

Paul D. Plotkowski, Ph.D.

Educational Background

Ph.D. Systems Engineering
M.S. Mechanical Engineering
B.S. Mechanical Engineering
Business Minor
Oakland University

Career Highlights

Extensive Experience and Success In:

- ***Academic Leadership and Administration***
 - Organization & management of a new college (2004 – present)
 - Led growth from one undergraduate program with under 150 students to a college of over 2,200 students
 - Budget management and extensive college growth during 12 consecutive years of decreasing state funding
 - Significant success in expanding faculty diversity
 - National / International leadership positions in ASME, ASEE, and SME
 - Serve on GVSU President's Council – Extensive work on special initiatives
- ***Strategic Planning***
 - Department, college and university level
 - Professional society experience
- ***Developing External Support***
 - Public, foundation, corporate and government agency success
 - Private donor and family foundations
 - Over \$43 million in external support to date
 - Established college level staff to support communications and partnership development
 - Supplemental assignment with the GVSU Development Division
- ***Community, Industry, and Alumni Engagement***
 - Dedication to relationship building
 - Extensive engagement with over 300 companies through internships and co-op
 - Service on many community, corporate, and NPO committees and boards
 - Creating student co-op, internship, and career opportunities through alumni engagement
 - Extensive industry and alumni engagement in endowment, facilities and scholarship efforts
- ***Strategic Enrollment Management / Student Development and Success***
 - Co-lead on GVSU Strategic Enrollment Management Team
 - Leadership team for University Awards of Distinction Scholarship program
 - Established Student Services Office to enhance student success
 - Includes 6 advisors, outreach coordinator, professional staff and graduate assistants
 - Established three Student Success Centers
 - Collaboration with admissions and financial aid offices to greatly expand applications
 - Developed and provide stewardship for multiple industry sponsored scholarships
 - Development of student success model and blueprint for success
 - Increased graduation rates from 47% to nearly 70%

- Recognition by ASEE for student success
 - Introduction of Industry Sponsored Graduate Fellow Program
 - Mentor for students in GVSU Hermanos program, Grand Rapids Public Schools Academy for STEM, and Society of Manufacturing Engineers
 - Faculty Fellow for Secchia and Winter Residence Facilities
- ***Inclusion, Equity, and Diversity***
 - Co-creator of HBCU/HSI Consortium for Combined Degrees
 - Established award winning dual degree programs with multiple HBCU's (and forthcoming HSI's).
 - “Grow Our Own” faculty program for supporting diverse populations
 - GVSU – NSF Advance Project (Advancing Women in the Academy) – Initiator and Advisory Board
 - Inclusion Advocate for faculty/staff hiring processes
 - Member of GVSU Hispanic/Latino Faculty/Staff Association and mentor for Hermanos program
 - PI or Co-PI on four NSF S-STEM grants to support underrepresented, low income, and first-generation students
 - GVSU TRIO – Educational Support Program – Advisory Board
 - GVSU – WISE (Women in Science & Engineering) – Advisory Board
 - Established chapter of National Society of Black Engineers
 - Established chapter of Society of Women Engineers
 - Establishing chapter of Society of Hispanic Professional Engineers
 - Bronze award (highest available) – inaugural ASEE Diversity Recognition Program
 - Advisory board member and mentor for GRPS Academy for STEM
- ***Accreditation and Assessment***
 - University experience with Higher Learning Commission
 - Extensive program experience with ABET
 - ABET accreditation evaluator for nearly 30 reviews of mechanical, manufacturing, and general engineering programs
- ***Curriculum and Program Development***
 - Growth from one undergraduate general engineering program (enrollment 130) to eleven undergraduate programs in engineering, computing, and OSH (enrollment over 2,200). Expansions based upon employer needs and student interest.
 - Development of multiple master's programs including Cyber-security and Data Science & Analytics.
 - School of Engineering named “Exemplar of Real-World Engineering Education” by the National Academy of Engineering
 - School of Engineering consistently ranked a Top Engineering School by US News and World Report
 - School of CIS named #1 undergraduate program in US by College Factual two consecutive years
 - Introduction of International Exchange Programs and Co-op Abroad Program
 - Applied R&D Centers
 - DTE Electromagnetic Compliance (EMC) Center
 - Applied Medical Devices Institute (aMDI)
 - Applied Computing Institute (ACI)
 - Design, Optimization, Evaluation & Redesign (DOER) Center

- ***Shared Governance***
 - Ex-officio member of University Academic Senate
 - Multiple faculty roles in governance
 - Administrative participation and support for shared governance
 - Collaborative development of college governance organization and policies

