlying articular cartilage in a traumatized joint, Michigan State University, 5 November 1997.

NON-TECHNICAL ARTICLES

Partnerships: enriching our academic research endeavors, Currents: College of Engineering Annual Academic and Research Report, Michigan State University, 70, 2-3 (1992).

The future of engineering graduate education, The Graduate Post, Michigan State University, 5, 12-13 (1997).

The tenure-track years, ASEE Prism, 10(1), 42 (2000).

Tapping Uncle Sam's coffers, ASEE Prism, 10(4), 35 (2000).

Grip and win, ASEE Prism, 10(7), 39 (2001).

NON-TECHNICAL PRESENTATIONS

Should undergraduate mechanics programs seek accreditation?, Twenty-Fifth Annual Meeting of Michigan Teachers of Mechanics, East Lansing, Michigan, 1986.

Why graduate school?, Michigan State University ASCE Student Chapter, East Lansing, Michigan, 15 May 1991.

Technology transfer mechanisms at Michigan State University, Mid-Michigan Technology Council, East Lansing, Michigan, 17 September 1992.

Nuts and bolts of research administration, ASEE Engineering Research Council Workshop and Forum, Washington, D.C., 28 February 1993.

The future of engineering lifelong education, Tau Beta Pi Michigan Alpha Chapter, East Lansing, Michigan, 13 April 1993.

Building a communication network linking knowledge providers, small business users and industrial extension agents in Michigan, MSU Fall Extension Conference, East Lansing, Michigan, poster presentation, 1993.

Information super highway, Technology Briefing Series, Research and Technology Institute of West Michigan, Grand Rapids, Michigan, 15 February 1994.

Using the internet for engineering research administration, ASEE Engineering Research Council Workshop and Forum, Washington, D.C., 27 February 1994.

A College of Engineering perspective on university technology transfer and outreach, Hazardous Substance Research Center Technology Transfer Annual Meeting, Sea Island, Georgia, 21 November 1994.

Total quality business and education partnership (with Ronald Smith and Fred Beaufait), Governor's School-to-Work Conference, Lansing, Michigan, 22 June 1995.

Use of the internet in support of engineering research planning and administration, ASEE Engineering Research Council Workshop and Forum, Washington, D.C., 3 March 1996.

Engineering research: internet resources, American Society for Engineering Education Annual Conference and Exposition, Washington, D.C., 25 June 1996.

Update: world wide web and research administration, ASEE Engineering Research Council Workshop and Forum, Washington, D.C. 23 February 1997.

Online information on funding sources, American Society for Engineering Education Annual Conference and Exposition, Milwaukee, Wisconsin, 17 June 1997.

Creating a new kind of engineer for a new kind of engineering (with Elaine Chapman-Moore and Gerardo A. Velazquez), Engineering Imagination Fall 2000 Unigraphics Users Group Conference, Orlando, Florida, 26 September 2000.

International Trade in Arms Regulations (ITAR) and their impact on university space-related research, ASEE Engineering Research Council Summit, Workshop and Forum, Washington, D.C., 24 February 2002.

The conversion of info, bio, and nanotechnologies: the new industrial revolution, Tulane University Alumni Association, Santa Fe, New Mexico, 3 December 2003.

Engineering and the new industrial revolution, Leah Goldman Karp Lecture Series, Metairie Park Country Day School, Louisiana, 27 April 2004.

The conversion of info, bio, and nanotechnologies: the new industrial revolution, Tulane University Alumni Association, Houston, Texas, 17 June 2004.

The future of aeronautics research at NASA, ASEE Engineering Deans Institute, Tucson, Arizona, 13 April 2005.

Engineering and engineering technology education, 9th Annual Tulane Engineering Forum, New Orleans, Louisiana, 3 April 2009.

Guest lecture, Tulane course INTU 2000, Seeking Knowledge: How Various Disciplines Recognize Truth, 19 November 2010.

Survival To Renewal: How a University and a City Recovered from Hurricane Katrina, Edison, Lecture, University of Notre Dame, 9 May 2012.

Engineering Education Presentations, National Engineers Week, US Army Corps of Engineers, New Orleans District, 19 February 2014, 25 February 2015.

