

## VITA

### I. PERSONAL DATA

**Name:** Mark Osborn Federle

**Work Address:** 257 Haggerty Hall, Marquette University, Milwaukee WI 53151

**Home Address:** 4935 South Daisy Court, New Berlin WI 53151

**Phone:** (Office) 414 288-4531, Cell 414 292-7938

**Email:** mark.federle@marquette.edu

**Professional Registration:** PE - Iowa #12848, WI #40061

**Professional Certifications:** Certified Professional Constructor (#170)

**Fellow** – American Society of Civil Engineers, 2009

### II. EDUCATION

PhD in Civil Engineering (Construction Engrg and Mgmt), The University of Michigan, 1990

MS in Engineering (Construction Engrg and Mgmt), The University of Michigan, 1986

BS in Civil Engineering (Construction), Rose-Hulman Institute of Technology, 1985

### III. ACADEMIC EXPERIENCE

#### **Marquette University, April 2008 to Present**

Associate Chair and Director of Undergraduate Studies, Department of Civil, Construction and Environmental Engrg, Aug 2011-present

McShane Chair of Construction Engineering and Management (Professor-in-Charge of the CEMA program), April 2008 - present

Full Professor (with Tenure) in Civil and Environmental Engineering), April 2008 - present

#### **Iowa State University 1990 to 1999, 2005**

Adjunct Associate Professor, 2005, Taught Construction Contracts

Professor-in-Charge, Professor-in-Charge, Construction Engineering Curriculum, July 1997 to June 1999 – Ran the largest Construction Engineering Program in the country. Supervised the development of 120+ credit hour programs, Developed the Electrical Emphasis option within Construction Engineering. Supervised 5 faculty

Associate Professor (with tenure), 7/96 to 6/99

Assistant Professor, Iowa State University, August 1990 to June 1996

Research Assistant, The University of Michigan, September 1987 to August 1990, September 1985 to May 1986.

#### **IV. INDUSTRIAL AND OTHER NONACADEMIC EXPERIENCE**

##### **The Weitz Company – Des Moines Iowa**

1/2001 to 3/2008 – Chief Information Officer and Vice President - reported to CEO

6/1999 to 12/2000 – Director of Information Technology, later promoted to IT Director.

##### **Responsibilities:**

Provide strategic direction for all aspects of information technology across the enterprise. Created the IT department. Created first IT Strategic Vision for company. Provide proactive management of ASP / software / hardware vendors. Act as a member of the Executive Team.

During last few years, selected, purchased and supervised implementation of ERP (JD Edwards), AP Imaging (Optika), CRM (SalesLogix), BI (Information Builders Web Focus) and SAN (XioTech)– met budget / schedule for each. Also, replaced WAN provider, reducing costs by over \$100,000 per year. Replaced long-distance provider at a 50% reduction in cost. Serve as the Weitz contact for IT vendors as a reference customer. Lead efforts in identifying qualified vendors and negotiating all contracts.

I travel approximately 140 days a year visiting vendors, business units, other contractors and in serving the construction industry through professional organizations.

**Hensel-Phelps**, Denver, Colorado, May to August 1993; I developed two training videos for using a slip-form paver and superflat concrete floors

**Gleason and Raus Mechanical Contractors**, Dexter, Michigan, October 1987 to September 1988; Project manager/estimator, HVAC contractor on residential, commercial and industrial projects throughout Southeastern Michigan

**Palermo Construction**, Brighton, Michigan, July 1986 to September 1987; Project manager/estimator, general contractor on commercial and industrial projects throughout southeastern Michigan

#### **V. HONORS AND AWARDS**

ASCE Outstanding Reviewer, *Journal of Construction Engineering and Management*, 2011

Outstanding Instructor, Associated General Contractors of America, 2011

Outstanding Faculty Mentor, James L. Allhands Competition, Associated General Contractors of America, 2010

Fellow, American Society of Civil Engineers, 2009

Outstanding Faculty Mentor, James L. Allhands Competition, Associated General Contractors of America, 2009

Career Achievement Award – Rose-Hulman Institute of Technology, 2005

Outstanding Advisor, College of Engineering, Iowa State University, 1999

Outstanding Professor in Construction Engineering, Engineering Student Council, Iowa State University, 1998

Big XII Faculty Fellowship (to University of Kansas), 1998

Leadership Excellence Award, Master Builders of Iowa (AGC Building Chapter), 1997

Certificate of Appreciation, American Society of Civil Engineers, Chair of the Engineering Management Publications Committee, 1996-1997

Certificate of Appreciation, Iowa State University Honors Program, “A Celebration of Teaching and Learning” 1997

Certified Cost Engineer (CCE), *aace International* October 1996 (Inactive)

Member of Chi Epsilon, Civil Engineering Honorary, Spring 1996 - 1999

Outstanding Faculty Member, Associated General Contractors Student Chapter, Iowa State University, School year 1995-96

Constructor Level, American Institute of Constructors, April 1995

Charles W. Schafer Faculty Award for Excellence in Teaching, Research, and Service, Civil and Construction Engineering Department, April 1994

Member of Sigma Chi - The Scientific Research Society, Full Member, February 1994 - 1999

Outstanding Associate Member, Iowa Section, ASCE, September 1993.

