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Education

BS Civil Engineering – Rose-Hulman Institute of Technology, Terre Haute, Indiana, 1975

AAS Business Management and Supervision – Richland Community College, Decatur, Illinois, 1978

Professional Registrations

Registered Professional Engineer – Michigan

Registered International Code Council Special Inspector

- Structural Steel and Bolting (S1)
- Structural Welding (S2)

Engineering Specialties

- steel construction quality and inspection
- bolted joints for structural steel
- welded joints for structural steel
- remediation of deficient structures
- fitness for purpose of welded joints

Technical Activities

Research Council on Structural Connections

- Chair (2024 – present), Vice-Chair (2018 – 2024)
- Specifications Committee (Member 1995 – present)

American Welding Society

- D1 Structural Welding Committee, responsible for D1 Structural Welding codes (Advisor, Member 1996 –present)
- D1Q Subcommittee on Steel, responsible for AWS D1.1 (Advisor, Member 1996 – present)
- D1L Subcommittee on Seismic Welding, responsible for AWS D1.8 (Member 2000 – present) (Chair 2021 – 2025)
- D1F Subcommittee on Strengthening and Repairing Existing Structures (Advisor, past Chair)
- D1X Executive Committee (Member)
- D1 Task Group 1 Design (past Member)
- D1 Task Group 6 on Prequalification (past Member)
- International Standards Activities Committee (ISAC) (Member, Vice-Chair 2018 – 2024)

American Institute of Steel Construction

- Specifications Committee, responsible for AISC 360 Specification for Structural Steel Buildings and AISC 341 Seismic Provisions for Structural Steel Buildings (Member 2000 – 2022, Emeritus 2022 – present)
- Connections Prequalification Review Panel (CPRP), responsible for AISC 358 Prequalified Connections for Special and Intermediate Steel Moment Frames (Member 2001 – present)
- Task Committee on Quality Control and Quality Assurance, TC12 (Member 2007 – 2022, Emeritus 2022 – present)
- Task Committee on Connections, TC6 (Member 1997 – 2017, Emeritus 2022 – present)
- Task Committee on Seismic Issues, TC9 (Member 2004 – 2016)

ASTM International

- Committee F16 on Fasteners (Member)
- Subcommittee F16.02 on Steel Bolts, Nuts, Rivets, and Washers (Member)
- Subcommittee F16.96 on Bolting Technology (Member)
- Committee A01 on Steel, Stainless Steel and Related Alloys (past Member)
- Subcommittee A01.02 on Structural Steels (past Member)

International Institute of Welding

- Board of Directors (Vice-President 2022 – 2025), (Director 2020 – 2025)
- Technical Management Board (Member 2021 – 2025, 2007 – 2010)
- Working Group – Technical Commissions (Chair 2021 – 2025)
- Commission XVIII - Quality Management in Welding and Allied Processes (Chair 2013 – 2025)
- Commission XV - Design, Analysis and Fabrication of Welded Structures (Chair 2006 – 2015)
- Subcommission XV-C - Fabrication (past Chair)
- Commission XIII - Fatigue of Welded Components and Structures (past Expert)
- Working Group on Standardization (Member)

American Council of the International Institute of Welding

- Chair (2021 – 2026), Vice-Chair (2014 – 2020), Member (2000 – present)

ISO – International Organization for Standardization

- ISO/TC 167 Steel and aluminium structures (Chair, US Technical Advisory Group)
- ISO/TC 167/WG 3 Steel and aluminium structures, Execution of steel structures (Chair)
- ISO/TC 167/WG 4 Steel and aluminium structures, Bolting (Member)
- ISO 17607 – all parts, Steel structures — Execution of structural steelwork (Project Leader, Convenor)
- ISO 22688 Brazing – Quality requirements for brazing of metallic materials (Project Leader, IIW)
- ISO/FDIS 19998 Structural bolting coordination —Tasks and responsibilities (Project Leader)