- ***Interdisciplinary Collaboration***
 - Development of undergraduate interdisciplinary engineering program, and biomedical engineering programs, and master's programs in data science & analytics and health & bioinformatics
 - Partnering in development of entrepreneurship programs
 - Management of multidisciplinary professional science master's programs in health & bioinformatics, biostatistics, biotechnology, and data science & analytics
 - Co-leadership (with Vice Provost for Research Administration) of High Performance Computing facility
 - Partnering in development of dual degree program in Engineering & Architecture with Kendall College of Art & Design
 - Partnering in development of Bachelor of Applied Science Degree

- ***Academic and Residential Facility Design and Development***
 - Co-chair for fundraising, design, and construction committees for Kennedy Hall of Engineering, Keller Engineering Laboratories, and the Innovation & Design Center providing over 150,000 sq-ft of new facilities
 - Design team member for Niemeyer Honors College living and learning facility, Kelley Family Sports Center, and Holton/Hooker living & learning facility

Professional Experience

Grand Valley State University, MI

2004 – present	Founding Dean and Professor, Padnos College of Engineering & Computing
2015 – 2016	Supplemental Assignment with GVSU Development Division
1991 – 2004	Director and Professor, School of Engineering Courses taught include: Statics, Machine Design, Engineering Co-op Preparation, Engineering Measurement and Data Analysis

GMI Engineering & Management Institute, MI

1989 – 1991	Institute ABET Accreditation Coordinator
1988 – 1991	Director, Manufacturing Systems Engineering Program
1986 – 1991	Associate Professor (tenured) of Mechanical Engineering
1983 – 1986	Assistant Professor of Mechanical Engineering Course taught include: Statics, Dynamics, Mechanics of Solids, Instrumentation, Experimental Stress Analysis, Applied Optics, Manufacturing Processes, Thermodynamics, Fluid Mechanics

Other Related Experience

1991 – present	Consulting for several colleges of engineering
1983 – 1991	Consulting, General Motors Co.
1979 – 1980	Machinist, Ford Motor Co.
1979	Dynamometer Technician, Ford Motor Co.

1978 – 1979 Equipment Operator, Reliable Concrete Products
 1975 – 1978 Manager, McDonalds Corp.

Professional Recognition

2021 Inspiring Programs in STEM Awards from Insight Into Diversity magazine for HBCU Consortium
 2020 Distinguished Alumnus Award – Tau Beta Pi: National Engineering Honor Society
 2019 Bronze award (highest available) - inaugural ASEE Diversity Recognition Program
 2017 2017 Manufacturing Talent Champion Award: Michigan Manufacturer’s Association
 2015 Alvah K. Borman Award for Contributions to the Philosophy and Practice of Cooperative Education: ASEE: Cooperative & Experiential Education Division
 2014, 2015 School of CIS named #1 US undergraduate CIS program by College Factual
 2013 GVSU Padnos College of Engineering featured by ASEE for student success
 2012 Chairman’s Award for Outstanding Contributions to Experiential Education
 ASEE: Cooperative & Experiential Education Division
 2012 GVSU selected as one of 29 “Exemplars of Real-World Engineering Education” by National Academy of Engineering
 2006 Fellow: American Society of Mechanical Engineers
 2003 Dedicated Service Award: American Society of Mechanical Engineers
 1990 Outstanding Teaching Award: GMI Engineering & Management Inst. Alumni Association
 1988 Outstanding Young Engineer: Society of Manufacturing Engineers
 1987 Certified Manufacturing Engineer

Grant and External Funding History

Over \$43,000,000 to date

Facilities Projects

2018 – 2019	Shape Innovation & Design Center Active campaign – to date results	\$1,700,000
2015 – 2017	EMC Pre-compliance Testing Facility Enhancement DTE Foundation	\$300,000
2014	Innovation Connection Endowment	\$420,000
2006	Large Scale Solar Photovoltaic Demonstration Project Grant Michigan Energy Office	\$50,000
2005 – 2006	Kennedy Hall of Engineering State of Michigan funding Private funding	\$12,000,000 \$5,000,000
1999 – 2000	Keller Engineering Laboratories Building Privately funded by a variety of corporations and foundations	\$7,000,000