CONFERENCE PARTICIPATION

Applied Mechanics Western Conference, ASME, Menlo Park, California, 1973, speaker.
American Society of Mechanical Engineers Annual Winter Meeting, Detroit, Michigan, 1973.
Seventh U.S. National Congress of Applied Mechanics, Boulder, Colorado, 1974, speaker.
Fourteenth Midwestern Mechanics Conference, Norman, Oklahoma, 1975, speaker.
Fourteenth International Congress of Theoretical and Applied Mechanics, Delft, The Netherlands, 1976.
Fifteenth Midwestern Mechanics Conference, Chicago, Illinois, 1977, speaker.
International Symposium on Innovative Numerical Analysis in Applied Engineering Science, Paris, France, 1977, speaker.
National Science Foundation Workshop on Mechanics Problems Associated with the Mining and Processing of Energy-Related Minerals, Asilomar, California, 1977, invited participant.
American Society of Mechanical Engineers Energy Technology Conference and Exhibition, Houston, Texas, 1977, speaker.
International Seminar on Recent Advances in Boundary Element Methods, Southampton, England, 1978, speaker.
International Union of Theoretical and Applied Mechanics Symposium on Variational Methods in the Mechanics of Solids, Evanston, Illinois, 1978, invited participant.
Sixteenth Annual Meeting of the Society of Engineering Science, Evanston, Illinois, 1979.
NASA-Lewis University Workshop on Turbine Engine Structures, Cleveland, Ohio, 1979, invited participant.
Fifteenth International Congress of Theoretical and Applied Mechanics, Toronto, Canada, 1980, speaker.
Seventeenth Midwestern Mechanics Conference, Ann Arbor, Michigan, 1981, session chairman.
Fifth ASCE Engineering Mechanics Division Specialty Conference, Laramie, Wyoming, 1984, invited speaker.
North American Congress on Biomechanics, Montreal, Canada, 1986.
Fourth Advanced Materials and Mechanics Workshop, Traverse City, Michigan, 1986, organizer and session chairman.
Twenty-Fifth Annual Meeting of Michigan Teachers of Mechanics, East Lansing, Michigan, 1986, invited speaker.
International Union of Theoretical and Applied Mechanics Symposium on Advanced Boundary Element Methods, San Antonio, Texas, 1987, invited participant. ASME Applied Mechanics, Bioengineering and Fluids Engineering Conference, Cincinnati, Ohio, 1987.
Fourth Annual ASM/ESD Advanced Composites Conference/Exposition, Dearborn, Michigan, 1988.

Fourth International Conference on Boundary Element Technology (BETECH 89), Windsor, Canada, 1989.

Twenty-First Midwestern Mechanics Conference, Houghton, Michigan, 1989, session organizer and chairman.

Twenty-Sixth Annual Meeting of the Society of Engineering Science, Ann Arbor, Michigan, 1989, session chairman.

Fifth Technical Conference of the American Society for Composites, East Lansing, Michigan, 1990, session chairman.

Third Annual Inverse Problems in Engineering Seminar, East Lansing, Michigan, 1990, speaker.

Chrysler Technology Exposition, Auburn Hills, Michigan, 1992, invited participant.

Gearing Up, The Manufacturing Forum, Saginaw, Michigan, 1992, invited exhibitor.

MSU Fall Extension Conference, East Lansing, Michigan, 1993, poster presentation.

Michigan Association for Adult and Continuing Education (MAACE) Annual Conference, East Lansing, Michigan, 1994, invited panelist.

National Technological University Tenth Annual Conference, Fort Collins, Colorado, 1994, invited panelist.

Manufacturing Extension Partnership LINKS Workshop, National Institute for Standards and Technology, Gaithersburg, Maryland, 1994, invited participant.

Fifth Hazardous Substance Research Center Technology Transfer Annual Meeting, Sea Island, Georgia, 1994, invited speaker.

Governor's School-to-Work Conference, Lansing, Michigan, 1995, speaker.

BIOCAD Organizational Conference, Detroit, Michigan, 1995, invited participant.

Capstone Symposium of the W.K. Kellogg Foundation – Michigan State University Lifelong Education Grant, East Lansing, Michigan, 1995, session organizer, session chairman and moderator.

Total Quality Forum VII, Pittsburgh, PA, 1996, invited participant.

Autofact '96, Society of Manufacturing Engineers Conference and Exposition, Detroit, Michigan, 1996, exhibitor.

Network for Excellence in Manufacturing Online Internet Catalogers Workshop, NASA/UMI, East Lansing, Michigan, co-organizer, 1994 – 1995, 1997.

Centers for Disease Control Injury Prevention through Biomechanics Symposia, 1994 – 1998.

TMS Fall Meeting, Chicago, Illinois, 1998.

American Society of Mechanical Engineers Mechanics and Materials Conference, Blacksburg, Virginia, 1999.

Engineering Imagination, Unigraphics Users Group Conference, Orlando, Florida, 2000, speaker.

Engineering Research Council Workshop and Forum, American Society for Engineering Education, 1991 – 2003, invited speaker, 1993, workshop organizer, session chairman and speaker, 1994, invited speaker and panelist, 1996, invited speaker and panelist, 1997, workshop organizer and panelist, 1998, workshop organizer, 1999, summit and workshop co-chairman, 2000, invited speaker, 2002.

International Mechanical Engineering Congress and Exposition, American Society of Mechanical Engineers, 1995 – 1997, 1999, 2002.

Rebuilding the New Orleans Region: Infrastructure Systems and Technology Innovation Forum, New Orleans, member of the organizing committee, 2006.

American Society for Engineering Education Conference for Industry and Education Collaboration (CIEC), invited speaker and panelist, 2008.

Center for the Integration of Research, Teaching, and Learning (CIRTL) Forum, Madison, Wisconsin, invited speaker and panelist, 2008.