Certificate of Service, Iowa Section, ASCE, 1995, 1994, 1993

President's Award, Timberline Users Group, 1992

Member of Sigma Lambda Chi - Construction Honorary, April 1992 - 1999

Bailey Fellow, The University of Michigan, August 1987-August 1990

Riggs Fellow, The University of Michigan, August 1985-June 1986

Outstanding Student Award, Indiana Chapter of the American Society of Civil Engineers,  
Rose-Hulman Institute of Technology Student Chapter, 1985

## **VI. ACADEMIC AREAS OF SPECIALIZATION**

### **(I) Teaching – Marquette University**

CEMA 4830/CEEN 5930, Construction Planning, Scheduling and Control, F10, F11, F12

CEMA 3860, Construction Materials and Methods, F10, F11, F12

CEMA 3810/CEEN 180, Introduction to Construction Management, F08, F09, S10, S11,  
S12

CEEN 181, Construction Cost Analysis, S09

CEEN 4931/5931/ 188, Construction Management Functions and Processes, S09, S10

CEEN 6999, Thesis Research, S11

GEEN 2952, Professional Orientation, F11

HOPR 1953, Project Management Skills for the 21<sup>st</sup> Century, F09, F10

### **(II) Teaching – Iowa State University**

CE 699, Thesis Research, S99, F98, Sum98, S96, Sum95, S95, F94

CE 599, Creative Component, S98, F97, Sum96, Sum93, Sum91, S91

CE 595X, Research Methods in Construction Engineering, F96, F95, F94, F93

CE 590, Special Topics, S98, S97, S96, F95, S95, Sum93, F92

ConE 550, Construction Management Functions and Processes, S91

CE 510, Advanced Technologies in Construction, F95

CE 503, Construction Management Functions, F98, F96, S94, S93, S92

ConE 490, Independent Study, F98, S98, F97, S97, SS95, SS4, F93, S93, S92, F91, S91

ConE 421, Construction Estimating, F97, F95, F94

ConE 410, Professional Development, S99, F98

ConE 372, Construction Equipment and Heavy Construction Methods, S93

ConE 346, Construction Estimating, F92, S92, F91, S91, F90

ConE 245, Contract Documents, S97, S96

ConE 241, Construction Materials and Methods, S97, F96

ConE 221, Contractor Organization and Management, S99 (4cr) F98 (1cr), S98 (4cr), F97  
(1cr), S96 (4cr), F94 (2crs), S94 (4cr), F93 (2cr), S93 (2cr), F92 (2 cr)

ConE 110, Construction Engineering Orientation, S99, S98

Engr 101 - ConE Section, F98, F97

FrE 101, Engineering Orientation, F91 (6 lectures), S91 (2 lectures)

Honors 321, Project Management Skills for the 21<sup>st</sup> Century, S97, F95

290H, Freshman Mentor Program, S97, S93, S91

### **(ii) Research Areas**

- Organizational Behavior & Culture
- Quality Management
- Leadership in Construction
- Partnering
- Benchmarking Organizations
- Design-Build Project Delivery
- Empowerment
- Recycling of Construction Waste
- Workforce Issues
- Continuous Improvement (TQM)
- Individual Behavior and Leadership
- Implementing Best Practices on the Web

## **VII. GRANTS AND CONTRACTS**

### **Funded Proposals:**

Title: Creating Value as a CEO

Principal Investigators: James E. Rowings and Mark O. Federle

Sponsor: The Electrical Contracting Foundation, Inc.

Amount: \$52,014 (Completed by Jim Rowings after I left Iowa State)

Duration: January 1, 1999–December 31, 1999

Title: Merit Systems for Field Personnel

Principal Investigators: James E. Rowings and Mark O. Federle

Sponsor: The Electrical Contracting Foundation, Inc.

Amount: \$44,698 (Completed by Jim Rowings after I left Iowa State)

Duration: January 1, 1999–December 31, 1999

Title: Best Practices of Electrical Contractors

Principal Investigators: James E. Rowings and Mark O. Federle

Sponsor: The Electrical Contracting Foundation, Inc.

Amount: \$57,955 (Completed by Jim Rowings after I left Iowa State)

Duration: January 1, 1998–December 31, 1998

Title: Benchmarking for Iowa DOT Offices of Construction

Principal Investigators: Chuck T. Jahren and Mark O. Federle

Sponsor: Iowa Highway Research Board

Amount: \$36,069 (Completed by Chuck Jahren after I left Iowa State)

Duration: January 1, 1998–December 31, 1998 – Extended through August 1999

Title: Project Specific Web-Site Development

Principal Investigators: Mark O. Federle

Sponsor: The Weitz Company

Amount: \$6,000

Duration: January 1, 1998–May 31, 1998

Title: Pen-Based Estimating Software Review

Principal Investigators: Mark O. Federle

Sponsor: ICCI

Amount: \$1,000

Duration: January 1, 1998–February 28, 1998

Title: Design-Build Methods for the Electrical Contracting Industry

Principal Investigators: James E. Rowings and Mark O. Federle

Sponsor: The Electrical Contracting Foundation, Inc.

Amount: \$54,440

Duration: January 1, 1996–February 28, 1997

Title: 21st Century Workforce and New Markets for Electrical Contractors

Principal Investigators: James E. Rowings and Mark O. Federle  
Sponsor: The Electrical Contracting Foundation, Inc.  
Amount: \$62,589  
Duration: January 1, 1996–February 28, 1997

Title: Consistency Review for Weitz Company  
Principal Investigators: Mark O. Federle  
Sponsor: The Weitz Company  
Amount: \$30,000  
Duration: October 1, 1996–May 31, 1997

Title: Implementation of Benchmark Project Recommendations for Iowa DOT Offices of Construction (HR 381 Continued)  
Principal Investigators: Chuck T. Jahren and Mark O. Federle  
Sponsor: Iowa Highway Research Board  
Amount: \$27,540  
Duration: September 15, 1996 to September 14, 1997

Title: Shop Burden Booklet  
Principal Investigators: Mark O. Federle and James E. Rowings  
Sponsor: Sheet Metal and Air Conditioning Contractors National Association  
Amount: \$16,452  
Duration: July 21, 1995–November 30, 1995

Title: Analysis, Design, and Construction of Hydraulic Structures  
Principal Investigators: David T. Kao, Fouad S Fanous, and Mark O. Federle  
Sponsor: The Synthesis Coalition and the National Science Foundation  
Amount: \$29,000  
Duration: October 1, 1994–September 30, 1995

Title: Optimizing Project Organizations  
Principal Investigators: James E. Rowings and Mark O. Federle  
Sponsor: Construction Industry Institute  
Amount: \$102,481  
Duration: January 1, 1994–October 31, 1995