K – 12 Outreach Support

2019	Ken Platteschore / FIRST Robotics Endowment	\$35,000
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2013	K-12 Outreach Grant, Perrigo Corporation	\$10,000
2007 – 2009	Enhancing K-12 STEM Education: A Higher Education/K-12 Co-curricular Partnership, Alcoa Foundation	\$150,000
2003 – present	FIRST Robotics – West MI Activities Several Private Sponsors	\$520,000
2001 – present	STEPS (Science, Technology, and Engineering Preview Summer) program NASA, Nokimos Foundation, SME Foundation, Alcoa Foundation, and others	\$500,000
<i>Scholarship Program Development</i>		
2023 – 2028	Racial Equity in STEM: STEM Master’s Degree Pipeline Collaboration (NSF) – Pending for \$7.74 Million	Pending
2021	HBCU/HSI Consortium Scholarship Fund – to date	over \$500,000
2021 – 2026	Scholarships for Student Success in a Combined Bachelor/Master Degree Program in Engineering: National Science Foundation – supports low income and first generation STEM students	\$967,019
2018 – 2023	Retaining and Inspiring students in Science and Engineering (RISE) : National Science Foundation – supports low income and first generation STEM students	\$1,000,000
2016 - present	Three scholarship funds and one program fund currently in the endowment building phase	
2016	FTC&H Occupational Safety & Health Management Scholarship	\$30,000
2016 - present	Autocam Medical Scholarship Program (full-tuition or half tuition scholarships - 14 scholarship recipients to date)	\$433,000
2015	Initech CIS Scholarship Endowment	\$30,000
2015	Tower – Pinkster Engineering Scholarship and Endowment	\$31,500
2014 - present	Right Place Manufacturing Engineering Scholarship (ongoing, 8 to date)	\$12,000
2014	Wisner Engineering Scholarship Endowment for non-traditional and transitioning students	\$1,500,000
2012 – present	NN Precision Components Scholarship – provides full or half tuition scholarships for engineering students (ongoing, 14 to date)	\$666,000
2011 – 2016	Mentoring, Academic Support and Scholarships for Science Students (MAS4): National Science Foundation – supports low income and first generation students	\$600,000

2010	Parmalee Engineering & Computing Scholarship Endowment	\$30,000
2006 – 2011	Support for Dynamic Students in Math, Science, Engineering and Computing: National Science Foundation – supports low income and first generation students	\$500,000

Curricular and Program Projects

2022	Shape Corporation Endowment for Padnos College Programing	\$2,000,000
2005	Sebastian Chair in Cooperative Engineering Education & Education Development	\$1,300,000
2003 – 2005	AIME (Articulation & Integration of Manufacturing Engineering) SME Education Foundation	\$226,000
1997	Seymour & Esther Padnos School of Engineering Endowment	\$5,000,000
1993 – 1999	Creation & Administration of the Padnos International Design Competition for environmentally responsible engineering senior design projects, Louis & Helen Padnos Foundation	\$144,000
1993	Software Grant: Algor Corporation	\$19,900
1993	Manufacturing Equipment Grant, Premium Industrial Equipment	\$17,000
1992 – 2000	Curriculum Development, Capital Equipment, Faculty Development, and Student Development in Manufacturing Engineering, SME Manufacturing Engineering Education Foundation, eight grants	>\$500,000
1991	Teaching Software Grant: Tharo Systems Inc.	\$1,500
1991	Teaching Equipment Grant: GM Research Laboratories	\$15,000
1991	Teaching Equipment Grant: Delco Electronics Division, GM Corporation	\$17,000
1990	Teaching Computer Hardware & Software Gift: J.M. Blinke	\$19,700
1990	Teaching Equipment Grant: IVAC Corporation	\$6,500
1989	Teaching Equipment Grant: Inland Division, GM Corp.	\$10,000
1998	Teaching Equipment Grant: BOC Division, GM Corp.	\$2,500
1986	Teaching Equipment Grant: View Engineering	\$27,000
1986	Teaching Equipment Grant: Itran Corporation	\$37,225

Technical Projects

2004 – present	R&D Center Activities (aMDI, DOER, DTE-EMC, ACI)	
1986 – 1987	Utility Research & Development Grant for “Background Evaluation and Preliminary Research for Development of the Carrier Fringe Technique for Application to the Power Generation Industry,” Michigan Energy and Research Association	\$10,000
1985 – 1986	Research Initiation Grant for “Further Development & Application of a Carrier Fringe Technique for Elimination of the Ambiguity in Holographic Interferometry,” Engineering Foundation	\$17,000
1985 – 1986	“Photoelastic Evaluation and Characterization of Stresses in Ceramic Spark Plug Insulators,” AC Spark Plug Division, GM Corp.	\$10,000
1986	Photoelastic Coating of Space Frame Members for Impact Testing,” CPC-Pontiac Division, GM Corp.	\$8,000
1985	“Real-Time Holographic Interferometric Analysis of Deformations of Roof/Sail Panel Joints,” CPC Group, GM Corp.	\$6,000
1985	“Residual Stress Analysis of Cast Aluminum Engine Heads,” CPC Test Engineering Group, GM Corp.	\$20,000
1985	“Holographic Analysis of Composite End Tanks,” Harrison Radiator Division, GM Corp.	\$7,000
1985	“Three Dimensional Photo-elastic Analysis of Ld-2 Prototype Engine Head,” Oldsmobile Division, GM Corp.	\$20,000
1985	“Holographic Analysis of Saturn Transmission,” Saturn Corp.	\$7,000
1985	“Three Dimensional Photoelastic Stress Analysis of the Manhattan Engine,” Pontiac Motor Division, GM Corp.	\$3,650
1984	Equipment Grant to Promote Studies in Holographic Interferometry, Newport Corporation	\$32,500
1984	“Holographic Analysis of Head Bolt Sensor Displacements,” Delco-Remy Division, GM Corp.	\$3,500

