Resume

JOHN W. STEADMAN

Date of Birth: October 13, 1943

Place of Birth: Cody, Wyoming

**Education**

 Ph.D., Electrical Engineering, Colorado State University 1971

 M.S., Electrical Engineering, University of Wyoming 1966

 B.S., Electrical Engineering, University of Wyoming 1964

**Professional Registration**

 Registered Professional Engineer (by examination) 1975 - present

 State of Wyoming, License No. 1852

 Member, Wyoming Board of Examining Engineers 1985 - 2001

 President of Wyoming Board 1987 - 1995

 National Council of Examiners for Engineering and Surveying 1985 - present

 President 1993-94

 Treasurer 1991-92

 Uniform Examinations and Qualifications Committee

 Examinations for Professional Engineers Committee (Chairman)

 Examination Policy and Procedures Committee

 Educational Assessment and Qualifications Committee

**Employment History**

 University of South Alabama

 Dean of Engineering 2003 – present

 University of Alabama, Tuscaloosa

 Adjunct Professor, College of Engineering 2009 - present

 United States Air Force Academy

 Distinguished Visiting Professor 1997 - 98

 University of Wyoming, Laramie, Wyoming 1971 - 2003

 Associate Dean of Engineering 1983 - 1999

 Acting Associate Dean of Engineering 1982

 Head of Electrical Engineering 1989 - 2003

 Professor of Electrical Engineering 1981 - 2003

 Associate Professor of Electrical Engineering 1976 - 1981

 Assistant Professor of Electrical Engineering 1971 - 1976

 Colorado State University, Fort Collins, Colorado 1968 - 1971

 NIH Special Research Fellow

 General Dynamics/Convair Division, San Diego, California 1966 - 1968

 Research Engineer, Life Sciences Section

**Honors and Awards**

Engineer of the Year, Mobile Area Council of Engineers 2009

Fellow, American Society for Engineering Education 2005

IEEE-USA President 2004

 Fellow, National Society of Professional Engineers 2004

NCEES Distinguished Service Award, Special Commendation 2003

 Mortar Board "Top Prof" 2001

ABET Certificate for EC 2000 Workshop Presentations 2000

NCEES Distinguished Service Award 1996

 IEEE Denver Section John D. Peeble Professional Award 1996

IEEE United States Activities Board Citation of Honor 1995

 Order of the Engineer - Board of Governors 1995

 Chair 2003-4

 Wyoming Engineering Society Outstanding Engineer 1995

 IEEE Univ. of Wyo. Student Branch Award 1994

 UW Alumni Association Outstanding Faculty Member 1991

 IEEE Region V Annual Meeting 1991

 AT&T Foundation Award for Excellence in Teaching 1991

 Harden-Simons Prize (ASEE CoED computational methods) 1986

 Outstanding Contribution to Student Affairs, U. of Wyo. 1986

 Ray H. Spiess Award (ASEE CoED Journal best paper) 1985

 Harden-Simons Prize (ASEE CoED computational methods) 1985

 John P. Ellbogen Award for Undergraduate Teaching 1981

 John A. Curtis Award (ASEE CoED best paper) 1980

**Funding**

Project Director, *Analytical & Technical Support Services from postsecondary educational institutions-universities and colleges in support of Advanced Research & Development projects*, U.S. Navy SPAWAR, $12,022,972 2010-2011

Principal Investigator, *Center for Advanced Materials Engineering,* University of South Alabama, funded by NASA, $500,000 2010-2011

Project Director, Alabama DOE/EPSCoR, Nanostructure-Enhanced Phase Change Materials, U.S. Dept. of Energy, $2,911,000 total, $1,905,000 DOE 2009-2011

Principal Investigator, *Hurricane Katrina Impact on Research and Education in Alabama,* funded by NSF EPSCoR Alabama, $150,000 2005-2007

Co-PI, Computer Science, Engineering and Mathematics Scholarships, funded by the National Science Foundation, $375,000 2002-2005

Co-PI, Communications Laboratory Improvements, funded by Rockwell-Collins Foundation, $10,500 2001-2002

Project Director, Wyoming DOE/EPSCoR Research Program, funded by the United States Department of Energy ($3,482,352 total, $1,485,908 DOE) 1999-2001