National Science Teachers Association (NSTA) Regional Conference, New Orleans, session chair, 2011.

Association of American Engineering Societies (AAES) Annual Policy Workshop and Board Meeting, 2014.

Association of American Universities (AAU) Arts and Sciences Deans Conference, speaker, 2009-2016, host, 2014.

American Society for Engineering Education Annual Conference, 1994 - 2009, 2011-2017,

program coordinator, session chairman and speaker, 1996, session chairman and speaker, 1997, session chairman, 1998, panelist, 2002, 2008, program coordinator, 2012, moderator and speaker, 2014, 2015.

Engineering Deans Council Public Policy Colloquium, American Society for Engineering Education, 2001– 2009, 2011- 2017, state organizer, 2003-2009, 2011-2015, session chairman, 2009.

Colonial Group Arts and Sciences Deans Conference, speaker, 2014, 2016-2017, host 2017.

Tulane Engineering Forum, New Orleans, co-chair of organizing committee, 2000 – 2004, 2006 – 2018, speaker, 2009

Engineering Deans Institute, American Society for Engineering Education, 2000 - 2013, 2015 – 2017, chairman of the organizing committee, 2004, 2018, session chairman, 2004, 2008, organizing committee 2004, 2010-2013, 2018.

REVIEWS: TECHNICAL PAPERS

Applied Mechanics Reviews (8)
Engineering Analysis with Boundary Elements (2)
International Journal of Fracture (6)
International Journal of Solids and Structures (8)
Inverse Problems in Engineering (1)
Journal of Applied Mechanics (4)
Journal of Biomechanical Engineering (4)
Journal of Elasticity (1)
Journal of Engineering Mechanics Division, ASCE (1)
Journal of Experimental Mechanics (2)
Journal of Heat Transfer (3)
Materials Science and Engineering (8)
Mechanics Research Communications (2)
Petroleum Division, ASME (1)
The Metallurgical Society of AIME (3)

REVIEWS: BOOKS

Addison-Wesley Publishing Company (2)
Brooks-Cole Publishing Company (2)
Elsevier Sequoia Publishers (1)
Houghton-Mifflin Company (1)
Irwin Publishing (5)
Martinus-Nijhoff Publishers (1)
McGraw-Hill Book Company (9)
Macmillan Publishing Company (6)

REVIEWS: PROPOSALS

Air Force Office of Scientific Research (2)
National Science Foundation (11 individual; 12 panel)
MSU All-University Research Initiation (12)
MSU Intramural Research Grant Program (3)
MSU Center for Fundamental Materials Research (1)
MSU Composite Materials and Structures Center (36)
MSU Division of Engineering Research (5)
City University of New York Research Awards (1)
State of Louisiana Board of Regents Speaking of Science (24)
State of Michigan Research Fund (1)
U.S. Civilian Research and Development Foundation (1)

PHD DISSERTATIONS DIRECTED

Alireza Mirmohamad Sadegh, On the problem of a finite linear-elastic region containing a hole of arbitrary shape: a boundary-integral approach, Michigan State University, 1978.

Benjamin Chin-wen Wu, A new method for the solution of anisotropic thin-plate bending problems, Michigan State University, 1980.

Enayat Mahajerin, Improvement of the boundary-integral method for plane elastostatics using combinations of singularities and analytic integration, Michigan State University, 1981.

Gary J. Burgess, The numerical treatment of body forces, dislocation fields, and arrays of cracks, Michigan State University, 1981.

David H. Harry, Modifications of the boundary-element method for application to bending of layered composites, Michigan State University, 1982.

Ukhwan Sur, A numerical method for the treatment of kinked cracks in finite bodies, Michigan State University, 1987.

Bijhan Khatib-Shahidi, Estimation of the force on a screw dislocation in finite elasticity using the J-integral (co-advisor: R. Abeyaratne), Michigan State University, 1987.

Younghan Youn, Determination of effective elastic properties and thermal residual stresses in fiber-reinforced composites by the boundary element method, Michigan State University, 1988.

Mahmud Khodadad, Characterization of the interior of an inhomogeneous body using surface measurements, Michigan State University, 1990.

Nengquan Liu, A numerical method for the solution of plane steady-state thermoelastic fracture mechanics problems, Michigan State University, 1991.

Husain J. Algahtani, Application of the boundary element method to finite elasticity, Michigan State University, 1992.

Xiaowei Li, A criterion to predict damage in articular cartilage due to blunt impact (co-advisor: R. Haut), Michigan State University, 1994.

Jose J. Garcia, A transversely isotropic hypo-elastic biphasic model of articular cartilage under impact loading, Michigan State University, 1998.