Publications

Books

- *Structural Bolting Handbook* - on testing, installation, inspection, and use of bolts, published by SSTC, 2022
- *Structural Welding Quality Handbook* - on structural steel welding quality and inspection, published by SSTC, 2022
- *Structural Steel Inspector's Workbook* - published by SSTC and International Code Council, 2024
- Chapter 8 on "Quality Control and Quality Assurance" for the textbook *Handbook of Structural Steel Connection Design and Details*, 3rd Edition, published by McGraw-Hill, editor Akbar Tamboli, 2017
- *Shop Inspection Handbook for Structural Steel Buildings* - on references and standards, structural steels, fabrication, bolting, welding, and surface preparation/coatings, published by SSTC, 2010 (to be updated)
- *Recommended Specifications and Quality Assurance Guidelines for Steel Moment-Frame Construction in Seismic Applications*, (FEMA 353), published by Federal Emergency Management Agency (lead guideline writer), 2000
- Chapter 12 on "Fabrication, Erection and Quality Control" for the textbook *Steel Design Handbook: LRFD Method*, published by McGraw-Hill, editor Akbar Tamboli, 1997
- *Welding – Design Procedures and Inspections*, Technical Instruction (TI 809-26), published by US Army Corps of Engineers, 1996
- *Guide to Metric Steel Fabrication*, published by American Institute of Steel Construction, 1990s

Papers

- *Recommendations and Best Practices for Welding Inspection – Tasks and Responsibilities*, International Institute of Welding, XVIII-292R7-2024
- *Plate Girder Flange Fractures – A Case Study and Lessons Learned*, International Institute of Welding, XV-1612-2020
- *Plate Girder Flange Fractures – Lessons Learned*, CanWeld 2019, Halifax Canada
- *Structural Welding Inspection: who, what, where, when, why, and how many*, CanWeld 2018, Winnipeg Canada, *Weld Magazine*, Spring 2019
- *Independent Third-Party Welding Inspection: a Canadian and Global Perspective*, CanWeld 2017, Montreal Canada, *Weld Magazine*, Summer 2018
- *Welding inspection – Tasks and responsibilities*, International Institute of Welding, XVIII-258r5-2018
- *Inspection and NDE Protocols in National and International Steel Construction Standards*, International Institute of Welding, SC-QUAL-192r4-2013, 2015
- *Comparison of ISO 5817 Quality Criteria to that of National Steel Construction Standards – Surface Imperfections and Imperfections in Joint Geometry*, International Institute of Welding, IIW-2583-2015
- *Weld Quality in Standards – Engineering v Workmanship; and Inspection and NDE Protocols in International Standards*, proceedings of 1st Australasian International Welding, Inspection and NDT Conference, Perth Australia, March 2013
- *Design and Construction Standards for Steel Connections in Seismic Frames*, with James O. Malley, proceedings of 14th World Conference on Earthquake Engineering, Beijing China, October 2008
- *AISC Seismic Provisions for Structural Steel Buildings*, with James O. Malley, proceedings of 14th World Conference on Earthquake Engineering, Beijing China, October 2008
- *Meeting Challenges to Achieve Seismic Safety*, proceedings of IIW International Congress, Chennai India, January 2008
- *Project specifications for new steel moment-frame building construction*, Earthquake Spectra, Earthquake Engineering Research Institute, July 2003
- *Steel Design and Construction in the US after the Northridge Earthquake*, proceedings of Symposium on Steel Structure, Japanese Society of Steel Construction, Tokyo Japan, April 2002
- *Ultrasonic Testing Procedures, Technician Skills, and Qualifications*, ASCE Journal of Materials in Civil Engineering, American Society of Civil Engineers, Jan/Feb 2002
- *USA Practice for Steel Building Design, Welding and Inspection in Seismic Regions*, proceedings of 7th International Symposium of Japan Welding Society, Kobe Japan, November 2001
- *Engineering Decisions: Weld Quality Requirements*, proceedings of North American Steel Construction Conference (AISC), Ft Lauderdale FL, May 2001