Project Director, *Wyoming DOE/EPSCoR Research Program,* funded by the United States Department of Energy ($3,305,000 total, $1,480,000 DOE) 1997-99

Project Director, *Wyoming DOE/EPSCoR Research Program,* funded by the United States Department of Energy ($3,432,876 total, $1,092,949 DOE) 1995-1997

Project Director, *Wyoming DOE/EPSCoR Traineeships,* funded by the United States Department of Energy ($250,000) 1994-1995

Project Director, *Wyoming DOE/EPSCoR Traineeships,* funded by the United States Department of Energy ($500,000) 1992-1994

Co-Director, *University of Wyoming Engineering Summer Program*, funded by The National Science Foundation 1989

Principal Investigator, *Use of Surface Mount Technology in Digital Hearing Aids*, funded by Audiotone, Inc., Phoenix, AZ 1986

Principal Investigator, *Development of a Noise-canceling Hearing Aid,* funded by Audiotone, Inc., Phoenix, AZ 1985

Principal Investigator, *Prototype Model of a Microprocessor-Based Digital Hearing Aid*, funded by Audiotone, Inc., Phoenix, AZ 1984

Principal Investigator, *Development of an Adaptive Digital Hearing Aid*, funded by Audiotone, Inc., Phoenix, AZ 1983

Co-principal Investigator, *Digital Filtering in Hearing Aids*, funded by Audiotone, Inc., Phoenix, AZ 1982

Principal Investigator, *Real-Time Microprocessor Systems Development Laboratory*, funded by Intel Corporation Educational Grant 1982

Project Director, *Training Regional Directors in Energy-Environment Simulation*, funded by Wyoming Energy Extension Service 1978 - 1980

Project Director, *Citizens Workshops on Energy and the Environment*, funded by University of Washington 1978 - 1980

Co-principal Investigator, *A Noise Level Study in the Canyons of Grand Teton National Park*, funded by Department of Interior 1976

Wyoming Coordinator, *Mountain States Regional Medical Program*, funded as sub-contract with University of Colorado Medical Center 1975 - 1976

Co-principal Investigator, *A Noise Level Study on the Snake River in Grand Teton National Park*, funded by Department of Interior 1975

Principal Investigator, *Using a High Gain Capacitive Plethysmograph to Assess Atherosclerosis Lesion Development in the Legs of Human Subjects*, funded by Wyoming Heart Association 1975

Director, *Development of a Digital Electronics Laboratory*, funded by National Science Foundation Equipment Grant 1973 - 1975

**Patents**

A Digital Hearing Aid - Patent #4,791,672 1988

**Publications and Presentations**

 Collins, Aaron, George Dean, and John Steadman, *A Dozen Reasons Why You Should Obtain Your P.E. License,* IEEE-USA Today’s Engineering, August 2010

Jacquot, Raymond, David Voltmer and John Steadman, *Standing and Traveling Waves on Transmission Lines: Getting it Right,* ASEE Annual Conference, Louisville, KY, June 2010.

 Pham, Nam, Steadman, J.W., and Wilamowski, B.M., Chapter 3: Active Filter Implementation, Industrial Electronics Handbook, edited by Irwin and Wilamowski, CRC Press, 2010.

Lefevre, Walter; Steadman, John W.; Tietjen, Jill S.; White, Kenneth R.; and Whitman, David L., *Objective and Quantitative Outcomes Assessment Using the Fundamentals of Engineering (FE) Examination*, [International Journal of Engineering Education](http://www.ingentaconnect.com/content/intjee/ijee;jsessionid=285a6v64jedll.alice), Volume 24, Number 5, September 2008 , pp. 917-925(9).

Steadman, John W., David Whitman and Walter LeFevre, *Efficient and Effective Outcomes Assessment Using the FE Exam*, ASEE Annual Conference, Honolulu, HI, June 2007.

Steadman, John W. and David Whitman, *Obtaining and Interpreting FE Exam Results for Outcomes Assessment*, Best Assessment Processes in Engineering Education IV, Rose-Hulman Institute of Technology, Terre Haute, Indiana, April 2001.