PHD DISSERTATION COMMITTEES: MICHIGAN STATE UNIVERSITY

Jing Chang, advisor: R.Wm. Little, 1978.
Stephen Zayac, advisor: R. Summitt, 1979.
Susan Schuon, advisor: K.N. Subramanian, 1980.
Richard Warren, advisor: R.Wm. Little, 1980.
Ali Barkhordari, advisor: W.A. Bradley, 1980.
Tsfai Goitom, advisor: G.Y. Baladi, 1981.
Jalil Rahimzadehhanachi, advisor: W.A. Bradley, 1981.
Somnuek Paleebut, advisor: G.L. Cloud, 1981.
Mohammed Ghobadi, advisor: J.F. Martin, 1983.
Sweanum Soo, advisor: O. Andersland, 1983.
Khaled Y. Medallah, advisor: R.K. Wen, 1984.

Jong Y. Lee, advisor: K.N. Subramanian, 1985.
 Tong C. Lee, advisor: K.N. Subramanian, 1985.
 JaeSung Yang, advisor: R. Abeyaratne, 1985.
 DongTeak Chung, advisor: C.O. Horgan, 1985.
 Shekhar Subramoney, advisor: K. Subramanian, 1986.
 Keyoung Chun, advisor: R. Hubbard, 1986.
 Peter Vafaedes, advisor: C.O. Horgan, 1987.
 Hassan Almoussawi, advisor: O. Andersland, 1988.
 Mary C. Verstraete, advisor: R. Soutas-Little, 1988.
 Bambang Suhendro, advisor: R.K. Wen, 1989.
 Tadeusz Stawiarski, advisor: J.F. Martin, 1989.
 Cha-Don Lee, advisor: P. Soroushian, 1989.
 Seong-Ho Hong, advisor: D. Liu, 1990.
 Zhen Hua Song, advisor: T. Pence, 1990.
 Stephen Belkoff, advisor: R. Haut, 1990.
 R.U. Vaidya, advisor: K.N. Subramanian, 1991.
 Yihong Tong, advisor: I. Jasiuk, 1991.
 Youngman Kim, advisor: E. Case, 1991.
 C.Y. Lee, advisor: D. Liu, 1991.
 Raymond Brodeur, advisor: R. Soutas-Little, 1991.
 Chin-Chen Chiu, advisor: E. Case, 1991.
 W.J. Lee, advisor: E. Case, 1991.
 Xianqiang Lu, advisor: D. Liu, 1991.
 M.K. Lee, advisor: I. Jasiuk, 1991.
 Mohammed Kouider, advisor: I. Jasiuk, 1991.
 A.M. Alhamad, advisor: R. Wen, 1992.
 S.R. Marikunte, advisor: P. Soroushian, 1992.
 J.C. Lee, advisor: K.N. Subramanian, 1992.
 Zahir Shah, advisor: P. Soroushian, 1993.
 Jiehliang Lin, advisor: T. Pence, 1993.
 Atef Tlili, advisor: P. Soroushian, 1993.
 A. Alhozaimy, advisor: P. Soroushian, 1993.
 Mohamad Naja, advisor: R. Harichandran, 1993.
 Xiaoyu Li, advisor: D. Liu, 1994.
 Yuen Cheong Yip, advisor: R. Averill, 1996.
 Yong-Bae Cho, advisor: R. Averill, 1997.
 Venkateshwar Rao Aitharaju, advisor: R. Averill, 1997.
 Chienhom Lee, advisor: D. Liu, 1998.
 Patrick Atkinson, advisor: R. Haut, 1998.
 Theresa Staton Atkinson, advisor: R. Haut, 1998.
 Marilyn Wulfekuhler, advisor: W. Punch, 1998.
 Jose Merodio, advisor: T. Pence, 1999.

MS DISSERTATIONS DIRECTED

Jose Jaime Garcia, Coupling of the finite element and boundary element methods for the solution of plane problems in linear elasticity, Michigan State University, 1984.

G. Curtis Bennett, An automated procedure for contact problems with and without frictional effects utilizing the boundary integral method, Michigan State University, 1988.

David C. Zwier, A comparative study of boundary element shape functions for linear elastostatics, Michigan State University, 1989.

Javad Katibai, On the application of the boundary element method to orthotropic elasticity, Michigan State University, 1989.

Patricia Soutas-Little, A parametric study of Parkinsonian gait, Michigan State University, 1990.

MS NON-DISSERTATION STUDENTS: MICHIGAN STATE UNIVERSITY

Gary J. Burgess, 1977.
Kenneth B. Miller, 1980.
Martin J. Imhof, 1982.
Mohammad K. Zarbinian, 1983.
Daniel D. Budney, 1984.
Hanan A. Ahmad, 1984.
Jin Shown Shyr, 1984.
Young Giu Kim, 1987.
Karie M. Howe, 1987.
Michael D. Gramza, 1988.
Paul B. Smith, 1988.
James Shavrnoch, 1990.
Atef Tlili, 1994.