Invited Lectures and Seminars – North America

United States of America

- NASCC The Steel Conference (AISC), Seismic Welding Requirements –Putting It All Together
- NASCC The Steel Conference (AISC), Bolting – Top Ten Things that Go Wrong, and What to Do about Them, Atlanta, GA, April 2026
- NASCC The Steel Conference (AISC), The New 2025 RCSC Bolt Specification – Twisting and Turning and Torque, Oh My!, (with Larry Kruth), Atlanta, GA 2026
- Inspection Expo and Conference (AISC/AWS), The 2025 RCSC Specification for Structural Joints Using High-Strength Bolts - What's New?, Austin, TX, February 2026
- NASCC The Steel Conference (AISC), *Preheating for structural welding: AWS D1.1 Table 5.8 and Annex B versus AWS D14.8M*, Louisville KY, March 2025
- Inspection Expo and Conference (AISC/AWS/ASNT/AMPP), *Bolting – Top Ten Things that Go Wrong, and What to Do about Them*, St Louis, MO, February 2025
- NASCC The Steel Conference (AISC), *Quality Requirements for Steel Buildings in High-Seismic Areas*, San Antonio TX, March 2024
- Inspection Expo and Conference (AISC/AWS/ASNT), *Structural Steel Inspection: What, Where, When. How Many – and Above All, Why?*, Austin TX, November 2023
- NASCC The Steel Conference (AISC), *Welding Management for Shop and Jobsite*, Charlotte NC, April 2023
- NASCC The Steel Conference (AISC), *Welding Requirements for Seismic Force Resisting Systems*, Denver CO, March 2022
- NASCC The Steel Conference (AISC), *Structural Steel Inspection: What, Where, When, How Many - and Above All, Why?*, Denver CO, March 2022
- NASCC The Virtual Steel Conference (AISC), *WPSs and WPS Qualification: Guidance for Engineers, Fabricators and Erectors*, April 2020
- AISC Live Webinar, *Getting the Welds You Need*, July 2020
- Inspection Expo & Conference, (AWS/ AISC/ASNT), *Routine Observations for Bolting Inspection*, Houston TX, January 2020
- NASCC The Steel Conference (AISC), *Engineers: Getting the Welds You Want and Need*, Nashville TN, March 2015, updated and repeated Saint Louis MO, April 2019
- NASCC The Steel Conference (AISC), *Suitable Inspection Intervals*, Dallas, TX, April 2012,
- NASCC The Steel Conference (AISC), *Chapter N Inspection Intervals*, Grapevine TX, April 2012
- NASCC The Steel Conference (AISC), *AISC 360 Chapter N - Are You Ready?*, Orlando FL, May 2010 and Pittsburgh PA, May 2011
- NASCC The Steel Conference (AISC), *Steel Interchange Live!* , San Antonio TX, February 2006
- North American Steel Construction Conference (AISC), *Engineering Decisions: Weld Quality Requirements*, Ft Lauderdale FL, May 2001
- National Steel Construction Conference (AISC), *Welding Inspection*, New Orleans LA, April 1998
- National Steel Construction Conference (AISC), *Inspection of Bolted Joints*, San Antonio TX, May 1995
- National Steel Construction Conference (AISC), *Getting Your Share in Good Times and Bad*, Pittsburgh PA, May 1994
- National Steel Construction Conference (AISC), *Q&A on the 3rd Edition, Quality Criteria and Inspection Standards*, Miami Beach FL, June 1988

Canada

- Canadian Steel Conference (CISC), *Speedcore: A Revolutionary and Game-Changing Structural System*, (with Amir Jamshidi), Vancouver, BC, September 2022
- Canadian Centre for Welding and Joining, *Getting the Welds You Need and Want*, and *Structural Bolting - the other joining method*, Edmonton AB, March 2020
- CANWELD, Canadian Welding Bureau (CWB), *Plate Girder Flange Fractures – Lessons Learned*, Halifax NS, October 2019
- CANWELD, Canadian Welding Bureau (CWB), *Structural Welding inspection: who, what, where, when, why, and how many*, Winnipeg MB, September 2018
- CANWELD, Canadian Welding Bureau (CWB). *Independent Third-Party Welding Inspection – a Canadian and Global Perspective*, Montreal QC, August 2017
- Canadian Institute of Steel Construction, *Should we legislate the inspection of steel structures?*, CISC National Steel Symposium, Toronto ON, September 2016

Mexico / Estados Unidos Mexicanos

- International Symposium on Steel Structures — Instituto Mexicano de la Construcción en Acero (IMCA), workshop *Quality Control and Quality Assurance: the requirements and more*; conference keynote *Inspection: focusing on priorities*, Monterrey, February 2024