Steadman, John W. and Bobby Price, *ABET Program Evaluator Training for Engineering Criteria 2000,* National Council of Examiners for Engineering and Surveying, Annual Conference, Chicago, IL, August 2000.

Steadman, John W., *Faculty Orientation for ABET Engineering Criteria 2000,* Motorola University, Phoenix, AZ, March 2000. (also presented at the United States Air Force Academy, January 2000)

Steadman, John W., *Content and Specifications for Engineering Licensing Examinations,* Conference for Engineering Deans and University Presidents, San Juan, Puerto Rico, March 2000.

Steadman, John W. and Bobby Price, *ABET Program Evaluator Training for Engineering Criteria 2000,* National Society of Professional Engineers Leadership Conference, January 2000

Anderson, Richard and John Steadman, *ABET Program Evaluator Training for Engineering Criteria 2000,* National Society of Professional Engineers Leadership Conference, January 1999

Steadman, John W., *Obtaining and Interpreting FE Exam Results for Outcomes Assessment*, Best Assessment Processes in Engineering Education II, Rose-Hulman Institute of Technology, Terre Haute, Indiana, October 1998. (Also presented at the University of Nebraska, Lincoln, Nebr. February 1999)

Anderson, Richard and John Steadman, *ABET Program Evaluator Training for Engineering Criteria 2000,* National Society of Professional Engineers Annual Conference and Exposition, Tulsa, OK, July 1998

Steadman, John W., *Overview of PE/FE Exams and Use as Assessment Tools,* 1998 ASEE Annual Conference Proceedings, Seattle, WA, June 1998

Steadman, John W., *Use of the Fundamentals of Engineering Examination for Outcomes Assessment*, Best Assessment Processes in Engineering Education, Rose-Hulman Institute of Technology, Terre Haute, Indiana, April 1997.

Steadman, John W., Associate Editor for Electrical Engineering, *The Engineering Handbook,* Richard C. Dorf, Editor-in-Chief, CRC Press, 1996, 2298 p.

Steadman, John W., Associate Editor for SECTION III - Electronics, *The Electrical Engineering Handbook*, Richard C. Dorf, Editor-in-Chief, CRC Press, 1993, 2661 p.

Steadman, J.W. & B.M. Wilamowski, "Realization of Active Filters", in *The Electrical Engineering Handbook*, Richard C. Dorf, Editor-in-Chief, CRC Press, 1993, pp. 683-691.

Jacquot, R.G. & J.W. Steadman, "Digital Filtering", in *The Encyclopedia of Telecommunications*, Fritz E. Froehlich, Editor-in-Chief, Marcel Dekker, New York, 1993, 508 p.

Wilamowski, B.M., S.F. Legowski and J.W. Steadman, “Personal Computer Support for Teaching Analog Filter Analysis and Design”, IEEE Transactions on Education, Vol. 35, No. 4, pp. 351-361, Nov. 1992.

Ula, A.H.M.S., J. W. Steadman and J. M. Wu, "Design and Demonstration of a Microcomputer Controller for an Industrial Sized DC Motor", IEEE Transactions on Energy Conversion, Vol. 3, No. 1, pp. 102 - 110, March 1988.

Jacquot, R. G. & J. W. Steadman, "Personal Computer Software Tools for Classical and Modern Design of Control Systems", ASEE CoED Journal, Vol. VIII, No. 1, pp. 31 - 34, January 1988.

Jacquot, R. G. & J. W. Steadman, "Personal Computer Software Tools for the Teaching of Digital Control", 1987 Frontiers in Education Conference Proceedings, pp. 26-29, October, 1987.

Jacquot, R. G. & J. W. Steadman, "Personal Computer Solution of the Matrix Eigenproblem: An Excellent Programming Exercise", ASEE CoED Journal, Vol. VII, No. 4, pp. 19 - 20, October 1987.

Zulinski, R. E. & J. W. Steadman, "Class E Power Amplifiers and Frequency Multipliers with Finite DC-Feed Inductance", IEEE Transactions on Circuits and Systems, CAS-34:No.9, pp 1074-1087, Sept. 1987.

Jacquot, R. G. & J. W. Steadman, "Personal Computer Aids for Linear Systems Analysis and Design", 1987 ASEE Annual Conference Proceedings, Reno, Nevada, pp. 928 - 931, June 1987.