Related Service Appointments / Activities

2017 – 2020	FIRST World Championship: Steering Committee (MI Governor’s Appointment)
2015 – present	ABET Evaluator for Interdisciplinary Engineering Programs
2014 – 2015	Learning / Living Facility Design Committee (Architect and Construction Manager selection as well as design and development)
2014 – present	GRPS Academy for STEM – Advisory Board and Mentor
2012 – 2014	City of Grand Rapids Sustainable Streets Task Force
2010 – present	Michigan Accelerator Fund 1 – Technical Advisory Board
2010 – 2012	GVSU Center for Entrepreneurship & Innovation – Advisory Board

2009 – present	Right Place (Grand Rapids Economic Development Organization) - Manufacturers Council <ul style="list-style-type: none"> • First academic organization member • Site selection / promotion team for attracting new businesses
2007 – 2010	Faculty Fellow for Secchia and Winter Residence Facilities
2007 – 2008	Neimeyer Hall Honors College Complex Design Committee
2008 – present	GVSU TRIO - Educational Support Program – Advisory Board
2006 – 2010	GVSU – NSF Advance Project – Advisory Board
2006 – present	GVSU – WISE (Women in Science & Engineering) – Advisory Board
2006 – 2008	Kelly Family Athletic Center Design Committee
2005 – 2007	Kennedy Hall of Engineering Design Committee co-chair
2005 – 2013	West Michigan Science & Technology Initiative – Executive Board
2004 – present	GVSU Awards of Distinction Scholarship Committee
2002 – 2014	Grand Rapids Area Pre-College Engineering Program – Advisory Board
2002 – 2005	City of Grand Rapids Infrastructure Task Force
2002 – present	FIRST Robotics – Exec. Comm. Chair, Judge, Event Co-chair, Development Chair
2001 – present	State of Michigan Regional Math & Science Center – Advisory Board
1998 – 2000	Keller Engineering Labs Building Design Committee co-chair
1994 – present	ABET Evaluator for Mechanical Engineering Programs
1989 – present	ABET Evaluator for Manufacturing Engineering Programs

Publications & Presentations

(* indicates refereed or invited)

“Workforce 2033: Building a pipeline of inclusive students at your college,” KEEN National Conference, January, 2023, (with T. Faulkner, L. Liu. B.D. Truss).

*“Improving Self-Efficacy of Financially Disadvantaged Students via Autonomous Design and Build Project,” Chumley, M., Choudhuri, S., Plotkowski, P., and Manoharan, S., 2022, Proceedings of the ASME IMECE, Columbus, OH, October 30 – November 2, Paper Number 97040.

“Widening the Opportunity Pipeline: Creating Access to Careers through Collaboration with HBCU’s and HSIs” – Expanded Panel Presentation & Re-presentation of CIEC paper, National Forum for Black Public Administrators, April, 2022 (with C. Thelenwood, C. Plouff, D. Truss).

*“Widening the STEM Pipeline: Creating Access to Careers in Engineering and Computing Through Collaborations with HBCUs,” 2022 ASEE – CIEC Conference, February 2022 (with C. Thelenwood).

*“Developing a Strategy to Include Financially Disadvantaged Undergraduate Students into Graduate Engineering Programs,” 4th Annual CoNECD Conference, February 2022 (with S. Manoharan, S. Choudhuri).

“Retaining & Inspiring Students in Science & Engineering (RISE),” Virtual Poster / Presentation, AAAS 2021 Virtual S-STEM Fall Forum, August, 2021 (with D.Herrington, J. Johnson, M. Villarreal).

*Lean & Continuous Improvement in Higher Education,” Keynote Address, Global Lean Summit, November, 2020.

*“The Community-Engaged College: Grand Valley State University’s Industry and Community Partnership Model,” 2020 ASEE Annual Conference, June, 2020, (with C. Thelenwood, B. Nowak).