Title: Partnering in the Electrical Contracting Industry  
Principal Investigators: James E. Rowings and Mark O. Federle  
Sponsor: The Electrical Contracting Foundation, Inc.  
Amount: \$46,839  
Duration: January 1, 1994–October 31, 1994

Title: Tools and Materials-Planning and Control Systems  
Principal Investigators: James E. Rowings and Mark O. Federle  
Sponsor: The Electrical Contracting Foundation, Inc.  
Amount: \$10,000  
Duration: January 1, 1994–October 31, 1994

Title: Formalizing Total Quality Management  
Principal Investigator: Mark O. Federle  
Sponsor: Butler Construction Company  
Amount: \$51,017  
Duration: August 23, 1993–December 31, 1994

Title: Analysis of Building Construction Recycling Efforts in Iowa  
Principal Investigator: Mark O. Federle  
Sponsor: College of Engineering Research Initiation Grants, Iowa State University  
Amount: \$2,200  
Duration: October 1991-June 1992

Title: A Study of Leadership in Construction  
Principal Investigator: Mark O. Federle  
Sponsor: College of Engineering Research Initiation Grants, Iowa State University  
Amount: \$1,850  
Duration: October 1990-June 1991

## **VIII. TECHNICAL PUBLICATIONS**

### **Refereed Journals**

Jahren, Charles T. and Mark O. Federle, "Implementation of Quality Improvement for Transportation Construction Administration," *Journal of Management in Engineering*, ASCE, 15, 56 (1999).

Rowings, James E., Jr., Mark O. Federle, and Jennifer Rusk, "Design-Build Methods for the Electrical Contracting Industry," *Journal of Construction Engineering and Management*, ASCE, 126, 15(2000).

Federle, Mark O., and James E. Rowings, Jr., "Determining Shop Burden," *Cost Engineering*, aace International, October 1997, pp. 38-42.

Rowings, James E., Jr., Mark O. Federle, and Sara Birkland, "Characteristics of the Craft Work Force," *Journal of Construction Engineering and Management*, ASCE, March 1996.

Federle, Mark O. and Gerald W. Chase, "Applying Total Quality Management to Design and Construction," *Journal of Management in Engineering*, ASCE, October 1993, V9, N4, pp. 357-364.

Federle, Mark O., "Overview of Building Construction Waste and the Potential for Materials Recycling," *Building Research Journal*, National Housing Research Centers Consortium, V. 2, N. 1, July 1993, pp. 31-38.

Federle, Mark O., James E. Rowings, Jr., and Thomas S. DeVany, "A Model of Career Choice for Craftworker," *Journal of Construction Engineering and Management*, ASCE, June 1993, V119, N1, pp. 105-114.

Maloney, William F. and Mark O. Federle, "Employee Involvement in Engineering and Construction," *Journal of Management in Engineering*, ASCE, April 1993, V9, N2, pp. 174-190.

Maloney, William F. and Mark O. Federle, "Organizational Culture and Assessment in Engineering and Construction Organizations," *Journal of Management in Engineering*, ASCE, January, 1993, V9, N1, pp. 64-81.

Chase, Gerald W. and Mark O. Federle, "Implementation of TQM in Building Design and Construction," *Journal of Management in Engineering*, ASCE, October 1992, V8, N4, pp. 329-339.

Federle, Mark O. and William F. Maloney, "Substitutes for Leadership and Unionized Construction Carpenters," *Journal of Construction Engineering and Management*, ASCE, June 1992, V118, N2, pp. 332-348.

Federle, Mark O., James E. Rowings, Jr., and Carlos Espana, "Educational Needs of Civil Engineering In Management," *Journal of Management in Engineering*, ASCE, April 1992, V8, N2, pp. 192-207.

Federle, Mark O., "Employee Involvement Attitudes Among Construction Executives," *Engineering Management Journal*, American Society of Engineering Management, March 1992, V4, N1, pp. 31-36.

Maloney, William F. and Mark O. Federle, "Organizational Culture and Management," *Journal of Management in Engineering*, ASCE, New York, January 1991, V7, N1, pp. 43-58.

### **Refereed Proceedings Articles - Entire Manuscript Refereed**

Babcock, Karmyn and Federle, Mark O., "Project Specific Websites to Improve Communication on Jobsites," Proceedings of Construction Congress VI: Building Together for a Better Tomorrow in an Increasingly Complex World, 2000.

Federle, Mark O. and Rowings, James E., Jr., "Identifying New Markets - An Approach for Specialty Contractors," CIB-55 *Proceedings of Economic Management of Innovation Productivity and Quality in Construction*, Zagreb Croatia, September 1996.



Rowings, James E., Jr., and Federle, Mark O. "Improving Project Teams," *CIB-65 Proceedings of Construction Management*, Glasgow Scotland, September 1996.

Federle, Mark O., "Encouraging Teamwork using a Group Examination in a Senior Design Course," *Proceedings of the 1995 American Society for Engineering Education Annual Conference*, Anaheim, CA, June 1995, Vol 1, pp 1006-1008.

Federle, Mark O. and Joseph J. Cecere, "Strengthening the Tie with Industry Through Continuing Education and Extension Activities," *Proceedings of the 1993 American Society for Engineering Education Annual Conference*, Champaign, Illinois, June 1993, Vol 1, pp. 321.

Harmelink, David J. and Mark O. Federle, "State of the Art Computerized Engineering Education," *Proceedings of the 1992 National Convention*, American Society for Engineering Education, Toledo, Ohio, June 1992, Vol. 2, pp. 1701-1704.

### **Reports**

James E. Rowings, Jr., and Federle, Mark O., *Design-Build Methods for Electrical Contractors*, A report to the Electrical Contracting Foundation, 1998.

Federle, Mark O., and Jahren, Charles, *Implementation of Benchmark Project Recommendations for Iowa DOT Offices of Construction (HR 381 Continued)*, A Report to the Iowa Highway Research Board, December 1997.