MS DISSERTATION COMMITTEES: MICHIGAN STATE UNIVERSITY

Michael S. Sacks, advisor: R. Hubbard, 1983.
Mary C. Verstraete, advisor R. Soutas-Little, 1984.
Trena Markus, advisor: R. Soutas-Little, 1986.
Stephen Belkoff, advisor: R. Soutas-Little, 1986.
Glenn C. Beavis, advisor: R. Soutas-Little, 1986.
Kathy Cowling, advisor: R. Soutas-Little, 1987.
Chin-Chen Chiu, advisor: E. Case, 1987.
Raymond Brodeur, advisor: R. Soutas-Little, 1988.
Michael Schwartz, advisor: R. Soutas-Little, 1988.
Lisa M. Schutte, advisor: R. Soutas-Little, 1988.
Chien Hom Lee, advisor: D. Liu, 1988.
Abdeslam Reklaoui, advisor: P. Soroushian, 1988.
Allen Magolan, advisor: M. Gandhi, 1989.
William A. Haas, advisor: R. Hubbard, 1989.
Jung Ki Lee, advisor: M. Gandhi, 1989.
Mehmet Gulgun, advisor: E. Case, 1990.
Robert Doane, advisor: R. Haut, 1990.
Makoto Yohena, advisor: P. Soroushian, 1990.
Ying Yu, advisor: A. Sliker, 1990.
Thad M. Ide, advisor: R. Haut, 1992.
Subrato Dhar, advisor: G. Cloud, 1992.
Dennis Shelp, advisor: R. Haut, 1994.

MS NON-DISSERTATION COMMITTEES: MICHIGAN STATE UNIVERSITY

Vang Neng Kue, advisor: D. Liu, 1989.
Hong Xu, advisor: D. Liu, 1990.
Tom Ninh, advisor: D. Liu, 1990.

BS SENIOR DISSERTATIONS AND PROJECTS DIRECTED

Carol Meyers, Interaction between persistent slip bands and modified surface layers during fatigue (co-advisor: D. Grummon), Michigan State University, 1988.

Lisa M. Ward, Use of the finite element method to determine thermal stresses in polyethylene sheets (co-advisor: F.T. Fink), Michigan State University, 1988.

Odelya B. Levy, Engineering management: a proposal for Tulane University, Tulane University, 2003.

Anna Brahm, Nicole Lehrer, Amy LaVelle, Justin Lipner, Biomedical Engineering Senior Design Project (co- advisor: C. Walker), Tulane University, 2007.

Samuel C. Sklare, Tulane University, 2013.

GRADUATE COURSES TAUGHT (Times taught, total students taught, average rating on a 4.0 scale.)

Finite Element Method	(5, 142, 3.80)
Continuum Mechanics	(3, 56, 3.93)
Advanced Strength of Materials	(8, 110, 3.93)
Fracture Mechanics and Fatigue	(9, 136, 3.93)
Boundary Element Method	(4, 72, 3.88)
Theory of Elastic Stability	(5, 40, 3.98)

UNDERGRAD COURSES TAUGHT (Times taught, total students taught, average rating on a 4.0 scale.)

Statics	(9, 538, 3.72)
Mechanics of Deformable Solids	(7, 266, 3.62)
Dynamics	(21, 897, 3.75)
Intro. to Elasticity and Plasticity	(1, 11, 3.70)
Energy Methods and Finite Elements	(9, 116, 3.84)
Dynamics and Stability	(5, 52, 3.74)

TELEVISED AND VIDEOTAPED COURSES TAUGHT

Finite Element Method, Michigan Information Technology Network (MITN), Fall, 1989.

Finite Element Method, recorded Spring, 1988.

Boundary Element Method, recorded Winter, 1989.

Introduction to Fracture Mechanics, recorded Fall, 1988.

OFF-CAMPUS COURSES TAUGHT

Finite Element Method, AC Spark Plug, Flint, Michigan, Fall, 1986.

Finite Element Method, AC Spark Plug, Flint, Michigan, Fall, 1988.

Structural Analysis, General Motors Technical Center, Warren, Michigan, Summer, 1990.

SHORT COURSES TAUGHT

A Short Course on Failure Analysis, Consumer's Power Company, Jackson, Michigan, 1980.

Advanced Mechanics of Deformable Solids, Ford Motor Company, Dearborn, Michigan, 1989.

EXTERNAL COMMITTEES

Consortium for Engineering Education for West Michigan, Board of Directors, 1991-1992, Secretary, 1991, Chairman, 1992.

Council on Research and Technology (CORETECH) Operations Group, 1991-1993.

Michigan Technology Council Board of Directors, 1990-1993.

Michigan Information Technology Network (MITN) Providers Council, 1992-1994.

Michigan Sea Grant Policy Committee, 1991-1994.

MERRA Board of Trustees, 1992-1998, Executive Committee, 1996-1998.

National University Materials Council, 1998-2000.

Association of Chairs of Departments of Mechanics, 1998-2000.

Partnership for the Advancement of CAD/CAM/CAE Education (PACE) Performance Metrics Committee, Chairman, 2000-2001.

ASME Task Force on Federal Engineering Research Funding Trends, 2001-2002.

Governor's Advisory Task Force on Funding and Efficiency of the Louisiana Department of Environmental Quality, 2002-2003.