*"Innovating Engineering Education to Transform the Future," Panel Discussion, 2020 ASEE Annual Conference, June 2020, (with R. Hammond).

*"Reflections on Excelencia in Education & American Society for Engineering Education Dean's Diversity Recognition Program Awards," Panel Discussion, 2019 SHPE National Convention, October, 2019, (with J. Baygents, A. Gates, J. Collofello).

*"Leveraging Industry Collaboration and Insight to Build an Engineering Co-op Program," Panel Discussion, 2019 ASEE Annual Conference, June, 2019, (with C. Hoff, and J.P. Mohsen).

*"Attracting the Next Gen to Careers in Manufacturing and to SME Membership," Webinar, November 15, 2016, (with M. Dochter and N. Lowell).

*"From The Desk Of..." Column, Society of Manufacturing Engineers – Member Council Newsletter, April, 2016.

*"Organizational Socialization Through Three-Stage Co-op Model Yields Slump-To-Jump Transition During Engineering Mid-Years," 2016 Mid Years Engineering Experience (MYEE) Conference, March 2016, (with D. LaFreniere, C. Plouff, and W. Mokhtar).

*"Employee Engagement and Retention through Co-ops and Internships," 2016 ASEE – CIEC Conference, February 2016, (with M.A. Karlsson).

*"Leveraging Cooperative Education Experiences to Enhance and Develop the Capstone Design Course," 2015 ASEE Annual Conference, June 2015, (with C. Pung and C. Plouff).

*"The state of STEAM Education in west Michigan," AIMWest, Panel Presentation, April, 2015.

"Sustainable Streets Task Force Report" to the City of Grand Rapids, MI, August 13, 2013, (contributor).

*"Improving Graduation Rates at a Comprehensive University: A Case Study of Institutional Alignment and Process Improvement in Higher Education," 2013 ASQ Advancing the STEM Agenda Conference, June, 2013, (Workshop) (with N. Giardina, S. Menon).

*"An Aviation-Themed STEPS Camp for Engaging 7th Grade Girls: Assessment Summary," Proceedings, 2013 ASQ Advancing the STEM Agenda Conference, June, 2013, (with S. Maas, C. Standridge).

"Real-World Engineering Education: The Role of Continuous Improvement" (Guest Commentary), Quality Approaches in Higher Education, April 2013, ASQ Press.

"Professional Social Networking: Preparing Students & New Employees," 2013 ASEE – CIEC Conference, (Workshop), February, 2013, (with L. Thurman, L. Carrese).

*"STEM Education – Industry Partnerships," Keynote Panel Discussion, 2012 ASQ STEM Agenda Conference, July, 2012, (with J. Asproth, A. Lane, R. McGregor, F. Padro).

"Co-op/Intern Best Practices: Addressing Diversity in the Workplace and Job Market Critical Skills," 2012 ASEE Annual Convention, June, 2012, (Panel Discussion) (with R. McGregor, C. Higa, B. Watford).

*"Development and Continuous Improvement of K-12 Outreach Programs in STEM," 2011 ASQ STEM Agenda Conference, July, 2011, (Invited workshop – later developed to book chapter).

*“Enhancing Graduation Rates Through High Impact Activities: Experiential Learning, Engagement, Mentoring, and Scholarships,” Proceedings, ASEE 2011 Annual Conference, June, 2011.

“West Michigan Resources to Foster Innovation,” Round table discussion panel leader, *Business Review Knowledge Economy* forum, November 18, 2010, (presentation).

*“Engineering Programs As A Conduit Between Industry and K-12 Education To Support Interest In STEM Fields,” with J. Pawloski, C. Standridge, Proceedings of the 2010 ASEE Annual Conference, June 2010.

*“Engineering as a Vehicle for K-12 Science & Math Education,” invited presentation to the Woodrow Wilson Foundation/W.K. Kellogg Foundation Michigan Teaching Fellowship Program Development Committee, May, 2010.

*“The Role of an Engineering College in Integrated K-12 STEM Outreach Efforts,” with J. Pawloski, S. Maas, K. Meyers, C. Standridge, ASQ Education Brief, February, 2010, (Invited paper).

“Positive Strategies for Challenging Times – Facilitated Discussion from the Front Lines in Co-op,” ASEE – CIEC Conference, February, 2010, (presentation).

“Filling the pipeline: educating for the knowledge economy,” Round table discussion panel leader, *Business Review Knowledge Economy* forum, November 12, 2009, (presentation).

“Challenges of the Engineering Education Pipeline,” – Invited panel, A Summit on Diversity & Opportunity in K-16+ Education, October, 2009, (presentation).