Federle, Mark O., and James E. Rowings, Jr., *An Action Plan for Electrical Contractors and Their Workforce in the 21st Century*, A report to the Electrical Contracting Foundation, 1997.

Mark O. Federle, *A Consistency Review of COG and Systems Manual*, A Report to the Weitz Companies, 1997.

Mark O. Federle and James E. Rowings, Jr., *Determining Shop Burden*, A Report to the Sheet Metal and Air Conditioners National Contractors Association, 1996.

Mark O. Federle and James E. Rowings, Jr., *Optimizing Project Organizations*, A Report to the Construction Industry Institute, August 1996.

James E. Rowings, Jr. and Federle, Mark O., *Electrical Contractor's Guide to Partnering*, A report to the Electrical Contracting Foundation, 1995.

James E. Rowings, Jr. and Federle, Mark O., *Tools and Materials Control Systems*, A report to the Electrical Contracting Foundation, December 1994.

Federle, Mark O., Compiled by, *Total Quality Management Process at Butler Construction*, 1993.

Federle, Mark O. and Gerald W. Chase, Editors, *TQM-IV in Building Design in Construction*, Civil and Construction Engineering Department, Iowa State University, Ames, IA, May 1993.

Federle, Mark O. and Gerald W. Chase, Editors, *Applying Total Quality Management to the Design and Construction of Buildings*, Civil and Construction Engineering Department, Construction Engineering Program, Iowa State University, September 1992

Federle, Mark O., *Analysis of Building Construction and Demolition Debris Recycling in Iowa*, A report to the Engineering Research Institute, Iowa State University, 1992.

Chase, Gerald W., Mark O. Federle, and S. Pigneri, Editors, *TQM-II in Building Design and Construction*, Civil and Construction Engineering Department, Construction Engineering Program, Iowa State University, October 1991.

Federle, Mark O., *Employee Involvement in the Construction Industry*, A Report to the Engineering Research Institute, Iowa State University, 1991.

Maloney, William F. and Mark O. Federle, *Organizational Culture in Engineering and Construction Organizations*, A Report to the Construction Industry Institute, January 1990, Source Document 52.

#### **Non-Refereed Articles or Non-Refereed Proceedings Articles**

Federle, Mark O. "Inside the Design/Builder's Studio" *Electrical Contractor Magazine*, October 2008.

Federle, Mark O. "Planning Ahead" *Electrical Contractor Magazine*, June 2008.

Federle, Mark O. "Understanding Design/Build" *Electrical Contractor Magazine*, April 2008.

Federle, Mark O., and Charles T. Jahren, "Implementing Benchmarking Recommendations in the Offices of Construction for the Iowa DOT, *Proceedings of Crossroads 2000*, Ames, IA, 1998, pg. 151-154.

Nelson, Chris, Powell, Doug, and Federle, Mark, "Computer Assistance in Conceptual Estimating for Buildings, *Proceedings of the aace International Meeting*, Cincinnati, OH, June 1998.

Federle, Mark O. and James E. Rowings, Jr., "What Strategic Planning Model are you Building?" *Electrical Contractor*, December 1996, pp. BG5-BG10.

Federle, Mark O., "Getting a Handle on Tool Control," *Electrical Contractor*, July 1994, pp. 33-35.

Pigneri, Steven C. and Mark O. Federle, "Predictive Model of Cost Overruns," *Proceedings of the American Association of Cost Engineers 1993 Annual Conference*, Dearborn, Michigan, July 1993

Federle, Mark O. and David J. Harmelink, "Integrating Software into an Estimating Course," *Proceedings of the International Cost Engineering Congress/American Association of Cost Engineers First World Congress*, June 1992, pp. S.3.1-S.3.4.

Federle, Mark O. and James E. Rowings, Jr., "A Model of Influences on the Construction Workforce," *Proceedings, American Society of Engineering Education*, North-Midwest Section Meeting, October 1991, pp. 7-1 - 7-7.

## **IX. RECENT TECHNICAL PRESENTATIONS**

### **Invited Presentations**

Lean Construction Units 1 and 2, Various Chapters AGC, 2012

Project Recordkeeping and Technology, AGC of Greater Milwaukee Safety and Management Training Day, Feb 28, 2012

“How to Mitigate Project Risk”, Safety and Management Training Day 2010, AGC-Greater Milwaukee, Mar 9<sup>th</sup> 2010

“Risk Management for Contractors” – Builders Association of Chicago, Feb 23<sup>rd</sup> 2010

“STP Unit 6” Associated General Contractors of America Training and Development Conference, Atlanta GA, Oct 2009.

Numerous (more than 20) presentations at various technology conferences over the years 2000 to 2009 – because I was no longer an academic I did not keep track of them.

“Technology in Construction” KeyNote Speaker – Electrical Contracting Foundation Meeting, Cancun Mexico – January 2003.

“Graduate Student Opportunities at Iowa State University,” Rose-Hulman Institute of Technology, December 4, 1998.

“Hotel Legos” (with Nicole Buscher) “*Taking the Road Less Traveled*”, Sponsored by the Program for Women in Science and Engineering, Iowa State University, 4 Times in 1998.

Doug Powell and Mark Federle, *The Iowa State/TWC Alliance and OWL<sup>2</sup> Project*, Meridian Systems Annual Conference, October 24, 1998, Baltimore MD

“Project Management Short Course,” Sheet Metal and Air Conditioning Contractors National Association Annual Convention, Nashville, TN, October 19, 1998.

Doug Powell and Mark Federle, *The Iowa State/TWC Alliance and OWL<sup>2</sup> Project*, Meridian Systems Education Outreach, July 31, 1998, San Luis Obispo, CA.

“Hotel Legos” Sponsored by the Summer Honors Program, The College of Engineering, Iowa State University, July 14 and July 21, 1998.

“Merit Systems for Electrical Contractors,” Electrical Contracting Foundation, Chicago, IL July 16, 1998.

“Creating Value as a CEO,” Electrical Contracting Foundation, Chicago, IL July 16, 1998.