National Institute for Global Environmental Change (NIGEC) Board of Trustees, 2000-2005, Chairman, 2002- 2005.

NASA Aeronautics Research Advisory Committee, 2004-2006; Chairman, Council of Deans Subcommittee, 2004-2006.

ABET Engineering Accreditation Commission Program Evaluator, 2002-2008.

Louisiana Governor's Emergency Preparedness Advisory Council, 2007-2008.

Board of Directors, Wink Industries, LLC, 2008-2009.

Board of Trustees, Southeastern Universities Research Association (SURA), 2007-2010.

ASEE Engineering Research Council, 1990-2014, Executive Board, 1994-2004, Vice Chairman, 1998-2000, Chairman, 2000-2002, Immediate Past Chairman, 2002-2004.

Louisiana Innovation Council, 2009-2015.

ASEE Board of Directors, 2000-2002, 2011-2016, Vice President for Institutional Councils, 2001-2002, 2011- 2012, President-Elect, 2013-2014, President, 2014-2015, Immediate Past President, 2015-2016.

Board of Trustees, Advocates for Science and Math Education (Sci High), 2011-2016.

Louisiana Experimental Program to Stimulate Competitive Research (EPSCOR) Committee, 2003-2016.

Nominating Committee for the Southeast Louisiana Flood Protection Authorities, 2006-2016

Board of Directors, Alliance for Science and Technology Research in America (ASTRA), 2013-2016.

Louisiana Universities Marine Consortium (LUMCON) Executive Board, 2012-2016.

Louisiana Council of Engineering Deans, 2000-2017, Chairman, 2003-2005, 2011-2012.

ASEE Engineering Deans Council, 2000-2017, Executive Board, 2005-2015, Vice Chairman, 2009-2011, Chairman, 2011-2013, Immediate Past Chairman, 2013-2015.

AAU Arts and Sciences Deans, 2006-2017. .

Colonial Group Deans, 2013-2017

Board of Directors, New Orleans Bioinnovation Center, 2016-2017.

Louisiana Board of Regents Advisory Council, 2016 – 2017.

Board of Directors, For Inspiration and Recognition of Science and Technology (FIRST) in Louisiana-Mississippi, 2006-2017.

Board of Directors, Greater New Orleans Science, Technology, Engineering, and Mathematics (STEM) Initiative, 2007-present, President-Elect, 2016-present.

Board of Directors, Greater New Orleans Science and Engineering Fair, 2007-present, President, 2018-present.

Board of Directors, Foundation for Science and Mathematics Education, 2018-present.

Executive Advisory Council, For Inspiration and Recognition of Science and Technology (FIRST) in Louisiana-Mississippi, 2018-present.

UNIVERSITY STANDING COMMITTEES

Advisory-Consultative Committee on International Studies and Programs, Michigan State University, 1983- 1987.
Student-Faculty Judiciary, Michigan State University, 1986-1987.
CCSAC Research Computing Subcommittee, Michigan State University, 1989-1990.
Associate/Assistant Deans Group: Outreach, Michigan State University, 1992-1996.
Associate/Assistant Deans Group: Graduate Studies, Michigan State University, 1990-1998.
University Research Council, Michigan State University, 1990-1998.
Affirmative Action Graduate Financial Assistance Program Operations Committee, Michigan State University, 1990-1998.
University Materials Advisory Committee, Michigan State University, 1990-1998, Chairman, 1990-1992, 1994-1996.
Environmental Health and Safety Operations Committee, Tulane University, 2001-2012, Chairman, 2001-2006.
President's Cabinet, Tulane University, 2016.
Enterprise Risk Management Steering Committee, Tulane University, 2014-2016.
Conflict of Interest Committee, 2014-2016.
Deans Council, Tulane University, 2000-2017.
University Research Council, Tulane University, 2004-2017.
Compliance Steering Committee, Tulane University, 2007-2017.
University Senate, Tulane University, 2000-2017.
Administrative Council, Tulane University, 2000-2017.
Health Sciences Leadership Group, Tulane University, 2007-2017.

OTHER UNIVERSITY COMMITTEES

Churchill Scholarship Interview Panel, Michigan State University, 1986-1987.
College of Engineering Dean Search and Rating Committee, Michigan State University, 1987-1989.
Assistant Vice-President for Research Services Search Committee, Michigan State University, 1991-1992.
Faculty Steering Committee for Michigan Perspectives, Michigan State University, 1992-1993.
Extension Community and Economic Development Coordinating Committee, Chairman, Michigan State University, 1992-1993.
GE Teaching Incentive Awards Committee, Michigan State University, 1990-1993.
Space Grant Awards Committee, Michigan State University, 1991-1992.
Lilly Teaching Fellow Selection Committee, Michigan State University, 1993-1994.
East Central Regional Director Search Committee, Michigan State University, 1994-1995.
MSU/Ford Continuous Quality Improvement Design Team, Michigan State University, 1994-1995.
Ad Hoc Advisory Committee on University-Wide Performance Indicators, Michigan State University, 1995.
Government Affairs Research Officer Search Committee, Michigan State University, 1996.
Working Group to Identify Research Thrust Areas, Michigan State University, Chairman, 1996-1997.
Research Promotion Task Force, Michigan State University, 1996-1997.
All-University Research Initiation Grant Review Panel: Physical Sciences, Michigan State University, Chairman, 1990-1998.
Faculty Research Infrastructure Advisory Committee, Michigan State University, 1999.
Intramural Research Grants Program Review Panel: Physical Sciences, Michigan State University, 1999.
Research Support and Infrastructure Group, Tulane University, 2000-2001.
Search Committee for the Vice President for Technology, Tulane University, 2001-2002.
Staff Performance Management Committee, Tulane University, 2001-2002.