Zulinski, R. E. & J. W. Steadman, "Idealized Operation of Class E Frequency Multipliers", IEEE Transactions on Circuits and Systems, CAS-33:No.12, pp 1209-18, Dec. 1986.

Zulinski, R. E. & J. W. Steadman, "A Practical Tuning Procedure for Class E RF Amplifiers and Frequency Multipliers", Proc. of the 29th Midwest Symposium on Circuits and Systems, August 1986.

Jacquot, R. G. & J. W. Steadman, "Two Interactive Personal Computer Programs for Teaching Automatic Control Systems", ASEE CoED Journal, Vol. VI, No. 2, pp. 23 - 25, April - June 1986.

Zulinski, R. E. & J. W. Steadman, "Performance Evaluation of Class E Frequency Multipliers", IEEE Transactions on Circuits and Systems, CAS-33:3, pp. 343-5, March 1986.

Jacquot, R. G. & J. W. Steadman, "A Low-Cost Laboratory Digital Data Acquisition and Control System", ASEE CoED Journal, Vol. V, No. 1, pp. 16 - 19, January - March, 1985.

Jacquot, R. G. & J. W. Steadman, "Numerical Laplace Transform Inversion Employing the Gaver-Stehfest Algorithm", ASEE CoED Journal, Vol. V, No. 1, pp. 12-15, January - March, 1985.

Jacquot, R. G. & J. W. Steadman, "Personal Computer Software Tools for Classical and Modern Design of Control Systems", Proc. of 1986 ASEE Annual Conference, June 1986.

Zulinski, R. E. & J. W. Steadman, "Effects of Component Variation on the Performance of Class E Amplifiers and Frequency Multipliers", Proc. of the 28th Midwest Symposium on Circuits and Systems, pp. 349-352, August 1985.

Wreschner, M.S., L.C. Best, J.J. Cupal, J.W. Steadman and J.A. Nunley, "A Microprocessor Based System for Adaptive Hearing Aids", Proc. of 1985 ASEE Annual Conference, pp. 688 - 691, June 1985.

Jacquot, R. G. & J. W. Steadman, "Two Interactive Personal Computer Programs for Teaching Automatic Control Systems", Proc. of 1985 ASEE Annual Conference, pp. 67 - 70, June 1985.

Steadman, J. W., R. G. Jacquot & K. A. Reed, "A 16-Bit Microcomputer for Audio Bandwidth Digital Filtering", IEEE Transactions on Education, Vol. E-28, No. 2, pp. 76 - 78, May 1985.

Dewey, B. R., S. Steadman & J. W. Steadman, "Strategy for Implementation of Computer-Aided Engineering", Proc. of the 1985 UPCAEDM Conference, Purdue University, pp. 59 - 63, July 1985.

Dewey, B.R., S.H. Hakes, J.W. Steadman & S.J. Steadman, "Implementing a New Engineering Computer Graphics Laboratory", Proc. of 1984 ASEE Annual Conference, pp. 632 - 637, June 1984.

Jacquot, R.G. & J.W. Steadman, "A Low Cost Digital Data Acquisition and Control System", Proc. of 1984 ASEE Annual Conference, pp. 1059-1062, June 1984.

Nunley, J.A., W. Staab, J.W. Steadman, P. Wechsler & B. Spencer, "A Wearable Digital Hearing Aid", The Hearing Journal, Vol. 36, No. 10, pp.29 - 35, October 1983.

Jacquot, R.G. & J.W. Steadman, "Interactive Microcomputer Programs for Teaching Engineering Systems", ASEE CoED Journal, Vol. 3, No. 5, pp. 3 - 6, September-October, 1983.

Jacquot, R.G., J.W. Steadman & C.N. Rhodine, "Numerical Laplace Transform Inversion Employing the Gaver-Stehfest Algorithm", Proc. of 1983 ASEE Annual Conference, pp. 489 - 491, June 1983.

Steadman, J.W., R.G. Jacquot & K.A. Reed, "A 16-Bit Microcomputer for Audio Bandwidth Digital Filtering", 1983 ASEE Annual Conference, June 1983.