“Comparing of Union and Non-union Electrical Contractors,” Electrical Contracting Foundation, Chicago, IL July 16, 1998.

“Graduate Student Opportunities at Iowa State University,” University of Kansas, March 16, 1998.

Doug Powell and Mark Federle, “Surfing into the 21<sup>st</sup> Century,” MBI Annual Meeting, January 27, 1998 - Des Moines, IA

“The Internet for Contractors,” Master Builders of Iowa Computer Users Group, November 14th, 1997.

“Hotel Legos” (with Nicole Buscher) “*Taking the Road Less Traveled*”, Sponsored by the Program for Women in Science and Engineering, Iowa State University, 3 Times in 1997, April 17, and October 16 and 23, 1997.

“An Overview of the Structure of Construction Engineering Degree Programs” Sponsored by the American Society of Civil Engineers, Construction Congress V, Minneapolis, MN, October 8, 1997.

“Hotel Legos” Sponsored by the Summer Honors Program, The College of Engineering, Iowa State University, July 7, 1997.

“The Future of the Construction Industry in Iowa”, Master Builders of Iowa Exposition, March 1997.

“The Future of the Construction Industry Workforce for Architects and Engineers in Iowa”, Master Builders of Iowa Annual Convention, January 1997.

“The 21st Century Workforce and Future Markets for Electrical Contractors in Iowa”, National Electrical Contractors Winter Meeting, January 1996.

“New Markets for Electrical,” National Electrical Contractors Association Annual Meeting - Anaheim, CA, October 11, 1995.

“Preparing for the Workforce of the 21st Century,” National Electrical Contractors Association Annual Meeting - Anaheim, CA, October 10, 1995.

"Partnering III between the IBEW and NECA Electrical Contractors in Iowa," (with Jim Rowings) Iowa Chapter of the National Electrical Contractors Association Summer Meeting, Sioux City, IA, August 24, 1995

"Tool and Material Control for Electrical Contractors," Tri-District Meeting of the National Electrical Contractors Association, Sun Valley ID, June 14, 1995

"21st Century Markets for Electrical Contractors," (with Jim Rowings) Electrical Contractors Foundation, Phoenix, AZ, March 3, 1995

Facilitator, “Highway & Heavy Construction Engineering Research Workshop,” Iowa State University, January 5, 1995

"Partnering II between the IBEW and NECA Electrical Contractors in Iowa," (with Jim Rowings) Iowa Chapter of the National Electrical Contractors Association, Clive, IA, December 22, 23, 1994

"Tool and Material Control for Electrical Contractors," National Electrical Contractors Association National Convention (3 times), Chicago, Illinois, October 24–25, 1994

"Construction Estimating at Iowa State University," American Society of Professional Estimators—Quad City Chapter, Davenport, Iowa, September 27, 1994

"Partnering between the IBEW and NECA Electrical Contractors in Iowa," (with Jim Rowings) Iowa Chapter of the National Electrical Contractors Association, Galena, IL, August 18, 1994

"Partnering for Electrical Contractors," Electrical Contractors Foundation, Phoenix, AZ, March 4, 1994

"Tool and Material Control for Electrical Contractors," (with Jim Rowings) Electrical Contractors Foundation, Phoenix, AZ, March 3, 1994

"Total Quality Management," Society of Land Surveyors in Iowa Annual Convention, March 25, 1993

Facilitator, “Construction Engineering Research Workshop,” Iowa State University, February 18, 1993

"Hotel Lego," (with Jim Rowings), Gifted Student Program, Iowa State University, November 14, 1992

"Research Activities in Construction Engineering," (with Ed Jaselskis), U.S. Corps of Engineers, Construction Engineering Research Laboratory, Champaign, Illinois, November 12, 1992

"Pen-Based Computers in Construction," Master Builders of Iowa Computer Users Group, June 17, 1992

Panel Member, "Project Planning and Control with Changing Workforce Demographics," *Construction Congress II*, American Society of Civil Engineers, April 14, 1991

### **Paper Presentations (Reviewed Abstract or Refereed Paper)**

"Cost Engineering Issues for Design Build," *Proceedings of the aace International Meeting*, Cincinnati, OH, June 1998.

"Production Rates for International Projects in Asia," *Proceedings of the aace International Meeting*, Cincinnati, OH, June 1998 (Paper written by Enno Koehn, presented by Mark Federle).

"Top-Down, Back to Front Project Planning," *Proceedings of the aace International Meeting*, Cincinnati, OH, June 1998 (Paper written by Fred Rahbar and Jim Rowings presented by Mark Federle).

Federle, Mark O., David T. Kao, and Fouad S. Fanous, "Computer Integrated Analysis, Design, and Construction of Hydraulic Structures," 1995 American Society for Engineering Education Annual Conference, Anaheim, CA, June 28, 1995

"Encouraging Teamwork using a Group Examination in a Senior Design Course, 1995 American Society of Engineering Education Annual Conference, Anaheim, CA, June 26, 1995

"State-of-the-Art Computerized Engineering Education," American Society for Engineering Education National Convention, Toledo, Ohio, June 24, 1992

"A Model of Influences on the Construction Workforce," American Society of Engineering Education, North-Midwest Section Meeting, October 1991

### **Session Moderator:**

"Lean Workstructuring: Perspectives from Miron and Boldt", Moderator Sept 20, 2012

Keynote Speaker, Bay View Leadership Academies – Pin Ceremony, Feb 8, 2012

“Bridging the Gap between Education and Industry” Technology Day”, Moderator, ConstrucTech Magazine, Chicago, IL, Sept 14, 2011.

“From the Outside Looking In: Valuable Insights to the Construction Process by Building Owners” Moderator, Associated General Contractors of Wisconsin Summer Meeting, July 20, 2011.

Session Moderator (Room Host) - Three Sessions, *aace International Meeting*, Cincinnati, OH June 1998.