“K-16 Partnerships in Engineering: Fostering Diversity and Growth in the Knowledge Based Workforce of Michigan” - A Whitepaper by the Deans of Michigan’s Colleges of Engineering, October, 2009, (contributor).

“Michigan's Engineering & Computing Colleges: A Community Resource”: Bridging 96 On-line Article, Crain’s Detroit Business & Grand Rapids Business Journal, July 20, 2009.

*“Leveraging Partnerships for Engaging Youth in STEM-Science, Technology, Engineering, and Mathematics”, with K. Meyers, Michigan Pre-College and Youth Outreach Conference, November, 2008.

“Great Internships & Co-ops (In collaboration with Faculty, Administration, Students & Employers)”, 2008 MC-ICE Annual Conference, June, 2008.

*“Empowering Girls: Measuring the Impact of Science Technology and Engineering Preview Summer Camps (STEPS),” with J. Noble and M. Dill, Proceedings, ASEE Annual Conference, June, 2008.

*“The Role of Experiential Learning in Preparing The Engineer of 2020,” with J. Ray, Proceedings, ASEE – CIEC Conference, February, 2008 – Received Best Session Award.

“Grand Valley State University as a Community Resource,” Inside Grand Rapids Conference, October 2007.

“The Interview at a Comprehensive – Teaching Oriented Institution,” SWE Conference, October 2007.

*“Formula For Success: Hands On – Minds On Experiences for First Year Engineering Students,” Invited Paper, Proceedings, 2006 SME Summit, March, 2006.

*“Infrastructure and Culture for Teaching with Technology at GVSU,” (Invited paper), Proceedings 2005 ASEE Annual Conference, Portland, OR, June, 2005.

“The Role of Employers in Developing an Educated Workforce,” Michigan Works – Spring into Action Conference, Grand Rapids, MI, May 5, 2005.

*“Integrating Professional Practice in the Engineering Curriculum – Academic / Industry Partnerships, Invited Paper,” Proceedings, 2004 National Conference on Integrating Practice into Engineering Education, Dearborn, MI, October 2004.

*Evolution & Advantages of an Industry Partnered Engineering College, with J. Ray, H. Larson, C. Plouff, Proceedings, 2004 National Conference on Integrating Practice into Engineering Education, Dearborn, MI, October 2004.

*“Integrated Co-op as the Catalyst for an Industry-Partnered Engineering School,” Proceedings, 2004 CIEC conference, Biloxi, MS, March, 2004 (with C. Plouff).

*“Enabling Technologies for Effective Student Advising,” Proceedings, 2003 ASEE Annual Conference, June, 2003, with A. Sterian and J. Ray.

*“Graduating Minority Students – Coordinated Strategies to Promote Learning for Engineering Students, Within and Beyond the Classroom,” Proceedings, 2001 Equity in the Classroom Conference, Big Rapids, MI, March, 2001, (with B. Adamczyk and H. Larson).

“Engineering Education for West Michigan,” 2001, SME Chapter 38 Publication.

“BSE Undergraduate Handbook:” June, 2001 (with J. Ray and H. Larson), GVSU internal publication.

Guest Editor – Technology: Journal of the Franklin Institute, Philadelphia, PA, Volume 8, 2000.

“Educating Engineers in a Hands-Off World, 2000, SME Chapter 38 Publication, with J. Farris

“Implications of ABET 2000 Accreditation Criteria for Community Colleges and Transfer Programs,” Proceedings, MEC-CCLC Conference, October, 2000 (with H. Larson)

Accreditation Board for Engineering & Technology (ABET) Self Study Documentation, Vols. I and II, School of Engineering, Grand Valley State University, June, 1998.

“PRIME: Pre-college Introduction to Manufacturing Engineering, A Summer Enrichment Program for High School Students,” Proceedings, 1997 Michigan Space Grant Consortium Conference, Ann Arbor, MI, October, 1997.

“Pending ABET Changes and Their Impact on Mechanical Engineering Programs,” Proceedings, 1996 Michigan Teachers of Mechanics Conference, Rochester, MI, March 1996.

“VP Viewpoint”, ASME Region V Newsletter, semi-annually, 1995 – 1998.

Proceedings – Editor, 1994 ASEE – North Central Section Conference, Grand Rapids, MI, April, 1994.

“An Overview of Master’s Programs for Practicing Engineers,” Invited Paper, The Michigan Professional Engineer, February, 1994.

Accreditation Board for Engineering & Technology (ABET) Self Study Documentation, Vols. I and II, School of Engineering, Grand Valley State University, June, 1992.

*“Teaching Laser Interferometry to Undergraduate Engineering Students,” Proceedings, 1991 SPIE Symposium, San Diego, CA, June, 1992 (with D. Parker).