Jacquot, R.G., J.W. Steadman & C.N. Rhodine, "The Gaver-Stahfest Algorithm for Approximate Inversion of Laplace Transforms", IEEE Circuits and Systems Magazine, Vol. 5, No. 1, pp. 4 - 8, March 1983.

Jacquot, R.G., J.W. Steadman & C.N. Rhodine, "Interactive Microcomputer Programs for Teaching Engineering Systems", Proc. of 1982 ASEE Annual Conference, pp. 663-666, June 1982.

Steadman, J.W., R. G. Jacquot & M.N. Hepworth, "A Programmable, Educational, Microprocessor-Based Digital Filter/Compensator", ASEE CoED Journal, Vol.1, No.1, pp. 3-8, January - February 1981.

Steadman, J.W., R.G. Jacquot & M.N. Hepworth, "A Microprocessor System for the Discrete-Time Control Laboratory", IEEE Transactions on Education, Vol. E-24, No.1, pp. 78 - 82, February 1981.

Fadali, M.S., J.W. Steadman & R.G. Jacquot, "A Model of Water Absorption in Human Intestine", Biomedical Sciences Instrumentation, Vol. 16, pp. 49 - 53, April 1980.

Steadman, J.W., C.D. Ferris & C.N. Rhodine, "A Prosthetic Communication Device", Archives of Physical Medicine and Rehabilitation, Vol. 61, pp. 93 - 97, February 1980.

Fadali, M.S., J.W. Steadman & R.G. Jacquot, "Control of Blood Volume and Extracellular Fluid Osmolality in Humans", Biomedical Sciences Instrumentation, Vol. 15, pp. 67-71, April 1979.

Bolouri, B., J.W. Steadman & W.L. Pancoe, "The Effects of Electric Current on the Growth Rate of Sarcoma-37 Solid Tumors", Proc. of the Rocky Mountain Division of the American Association of Science, 1979.

Osterlitz, B.A. & J.W. Steadman, "Using a High Gain Capacitive Plethysmograph to Assess Atherosclerosis Lesion Development in the Legs of Human Subjects", Biomedical Sciences Instrumentation, Vol. 13, pp. 53 - 58, 1977.

Steadman, J.W., C.N. Rhodine & C.D. Ferris, "A Communication System Prosthesis", Biomedical Sciences Instrumentation, Vol. 13, pp. 93-97, 1977.

Steadman, J.W. & C.N. Rhodine, "Renal Dialysis Membrane Leak Detector", ISA Transactions, Vol. 15, No. 3, pp. 233-236, 1976. (also published in Biomedical Sciences Instrumentation, Vol. 12, pp. 123-127, 1976)

Smith, D.V., J.W. Steadman & C.N. Rhodine, "An Analysis of the Time Course of Gustatory Neural Adaptation in the Rat", American Journal of Physiology, Vol. 229, No. 4, pp. 1134-1140, October 1975.

Steadman, J.W., "Dangerous Electricity Annunciator and Detector", ISA Transactions, Vol. 14, No. 2, pp. 118-121, 1975.

Steadman, J.W. & C.N. Rhodine, "A Solid-State Digital Hemoglobinometer", Proc. of the 28th Annual Conference on Engineering in Medicine and Biology, p. 230, October 1975 (abstract)

Smith, D.V., J.W. Steadman & C.N. Rhodine, "Time Course of Gustatory Neural Adaptation in the Rat", Proc. of the Society for Neuroscience, 1975. (abstract)

Steadman, J.W., C.N. Rhodine, D.V. Smith and J.E. Lindsay, "A Mathematical Analysis of the Gustatory Response in the Chorda Tympani with Implications of Neural Mechanisms", Proc. of the Midwestern Neurosciences Conf., pp. 42-48, 1975.

Steadman, J.W. & R.J. Morgan, "Use of a Spectral Ratio in Lateralization of CNS Lesions", Electroencephalography and Clinical Neurophysiology, Vol. 37, No. 4, pp. 399-402, 1974.

Steadman, J.W. & A. Rose, "Design of a Portable Solid-State Hemoglobinometer", Clinical Chemistry, Vol. 20, No. 5, pp. 613-614, 1974.