Session Moderator, Transportation Research Board 76th Annual Meeting, Session 100, "Good Faith Efforts from the Prime Contractors Perspective," January 1997

Session Moderator, “Afternoon Session,” 1995 American Society of Civil Engineers - Iowa Section Annual Meeting, Ames, IA, September 15, 1995

Session Moderator, “Integration of Design and Construction,” 1995 American Society for Engineering Education Annual Conference, Anaheim, CA, June 28, 1995

Session Moderator, "Academic-Industry as Partners for Construction Engineering Education," American Society for Engineering Education Annual Convention, Edmonton, Alberta, Canada, June 28, 1994

Session Moderator, Transportation Research Board 71st Annual Meeting, Session 14-B, "Determinants of Disadvantaged Business Enterprises Program Effectiveness," January 1992.

## **X. EXTENSION AND OUTREACH ACTIVITIES**

### **Short Courses Taught:**

Timberline Estimating Short Course, Ames, Iowa, January 5, 1995, November 21, 1994, January 17, 1994, November 22, 1993, March 13, 1993, January 9, 1993, and November 21, 1992

### **Webinars Taught:**

Lean Construction In Electrical Contracting, National Electrical Contractors Association, taught 4 times.

Leadership, Associated General Contractors of America’s Project Manager Development Program, taught 4 times.

Risk Management, Associated General Contractors of America’s Project Manager Development Program, taught 4 times.

Project Administration Associated General Contractors of America’s Project Manager Development Program, taught 7 times.

Contract Administration Associated General Contractors of America's Project Manager Development Program, taught 4 times..

Estimating Associated General Contractors of America's Project Manager Development Program, taught 4 times.

**Workshops:**

"Basics of Design-Build Contracting," (with Jim Rowings), Sponsored by Iowa State University and the Design-Build Institute of America, Chicago, IL June 26 and 27, 1997.

Total Quality Management in Building Design and Construction (TQM-IV), Chicago, Illinois, May 20-21, 1993 (Coordinator)

Total Quality Management in Building Construction (TQM-III), Dallas, Texas, May 28-29, 1992, (Co-Coordinator)

Implementing Total Quality Management in the Design and Construction of Buildings (TQM-II), Denver, Colorado, May 9-10, 1991, (Co-Coordinator)

**Partnering Facilitation**

"ARRTC II - Fort McCoy Resident Office," US Army Corps of Engineers, Omaha, NE District, August 27, 1998.

"Cornhusker Army Ammunition Plant, Interim Groundwater Remedy - Phase 1," US Army Corps of Engineers, July 16, 1997.

"The Teacher Education Program," Grandview College," Grandview College, July 15, 1997, Follow-up Session, April 28, 1998.

"Principal Print-to-Mail Facility," (with Jim Rowings), Principal Financial Group, June 18th, 1997.

"ILLOWA Labor Management Summit," (with Jim Rowings), (34 Sessions), Rock Island, IL, June 13, 1997, May 22, 1997, and January 22, 1998.

"Palmer College Improvement Team," (with Jim Rowings), Estes Company, April 9 and 10, 1997.

"Centre Station on John Deere Commons" (with Jim Rowings), Russell Construction Company, March 19th, 1997.

"Organizing and Market Share Recovery," (with Jim Rowings), NECA of Iowa and IBEW, Amana, IA, (2 times), January 17, 1997 and April 9, 1997.



“Labor Management Partnering,” (with Jim Rowings), NECA - Quad Cities Chapter and IBEW, January 8, 1997.

“Von Maur Store Remodel,” (with Jim Rowings), Russell Construction Company, Bettendorf, IA January 2, 1997.

Meredith Expansion Project, (with Jim Rowings), (Two Sessions), Des Moines IA, 1996

Iowa Section of NECA and the State IBEW Partnering Session (With Jim Rowings), Dubuque, IA, August 1996

Burlington Fire Station Project, Estes Company, Burlington, IA, January 1996

Dubuque Division of the NECA and the IBEW Local Partnering Session (With Jim Rowings), January 1996

Des Moines Division of the NECA and the IBEW Local Partnering Session (With Jim Rowings), January 1996

Cedar Rapids Division of the NECA and the IBEW Local 405 Partnering Session (With Jim Rowings), December 19, 1995.

St. Ambrose University Residence Hall Project Partnering Workshop (With Jim Rowings), Rock Island, IL, December 14, 1995.

Mississippi Bend Area Education Agency Construction and Renovation Project Partnering Workshop (With Jim Rowings), Bettendorf, IA, December 13, 1995.

Sioux City Division of the NECA and the IBEW Local 231 Partnering Session (With Jim Rowings), South Sioux City, NE December 11, 1995.

### **Industrial Training Presentations**

Lean Construction in Electrical Contracting, National Electrical Contractors Association, Taught 4 times, Last in 2011.

Project Manager Development Course, Associated General Contractors of America – 5 modules, taught 16 modules, 2009-present

“Record Retention and Cost Control” Project Manager’s Course, Associated General Contractors of America, 2005 to present, taught 22 times, last 2011.

“Problem Solving and Decision Making,” Project Manager’s Course, Associated General Contractors of America, 2008 to present, taught 6 times.

“Subcontractor Management” Associated General Contractors of America, 2008, taught 4 times.

“Pre-Project Planning and Field Management,” Associated General Contractors of Wisconsin, March 2009.

“Executive Leadership Challenge,” Master Builders of Iowa, 2006, 2007 taught 2 times.

“Leadership Workshop” Associated General Contractors of America, 2006 to 2008, Taught 3 times.

“Cost Implications Important to Apprentices,” Mechanical Contractors Association of Iowa and Local #33, 5 Sessions, Spring 1998, Fall 1998, Spring 1999.

“Supervisory Training Program” Mechanical Contractors Association of Iowa, 4 sessions (Taught 4 times), Spring 1999, Fall 1998, Spring 1998 and Fall 1997.

“Elements of Electrical Contracting” National Electrical Contractors Association, 6 times (with Jerry Rounds).

Estes 2000 Training, Spring 1997, (with Jim Rowings).

“Project Manager’s Training Course,” National Electrical Contractors Association, 17 times.