*“An Interdisciplinary Approach to Manufacturing Education,” Proceedings, 1991 ASEE Annual Conference, New Orleans, LA, June, 1991 (with P. Gheresus).

*“Expanding Ethics and Safety Coverage Within the Undergraduate Engineering Curriculum,” Proceedings, 1991 NCS / ASEE Annual Conference, Saginaw, MI, April, 1991, (with D. Clark).

ASME Region V Newsletter – Editor, Published semi-annually, 1990 – 1996.

*“Educating Engineers for the Manufacturing Environment,” Invited Paper, Proceedings, Manufacturing International 90, Atlanta, GA, March, 1990.

“Student Development Programs and Their Role in Preparation for ABET Accreditation,” Invited Paper, Proceedings, SME/NSF Grantee Workshop, Autofact '89 Conference, Detroit, MI, November, 1989.

ABET Self-Study Documentation, Vols. I and II, Manufacturing Systems Engineering Program, GMI Engineering & Management Institute, June, 1989.

*“Deformation Analysis Using Holographic Interferometry,” Invited Paper, Proceeding, 1998 ASEE Annual Conference, Portland, OR, June, 1988.

*“Use of Computer Vision with Holographic Interferometry for Industrial Applications,” Invited Paper, Proceeding, 1987 ICALEO Conference, San Diego, CA, November, 1987 (with D.E. Parker and D.W. Poock).

“Residual Stress Determination on Nasty Surfaces,” Experimental Techniques, Vol. 12, No. 3, March, 1987 (with H. Kowalski).

*“Optical Alignment, Gauging and Holographic Interferometry,” Invited Paper, Proceedings, 1986 Automated Manufacturing Conference, Greenville, SC, November, 1986 (with D.E. Parker).

*“Application of Real-Time Holographic Interferometry to Determine Surface Displacement,” Invited Paper, Proceedings, 1986 ICALEO Conference, Arlington, VA, November, 1986 (with D.E. Parker).

“Statics, ME-201 Lecture Supplement,” GMI Engineering & Management Institute – Instructional Publication, 1986.

“Mechanics of Solids, ME-202 Lecture Supplement,” GMI Engineering & Management Institute – Instructional Publication, 1986.

“Holographic Analysis of Composite End Tanks,” Internal report for Harrison Division of GM, May, 1986 (with D.E. Parker).

*“An Improved Carrier Fringe Technique for Elimination of the Ambiguity in Holographic Interferometry,” Invited Paper, Optical Engineering, October, 1985 (with Y.Y. Hung, and J.D. Hovanessian).

*“A Carrier Fringe Technique for Elimination of the Ambiguity in Holographic Interferometry,” Proceedings, SPIE '85 Symposium, Los Angeles, CA, January, 1985 (with Y.Y. Hung and J.D. Hovanessian). Revised and appeared as a paper in Optical Engineering.

*“Separation of Displacement Components in Holographic Interferometry by Use of a Carrier Fringe Technique,” 1985 SEM Spring Conference, Las Vegas, NV, June, 1985 (with Y.Y. Hung).

“Real-Time Holographic Interferometric Analysis of Deformation of Roof/Sail Panel Joints,” Internal Report for the CPC Group of GM, November 1985 (with D.E. Parker).

“Residual Stress Analysis of an Aluminum Engine Head (PN 14161128) for the L-98 V-8 Corvette Engine,” Internal Report for the CPC Group of GM, November, 1985 (with H.K. Kowalski).

“Real-Time Holographic Analysis of Normal Displacement of the Saturn Transmission Case Under Static Load,” Internal Report for Saturn Corporation, May, 1985 (with D.E. Parker).

“Three Dimensional Photoelastic Stress Analysis of the Manhattan Engine,” Internal Report for the Pontiac Motor Division, GM Corp., February, 1985. (with H.K. Kowalski).

“Basic Principles of Holography and Holographic Interferometry,” GMI Engineering & Management Institute, Instructional Publication, July, 1984.

“Holographic Analysis of Head Bolt Sensor Displacement,” Internal Report for Delco-Remy Division of GM, April, 1984 (with D.E. Parker).

“A Carrier Fringe Technique for the Elimination of Ambiguity in Holographic Interferometry,” Ph.D. Dissertation, 1984.

*“A Technique for Direct Readout of the Derivatives of Holographically Recorded Displacements,” Proceedings, 1983 SESA Spring Meeting, Cleveland, OH, May, 1983 (with Y.Y. Hung).

“Fringe Compensation in Hologram Interferometry,” Experimental Techniques, Vol. 5, No.4, December, 1981 (with Y.Y. Hung and J.D. Hovanesian).