Louisiana Alliance for Minority Participation (LAMP) Administrative Council, Tulane University, 2001- 2002.
 Dean of Architecture Review Committee, Tulane University, 2001-2002.
 Search Committee for Dean of the A.B. Freeman School of Business, Tulane University, Chairman, 2002-2004.
 Search Committee for Associate Vice President for Technology Transfer and Business Development, Tulane University, 2003-2004.
 University Extramural Research Proposal Screening Committee, Tulane University, 2000-2004.
 Tulane Energy Institute Executive Committee, 2002-2005.
 Sophomore Experience Committee, Tulane University, 2004-2005.
 Search Committee for the Provost and Senior Vice President for Academic Affairs, Tulane University, 2006- 2007.
 Space Strategy for Renewal Plan Working Group, Tulane University, 2006-2007.
 Search Committee for the Senior Vice President for Health Sciences and Dean of Medicine, Tulane University 2006-2007.
 Search Committee for the Dean of Liberal Arts, Tulane University, 2007-2008.
 Alumni-Development Integration Task Force, Tulane University, 2009-2010.
 Dean of Business Review Committee, Chairman, Tulane University 2009-2010.
 Division I Athletics Certification Program: Academic Integrity Subcommittee, Tulane University, 2010-2011.
 Board of Directors, Tulane Center for Advanced Medical Simulation and Team Training, 2008-2013.
 Search Committee for Executive Director of Corporate and Foundation Relations, 2013-2014.
 Search Committee for Vice President for Enrollment Management, Chairman, 2015-2016
 Executive Committee, Tulane Framework for Global Health Program, 2008-2017.
 Budget Review Steering Committee, 2015-2017.
 Building Interdisciplinary Research Careers in Women's Health (BIRCWH) Advisory Committee, 2007-2017.
 Advisory Committee, Tulane Center on Aging, 2012-2017.

COLLEGE STANDING COMMITTEES

Engineering Computer Advisory Committee, Michigan State University, 1976-1978, Secretary, 1977-1978.
 Curriculum Coordination Committee, Michigan State University, 1976-1979, Chairman, 1977-1979.
 Case Center Advisory Committee, Michigan State University, 1985-1987, Secretary, 1986-1987.
 College Advisory Council, Michigan State University, 1985-1989, Secretary, 1985-1986, Chairman, 1986-1989.
 Graduate Studies and Research Council, Michigan State University, 1982-1984, 1989-1990, Chairman, 1989-1990.
 Graduate Studies and Research Council (ex officio), Michigan State University, 1990-1992.
 Lifelong Education Programs (ex officio), Michigan State University, 1992-1994.
 Engineering Research Council (ex officio), Michigan State University, 1992-1998.
 Engineering Curriculum Committee (ex officio), Michigan State University, 1992-1998.
 Administrative Group and Academic Administrative Group, Michigan State University, 1990-2000.
 Composite Materials and Structures Center Advisory Committee (ex officio), Michigan State University, 1990-2000.

OTHER COLLEGE COMMITTEES

Engineering Mechanics Information Committee, Michigan State University, Chairman, 1975-1977.
 Engineering Mechanics Council Graduate Committee, Michigan State University, 1977-1978.
 Engineering Mechanics Council Executive Committee, Michigan State University, 1977-1981, Chairman, 1978- 1981.

Department Chair Search and Selection Committee, Michigan State University, Chairman, 1978-1980.

Graduate Studies and Research Council Graduate Fellowship Subcommittee, Michigan State University, 1982-1983.

Graduate Studies and Research Council Minority Recruiting Subcommittee, Michigan State University, 1982-1984.

Materials Science and Mechanics Department Chair Search and Selection Committee, Michigan State University, Chairman, 1984-1985.

College Advisory Council Distinguished Faculty Award Subcommittee, Michigan State University, 1985-1986.

Ad Hoc Committee on Research and Graduate Studies, Michigan State University, Secretary, 1985-1986.

College Advisory Council Commencement Subcommittee, Michigan State University, 1986-1987.

Promotion/Reappointment Service Evaluation Committee, Michigan State University, 1987-1988.

College Advisory Council Teacher-Scholar Award Subcommittee, Michigan State University, 1987-1988.

Honors Program Committee, Michigan State University, 1987-1988.