Steadman, J.W., "Training Hospital Staff in Biomedical Instrumentation Safety", Proc. of 26th Annual Conference on Engineering in Medicine and Biology, 1973. (abstract)

Steadman, J.W., "Dangerous Electricity Annunciator and Detector", Biomedical Sciences Instrumentation, Vol. 10, pp. 129-132, 1974.

Steadman, J.W., C.N. Rhodine & R.J. Morgan, "Measurement of Propagation Delay in Nerves", Proc. of 26th Annual Conference on Engineering in Medicine and Biology, 1973. (abstract)

Steadman, J.W., "Medical Instrumentation Safety in the Rocky Mountain Area", Annual Conference of the Instrument Society of America, paper #560, October 1973.

Steadman, J.W., C.N. Rhodine & R.J. Morgan, "The FFT in BASIC for Minicomputer Applications", Computers, Electronics and Control Proceedings, pp. 11-12, 1973.

Hauser, S. & J.W. Steadman, "A Hybrid System for Processing Neurodata", Proc. of 10th Annual Rocky Mountain Bioengineering Symposium, pp. 41-45, May 1973.

Morgan, R.J., P.D. Lambert & J.W. Steadman, "Measurement of the Change in the Normal Canine EEG with Age", Electroencephalography and Clinical Neurophysiology, Vol. 34, pp. 409-418, April 1973.

Steadman, J.W., C.N. Rhodine & R.J. Morgan, "A Technique for Finding Direction and Average Propagation Velocity of Signals in Mixed Nerves", Conf. on Machine Processing of Neurodata, October 1972.

Steadman, J.W., D.J. Krause & T.W. Williams, "Effect of Record Length on Noise-Induced Error in the Cross-correlation Estimate", IEEE Transactions on Systems, Man and Cybernetics, Vol. SMC-2, No. 2, pp. 255-261, April 1972.

Steadman, J.W., E.L. Pautler, R.J. Morgan & H. Su, "Crosscorrelation Analysis of the Spontaneous Electrical Activity in Nerves", Proc. of the San Diego Biomedical Symposium, pp. 261-266, February, 1972.

Steadman, J.W., Correlation Analysis of Clinical EEG's, Ph.D. Thesis, 192p., Colorado State University, 1971.

Williams, T.W., J.W. Steadman, D.J. Krause and E.L. Pautler, "Reduction of Noise-Induced Error in Correlograms", Proc. of 8th Annual Rocky Mountain Bioengineering Symposium, pp. 109-115, 1970.

Steadman, J.W., R.J. Morgan & P.D. Lambert, "Determination of the Developmental State of the Brain", Proc. of 7th Annual Rocky Mountain Bioengineering Symposium, pp. 87-92, 1970.

Steadman, J.W., "A Short-Range Underwater Biotelemetry System", Proc. of the International Telemetering Conference, Vol. 3, pp. 316-324, 1967.

Steadman, J.W., E.M. Lonsdale & W.L. Pancoe, "A Telemetering System for Securing Data on the Motility of Internal Organs", IEEE Transactions on Biomedical Engineering, Vol. BME-13, No. 3, pp. 153-159, July 1966.

Steadman, J.W., "An Analog Model of the Learning of Conditioned Responses", Simulation, Vol. 6, No. 6, p. 351, June 1966.

Steadman, J.W. & L.L. Nielsen, "A Study of Stomach Motility Using Implanted Telemetry Systems", Proc. of 3rd Annual Rocky Mountain Bioengineering Symposium, pp. 37-41, 1966.

Steadman, J.W., "A Telemetering System for Measuring the Distention of Internal Organs", M.S. Thesis, 1965.

Steadman, J.W., "A Telemetering System for Remote Pressure Measurements", Proc. of 1st Annual Rocky Mountain Bioengineering Symposium, pp. 233-238, 1964.