“Fractional Fringe Evaluation Via Compensation in Hologram Interferometry,” SESA 4th International Congress, Boston, MA, May, 1980 (with J.D. Hovanesian and Y.Y. Hung).

Book and Book Chapter

Advancing the STEM Agenda: Quality Improvement supports STEM, “Chapter 4 – K-12 Outreach Programs in STEM: Strategies for Development and Continuous Improvement,” book chapter, Veenstra, Padro, and Furst-Bowe editors, ASQ Press, 2012.

Lasers in Manufacturing, J.T. Luxon, D.E. Parker and P.D. Plotkowski, IFS Springer-Verlag, London, 1987.

Other Scholarly Activities

Professional Society Memberships and Offices

American Society of Mechanical Engineers (ASME)

- ASME Fellow
- ABET Visitor for Mechanical Engineering Programs (1994 – present)
- International Vice President (Term of office 1998-2001)
- Region V Regional Operating Board Member 1990 – 2005

American Society for Engineering Education (ASEE)

- Engineering Dean's Council (1991 – present)
 - Engineering Deans Council K -12 Working Group (2010 – present)
 - Undergraduate Experience Committee (2009 – present)
 - Co-founder and co-chair (2009 – 2010)
- Freund Award Committee (2010 – 2020)
- Cooperative & Experiential Education Division
 - Executive Committee (2006 – 2014)
 - CIEC Conference Planning Committee (2011 – present)

Society of Manufacturing Engineers (SME)

- SME National Nominating Committee (2020 - present)
- SME Society Member Council (2016-2017)
- SME Mentor Program – mentor for high school and college students
- ABET Visitor for Manufacturing Engineering Programs (1989 – present)
- Proposal Review Committee, SME – Manufacturing Engineering Education Foundation (1989 – 1999)

National (& Michigan) Society of Professional Engineers

- West Michigan Chapter
- Reviewer for MSPE / Consulting Engineers Design Competitions (2009 – 2011)
- Host annual MathCounts competitions and sponsor scholarship

Tau Beta Pi: The National Engineering Honor Society

- Charter Member – MI Theta Chapter (1979)
- Faculty Advisor – MI Zeta Chapter (1983 – 1991)
- Faculty Advisor – MI Lambda Chapter (2004 – present)

Society of Hispanic Professional Engineers

- Member at Large
- Outreach and mentoring efforts in west Michigan
- Establishing student chapter at GVSU

Reviewing Activities

2018 – present	National Science Foundation Reviewer: S-STEM Program
2012 – 2014	National Science Foundation Reviewer: Graduate Fellowship Program
2006	National Science Foundation Reviewer: CCLI Program
2001 – present	American Society for Engineering Education Annual Conference: multiple papers each year for various society divisions
1989 – 1999	SME Education Foundation: Educational Grant Proposal Review Committee

Governance and Service Activities

Grand Valley State University

2021 – present	University Communications Review Committee
2020	Vice Provost for Graduate & Life Long Learning Search Committee
2016 – present	Developed and facilitate AutoCam-Medical Scholarship program for co-op students
2014 – present	Mentor – GVSU Hermanos program (male Hispanic students)
2013 – present	GVSU Latin@ Faculty & Staff Association - member
2013	Seidman College of Business Dean Search Committee
2012 – present	Facilitate development and management of Industry Sponsored Graduate Assistant Program
2012 – present	Developed and facilitate NNAutoCam Scholarship program for co-op students
2011 – 2013	Living Center Faculty Fellow
2011 – present	University Faculty & Staff Campaign – chair emeritus
2008 – 2011	University Faculty & Staff Campaign – co-chair
2005 – 2006	University Self-Study Committee for North Central Association / HLC Review
2005 – present	University Inclusion Advocate
2004 – present	University Awards of Distinction Scholarships Committee
2004 – 2012	Student Success Working Group (developed Student Success Model and Blueprint for Success)
2004 – present	University Academic Senate (Ex-officio)
2000 – 2002	University Grievance Committee
1999 – 2004	University General Education Committee

GMI Engineering & Management Institute

1987 – 1989	Faculty Senate
1986 – 1991	Manufacturing Systems Engineering Curriculum Committee – chair
1984 – 1986	University Curriculum Committee
1984 – 1985	Intellectual Property Policy Development Committee – co-chair
1984 – 1991	Sigma Nu Fraternity – faculty advisor
1983 – 1986	Course coordinator for five courses in mechanical and manufacturing systems engineering
1983 – 1986	Developed laboratory facilities (via external funding) and curriculum for courses in experimental stress analysis, applied optics, statics, and mechanics of materials