College Advisory Council Teacher-Scholar, Excellence-in-Teaching Awards Subcommittee, Michigan State University, Chairman, 1988-1989.

College Advisory Council Subcommittee to Review Reappointment, Promotion and Tenure, Michigan State University, 1988-1989.

Graduate Studies and Research Council Recruiting Subcommittee, Michigan State University, 1988-1989.

Promotion/Reappointment Teaching Evaluation Committee, Michigan State University, 1988-1990.

Associate Dean Search and Rating Committee, Michigan State University, 1989-1990.

Graduate Hearing Board, Michigan State University, Chairman, 1989-1990.

Graduate Studies and Research Council Academic Subcommittee, Michigan State University, Chairman, 1989-1990.

Biomechanics Chair Search Committee, Michigan State University, 1990-1993.

Mathematics/Engineering Liaison Committee, Michigan State University, 1991-1994, Chairman, 1991-1992.

Civil and Environmental Engineering Chair Search and Selection Committee, Michigan State University, Chairman, 1995.

Dean's Administrative Associate Search Committee, Michigan State University, 1996.

Promotion/Reappointment Research Evaluation Committee, Michigan State University, Chairman, 1990-1998.

Committee to Review the Case Center for Computer-Aided Engineering and Manufacturing, Michigan State University, Chairman, 1999-2000.

Undergraduate Awards and Financial Aid Committee, Michigan State University, 1999-2000.

DEPARTMENT STANDING COMMITTEES

Curriculum Committee, Michigan State University, 1977-1978.

Student Affairs Committee, Michigan State University, 1976-1977, 1982-1983.

Seminar Committee, Michigan State University, Chairman, 1984-1987.

Department Advisory Committee, Michigan State University, 1984-1990, Chairman, 1985-1990.

Graduate Studies Committee, Michigan State University, Chair, 1979-1984, 1987-1990.

Awards and Recognition Committee, Michigan State University, 1991-1999.

OTHER DEPARTMENT COMMITTEES

Faculty Search and Selection Committee, Michigan State University, 1979-1980.

Ad Hoc Committee on Mechanics Curriculum, Michigan State University, Chairman, 1985-1986.

Ad Hoc Committee on Departmental Computer Needs, Michigan State University, Chairman, 1988-1989.
DAC Faculty Search and Selection Subcommittee, Michigan State University, Chairman, 1984-1990.
Ad Hoc Committee on Semester Conversion, Michigan State University, 1989-1990.
Electronic Materials Faculty Search and Selection Committee, Michigan State University, 1997-1998.

EXTRACURRICULAR ADVISING AND JUDGING

American Institute of Aeronautics and Astronautics Student Chapter, Faculty Advisor, Michigan State University 1985-1987.
Society of Engineering Science Student Chapter, Faculty Advisor, Michigan State University 1986-1987.
Honors College Academic Advisor, Michigan State University 1975-1979, 1986-1988.
Mechanics Undergraduate Academic Advisor, Michigan State University 1987-1988.
Annual Review Session for the Professional Registration Examination, Michigan State University 1976-1981, 1984-1990.
Tau Beta Pi Michigan Alpha Chapter, Faculty Advisory Board, 1989-1990.
Judge, Freeman Business Plan Competition, Tulane Entrepreneurs Association, 2002.
Judge, TURBO Design Competition, Tulane Engineering and Computer Science Honor Society, 2001-2008.
Moderator, Department of Energy Louisiana Regional High School Science Bowl, 2007-2009, 2011.
Judge, Tulane University Biomedical Engineering Design Competition, 2004-2006, 2008-2012.
Judge, FIRST Bayou Regional Robotics Tournament, 2007-2008, 2011-2013.
Judge, Louisiana FIRST LEGO League Tournament, 2004, 2006-2010, 2012-2014, 2016.

BIOGRAPHICAL SOURCES

American Men and Women of Science
Dictionary of International Biography
International Book of Honor
International Who's Who in Engineering
Leading Consultants in Technology
Personalities of America
United Who's Who Registry
Who's Who in America
Who's Who in American Education
Who's Who in Boundary Element Research
Who's Who in Engineering
Who's Who in Engineering Education
Who's Who in Finance and Business
Who's Who in Frontier Science and Technology
Who's Who in Science and Engineering
Who's Who in Technology
Who's Who in the Midwest
Who's Who in the World

CONSULTING

Bendix-Skagit Corporation, Sedro-Wooley, Washington, 1972.
Técnicas Reunidas, S.A., Madrid, Spain, 1974.
Bureau of Mines, U.S. Department of the Interior, Twin Cities, Minnesota, 1974.
Donnelly W. Hadden, P.C., Detroit, Michigan, 1981.
Rappleye, Wilkins and Arcaro, Attorneys at Law, Jackson, Michigan, 1981.
Vogel Law Firm, Mandan, North Dakota, 1983.
Amerisure Companies, Grand Rapids, Michigan, 1987.
AC Rochester, Flint, Michigan, 1990.

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