“Leadership and the Field Manager,” with Bob Anderson, *Field Manager’s Leadership Series*, Master Builder’s of Iowa, October 14, 1998

“Project Manager’s Training Course,” Sheet Metal and Air Conditioning Contractors National Association, 3 times.

“Foreman’s Training,” Clifford R. Gray Company, Schenectady, NY, November 12, 1998

“Foreman’s Training,” Winger Mechanical Corporation, Ottumwa, IA, December 2, 1998, and April 7, 1998

“Executive Management Training Short Course” National Electrical Contractors Association of Iowa, (with Jim Rowings), January 18th, 1997

Estes 2000 Training, Fall 1996, (with Jim Rowings).

"Earning Trust," Butler Construction's Superintendent Conference, Kansas City, Missouri, November 1994 (2 times), December 1994

“Subcontractor and Supplier Management” (with Jim Rowings), *Field Managers’ Leadership Series*, Master Builder’s of Iowa, Des Moines, IA, November 30, 1994

“Cost Awareness” (with Jim Rowings), *Field Managers’ Leadership Series*, Master Builder’s of Iowa, Des Moines, IA, November 16, 1994

“Planning and Scheduling” (with Jim Rowings), *Field Managers’ Leadership Series*, Master Builder’s of Iowa, Des Moines, IA, November 2, 1994

“Team Management” (with Jim Rowings), *Field Managers’ Leadership Series*, Master Builder’s of Iowa, Des Moines, IA, October 19, 1994

“Leadership” (with Jim Rowings), *Field Managers’ Leadership Series*, Master Builder’s of Iowa, Des Moines, IA, October 5, 1994

"Total Quality Management," Butler Construction's Spring Superintendent Conference, Kansas City, Missouri, February 23, 1994

## XI. PATENTS

None

## XII. GRADUATE STUDENTS

### Major Professor:

#### Master's – At Marquette

Meredith Claeys	Major Professor	Spring 2011	Thesis
Paul Stuckey	Major Professor	Fall 2011	Non-Thesis

#### Master's – At Iowa State

Karmyn Babcock	Major Professor	Fall 1998	Thesis
Steve Pigneri	Major Professor	Summer 1998	Non-Thesis
Chris Nelson	Major Professor	Spring 1998	Non-Thesis
Todd Sirotiak	Major Professor	Spring 1998	Non-Thesis
Ravi Kumar Karra	Co-Major Professor	Summer 1996	Thesis
Rich Busch	Major Professor	Summer 1996	Non-Thesis
Robert Weddall	Major Professor	Spring 1996	Thesis
Sara Birkland	Major Professor	Fall 1995	Thesis
Justina Ervitarini	Major Professor	Spring 1995	Thesis
Mike Orgler	Major Professor	Summer 1993	Non-Thesis
Nareshkumar Pallegar	Major Professor	Spring 1992	Non-Thesis
Thomas DeVany	Co-Major Professor	Fall 1991	Thesis

### Committee Member:

#### PhD's

San Soo Lee	Committee Member	Spring 1999	Dissertation
Yvan Rodriguez	Committee Member	Spring 1999	Dissertation

Fred Rahbar	Committee Member	Spring 1997	Dissertation
Rifat Sonmez	Committee Member	Spring 1996	Dissertation

**Master's**

San Soo Lee	Committee Member	Summer 1997	Thesis
Brad Sonnenberg	Committee Member	Summer 1996	Non-Thesis
Steve Bakley	Committee Member	Summer 1994	Thesis
Gad Roitman	Committee Member	Fall 1993	Thesis
Tim Hielkema	Committee Member	Summer 1993	Thesis
Kevin Behling	Committee Member	Spring 1993	Thesis
Gurivinder Virdi	Committee Member	Spring 1993	Non-Thesis
Yvan Rodriguez	Committee Member	Fall 1992	Thesis
Cem Sahin	Committee Member	Summer 1992	Thesis
Rifat Sonmez	Committee Member	Summer 1992	Thesis
Guillermo Recarte	Committee Member	Fall 1991	Thesis

**XIII. PROFESSIONAL ACTIVITIES**

**ABET Evaluator for Construction Engineering and Construction Engineering Technology**, 2010 to present

**The BAT Academy (AGC Building, Architecture, & Technology Leadership Academy at Bay View High School)**, Committee Member, 2009 to present

**AGC of Greater Milwaukee, Construction Leadership Council**, Committee Member, 2009 to present

Editorial Board, *International Journal of Construction Education and Research*, 2011-present

**AIC CCC Examination Committee**, Member, 2009 to present

**Quest International User Group** for Oracle's JD Edwards and PeopleSoft, 2003 to 2009  
 Director of Leadership Development, formerly Director of Conferences (2006-07) Treasurer (2005-06), have held a variety of leadership positions for this organization of 55,000 subscribers.

**Associated General Contractors of America**

Lean Forum Committee Member, 2010 to present.

Lean Forum Education Committee member, 2009 to present

Committee Member for Construction Education Committee, formerly the AGC/ASC National Student Competition Chair, member of the Student Chapter Task Force 2005 to 2009.

**Rose-Hulman Institute of Technology's Civil Engineering Advisory Council Member,**  
1999 to present

**Professional Memberships**

American Society of Civil Engineers, Fellow, 2009, Member, 1982-present  
Special Editor for the *Journal of Construction Engineering and Management*,  
Construction Engineering Education Conference at Virginia Tech, 2010

Iowa Section Leadership Positions:

Director, September 1994–September 1995

Associate Director, September 1992–September 1994

Engineering Management Division

Publications Committee Leadership Positions:

Associate Editor, *Journal of Management in Engineering*, June 1995–1999

Chair, August 1996 - August 1997

Committee on Professional Practice

Publications Committee, August 1997 to 1999.

Construction Division

The Construction Research Council, Member, 1990-2001

Reviewer for the *Journal of Construction Engineering and Management*

American Society of Engineering Education, 1990-1999

Construction Engineering Committee Leadership Positions:

Chair, August 1994–July 1995

The Mechanical-Electrical Academic Consortium, Sponsored by the Mechanical Contractors Association of America and the National Electrical Contractors Association, 1997 to 1999.