**Professional Activities**

IEEE - Member 1966-present

 President-elect, IEEE-USA 2003

 Vice President for Career Activities, IEEE-USA 2000-2003

 IEEE-USA Board of Directors and Operations Committee 2000-present

 Licensure and Registration Committee (National Chairman) 1995-1999

 Senior Member 1989-present

 Engineering in Medicine & Biology AdCom 1981-1983

 EMBS Denver Section President 1975-1976

 EMBS Denver Section Vice President 1972-1975

 Computer Society Member 1990-present

 Wyoming Society of Professional Engineers (NSPE) 1987-present

 President 1997-98

 President-Elect 1996-1997

 Vice President 1995-1996

 Sec./Treas. 1994-1995

 Engineering Accreditation Commission of ABET (Team Chair) 1996-2002

ABET/EAC Program Evaluator for IEEE 1990-1995

 Faculty Workshop Facilitator (Turkey) 2002

 Faculty Workshop Facilitator (Seattle, Phoenix, etc.) 2000-2002

 Program Evaluator Training (NCEES and NSPE) 1998-2001

National Council of Examiners for Engineering and Surveying

 President 1993-1994

 Treasurer and Board of Directors Member 1991-1992

 Examinations for Professional Engineers (Chair) 1989-1991

 Fundamentals of Engineering Committee 1986-1988

 Principals and Practice of Engineering (Electrical) 1985-1986

 Examination Policies and Procedures Committee 1989-1991

 Educational Assessment and Qualifications Committee 1989-1991

 Western Zone Distinguished Service Award 1991

 Wyoming Board of Examining Engineers 1985-2001

 President 1987-1995

 Order of the Engineer Board of Governors 1997-present

 Vice President 2000-2002

 President` 2004-2004

 Associate Editor for *IEEE Micro* 1990-1995

 Reviewer for *IEEE Micro* 1985-present

 Reviewer for *IEEE Transactions on Circuits & Systems* 1985-present

 NSF Review Panel for Computer Science, Engineering, and

 Mathematics Scholarships Program 2001

 NSF Review Panel for Young Scholars Program (chair) 1989

 NSF Review Panel for Graduate Fellowships 1984-1986

 ASEE - Biomedical Engineering Division

 Secretary/Treasurer 1981-present

 ASEE - Computers in Education Division

 Rocky Mountain Bioengineering Symposium

 Board of Directors 1970-1988

 President 1974-1978

 Treasurer 1971-1974

 Sigma Xi

 University of Wyoming Admissions Committee 1977-1979

 NIH Special Research Fellow 1969-1971

 NSF Co-op Fellow 1964-1966

 Phi Kappa Phi

 Phi Beta Kappa Award, Univ. of Wyoming 1964

**Consulting**

Consultant for Microprocessor Short Courses:

 Philadelphia, Pennsylvania (AEMB) 1982

 Houston, Texas (AEMB) 1981

 Washington, D.C. (AEMB) 1980

 New York, New York (ASME) 1979

 Denver, Colorado (AEMB) 1979

 Milwaukee, Wisconsin (GLBS) 1979

 Atlanta, Georgia (AEMB) 1978

 Los Angeles, California (AEMB) 1977

 Denver, Colorado (IEEE) 1977

 Boston, Massachusetts (AEMB) 1976

 Denver, Colorado (IEEE) 1976

 Consultant for Noise Level Instrumentation and Measurement:

 Peter Jorgensen Engineering 1986

 Peter Jorgensen Engineering 1981

 CGG Services 1981

 Jackson Hole Airport Board 1980

 Jackson Hole Ski Corp. 1980

 Consultant as an Expert Witness

 Philip Wynott, P.C., Cheyenne, WY 1997

 Van Steenberg, Chaloupka, Mullin & Holyoke, Scottsbluff, NE 1993

 Clay Jenkins, P.C., Sheridan, WY 1989

 David Jaroslawicz, P.C., New York, NY 1988

 Williams, Porter, Day and Neville, Cheyenne, WY 1987

 Patrick Hunter, P.C., Cheyenne, WY 1985

 Nicholas Kalokathis (Exide Corp.) 1984

 Mike Hoch, P.C. 1983

 Guy, Williams, White and Argeris 1982

 Spence, Moriarity and Schuster 1980

 Guy, Williams and White 1980

 Consultant for Instrumentation Design

 Ideal Aerosmith, Inc. 1984-1985

 Sikes Industries 1974

 ROYCO Instruments 1973-1974

 Consultant for Hospital Electrical Safety

 Mountain States Regional Medical Program 1975-1976

 Montana Medical Education and Research Foundation 1973

 Wyoming Hospital Association 1972

 Consultant for Adaptive Filter Design

 Audiotone, Inc. 1987