The American Association of Cost Engineers, Member,

Leadership Positions:

Chair of Certification Exam Review Committee, June 1998 - 1999

National Science Foundation, Transformations to Quality Organizations, Proposal Reviewer, 1995

National Science Foundation, Division of Mechanical and Structural Systems, Structures and Geo-Mechanics Program, Proposal Reviewer, 1992

Transportation Research Board, 1991-1999

Disadvantaged Business Enterprises Committee, 1991-1999

Leadership Positions:

Chair, February 1, 1996 – July 1999

The American Institute of Constructors, Constructor Level, April 1995-present  
CPC Exam Writing Subcommittee member, 2009 to present

Sigma Lamda Chi, Member, April 1992-1999.

### **Consulting**

Michels Corporation, Brownsville WI, 2009-present

Sperling Law Offices, Milwaukee, WI 2011

Billsby Residence Review, Storm Lake, IA, Fall 1997

Doug Baker, Welch Wulff & Childers Law Offices, Omaha, NE, October 1996

Shearer, Templar, Pingel, and Kaplan, Attorneys-at-Law, Des Moines, IA, Spring 1996

Robert Burnett, Attorney-at-Law, Des Moines, IA, Summer 1995

Mid-America Construction Company, Iowa City, IA, Summer 1995

Center for Advanced Journeyman Education, Des Moines, IA, June 1995-December 1996

Master Builders of Iowa, Des Moines, IA - Fall 1994 to 1999

Estes Co., Davenport, IA, April 1995 to 1999

Mississippi Bend Area Education Agency, December 1995

Construction Industry Institute, Austin TX, September 1989

Walbridge-Aldinger Co., Detroit, MI, Fall 1988

## **XIV. MARQUETTE UNIVERSITY ACTIVITIES**

### **Department of Civil, Construction and Environmental Engineering Committees:**

Chair, Assessment Committee, 2009-present

Member, Long Range Planning Committee, 2009-present

### **College Level Committee**

College of Engineering Ambassador to Mission Week 2013

Chair, Sabbatical Review Committee, 2012

Member, College P&T Committee, 2012

Chair, Engineering Management Masters Review Committee, 2010-present

Member, Technology Committee, 2010 to present

**University Committees:**

Member, New Buildings Sustainability Committee, 2011 to present

Member, Student Organization Policy Advisory Committee, 2011 to present

**IOWA STATE UNIVERSITY ACTIVITIES**

Leadership ISU, Fall 1996

Facilitator, Succeeding with Students, Fall 1995

**University Committees**

Faculty Senate Committee on Faculty Governance and Structure, Fall 1996-Summer 1998

**College Committees**

Promotion and Tenure Review Committee, Fall 1997 to Summer 1999

Professional Development Committee, Fall 1997 to Summer 1999

Basic Program Committee, Fall 1996 to Fall 1997

Ad-Hoc, Outcomes Assessment for EFMD 160 and EFMD 170, 1994 - Fall 1996

Reappointment DEO Review Task Group, October 1993–January 1994

Silicon Graphics Proposal Subcommittee, Spring 1993

**Departmental Committees**

Administrative Council, July 1997 to 1999

Construction Engineering Curriculum Committee, 1990-1994, 1995-1997

Leadership Positions: Chair, December 1992–August 1994, June 1995-1997

Faculty Council, Fall 1996- June 1997.

Program Planning Committee, December 1992–June 1994, June 1995-June 1997.

Women and Minorities Committee, August 1995-June 1997.

Leadership Positions: Chair, August 1996 to June 1997.

Construction Engineering Search Committee,  
Leadership Positions: Chair, Fall 1997 to Summer 1999 and 1992-1993  
Member, 1995 to April 1997.

Civil and Construction Engineering Computer Committee, 1990-1993  
Leadership Positions: Chair, 1992-1993

Civil and Construction Engineering Search Committee, Geo-tech Position, 1991

Ad-Hoc Committee, Thomas Mahoney Visit, 1992-1993

Construction Engineering Extension Planning Committee, 1992

Civil Engineering Curriculum Committee (Ex-officio), December 1992–June 1994,  
and June 1995-June 1997.

### **Faculty Adviser for Student Societies, Clubs, and Other Activities**

#### **At Marquette:**

Green Building Club, 2011 to present

The Builders Coalition at Marquette University, The Student Chapter of the AGC, 2010 to present.

Engineers without Borders, Guatemala Electrification Project, 2010 to present

#### **At Iowa State University:**

National Electrical Contractors Association Student Chapter, Spring 1998 to 1999.

Sigma Lambda Chi Student Chapter, August 1996 - June 1997.

Associated General Contractors Student Chapter, Fall 1991-Summer 1993

### **Participation / Attendance at Short Courses / Meetings**

AASHTO's Summer Meeting of Construction Engineers, Portland, ME August 1998.

ABET Assessment Workshop, College of Engineering, August 20, 1998

Career Day, The Consortium for Careers in Design and Construction, Chicago, 10/11/97.

AASHTO's Summer Meeting of Construction Engineers, Branson, MO August 1997.

“University Professor’s Masonry Workshop” Salt Lake City, UT March 1997.

“Teaching and Learning with Style,” 1995 Annual Conference and Exposition, American Society for Engineering Education, Anaheim, CA



“Total Quality Transformation” Iowa State University, (One-day workshop) September 1994

“Section and Branch Management Conference for Zone III,” American Society of Civil Engineers, St. Louis, MO, February 12, 13, 1994

“Timberline’s Educator’s Conference ,” Timberline Corporation (Three-day workshop), June 1992 and June 1991

“Effective Teaching Workshop” Iowa State University, (Two-day workshop) January 1991

**Local Community Activities**

Active in Variety Club, Ames Golf and Country Club Board, Boy Scouts, Coach (Soccer, Baseball, Softball) St. Elizabeth Anne Seton Church