Invited Lectures and Seminars – International

- India — 6th International Congress, Indian Institute of Welding (IIW), Congress keynote Managing to Achieve Sustainable and Green Welding, Bangalore, January 2024
- Australia & New Zealand – Weld Australia, Australian Steel Institute, Heavy Engineering Research Institute, *Structural Bolting: Specification, Supervision, and Inspection*, eCourse, November & December 2020
- Iran – Iranian Society of Steel Structures, *High-Strength Bolting in Steel Structures* seminar, sponsored by Iran Tohid Co., Tehran, May 2016
- South Africa – South African Institute of Welding, *AWS D1.1 – Steel Structures* seminar/workshop, Johannesburg, January 2016
- Iran – Iranian Society of Steel Structures, 6th Conference on Steel and Structure, *Steel Construction: a Global Perspective* keynote, and *Inspection of Steel Building Structures* workshop, Tehran, December 2015
- Estonia – GSI SLV Baltikum / DVS / AWS, *Welding Structural Steel to American Standards*, and *Welding to the ASME Boiler and Pressure Vessel Codes*, Tallinn, June 2015
- New Zealand – Heavy Engineering Research Association, *Engineering the Repair and Retrofitting of Steel Structures*, Auckland, Hamilton, Wellington and Christchurch, April 2015
- Australia – Welding Technology Institute of Australia, *Structural Bolted Joints: Specifying and Achieving Performance*, Perth, Melbourne, Sydney and Brisbane, April 2015
- India – Indian Institute of Welding / American Welding Society, *AWS Lecture Series VII – Structural Welding: Design and Specification*, nine cities, December 2014
- New Zealand – Heavy Engineering Research Association, *Achieving Performance in Bolted Connections*, March 2013
- Australia – Welding Technology Institute of Australia, *Structural Welding Design*, five cities, March 2013
- Australia – 1st Australasian International Welding, Inspection and NDT Conference, *Weld Quality in Standards – Engineering v Workmanship, and Inspection*, and *NDE Protocols in International Standards*, Perth, March 2013
- South Africa – South African Institute of Welding, *Welding and Inspection Requirements for Steel Structures in Accordance with AWS D1.1 Structural Welding Code – Steel*, and *Achieving Performance in Bolted Structural Joints*, Johannesburg, Durban, and Cape Town, May 2012
- New Zealand – Heavy Engineering Research Association, *Achieving Performance in Welded Seismic Connections*, Auckland, Wellington, and Christchurch, February 2012
- Australia – Welding Technology Institute of Australia, *Specifying and Achieving Performance in Structural Bolted Joints*, five cities, September 2010 and March 2013
- Nigeria – Nigerian Institute of Welding, 1st Nigerian International Welding Congress, *The Engineering of Welded Structures: Design, Details, Production, and Quality*, and *Engineering for the Repair and Strengthening of Welded Steel Structures*, Abuja, March 2009
- Ecuador – Structural Engineers, Inc., *Bolted Connections, Welded Connections, Fabrication and Erection, Quality and Inspection*, and *Seismic Considerations*, Guayaquil and Quito, June 2008
- India – Institute of Steel Development and Growth (INSDAG), *Welding and Welded Connections, Bolting and Bolted Connections, Seismic Connections, Steel Erection, and Quality*, five cities, January 2008
- India – Indian Institute of Welding, IIW International Congress, *Meeting Challenges to Achieve Seismic Safety*, Chennai, January 2008
- Japan – Japanese Society of Steel Construction, *Steel Design and Construction in the US after the Northridge Earthquake*, Tokyo, April 2002
- Japan – 7th International Symposium of Japan Welding Society, *USA Practice for Steel Building Design, Welding and Inspection in Seismic Regions*, Kobe, November 2001

In-House Training Seminars – representative clients

- Port Authority of New York and New Jersey (bolting inspection, welding inspection)
- American Bridge / Fluor Joint Venture (bolting)
- Massachusetts Dept of Transportation (bolting)
- Tacoma Narrows Constructors (bolting)
- Danny's Construction (bolting, welding)
- Derr & Isbell Construction (bolting, AISC QC/QA)
- Barton-Malow (bolting)
- New York School Construction Authority (inspection)
- Quality Management Company (bolting, AISC 360-10 Chapter N: QC and QA)
- Weidlinger Associates (welding design)
- STV, Inc. (welding design)
- Ove Arup & Partners (welding design)
- New York City Transit Authority / MTA (welding design, inspection)
- RK&K (steel bridge inspection)
- State of California, Division of the State Architect (welding design, inspection)
- Atlas-Copco Drilling Solutions (welding design)
- Centria (welding inspection)
- Kakivik Asset Management (structural steel inspection)
- US Army Corps of Engineers (structural steel inspection)
- Aker Solutions (bolting)
- TTL (structural steel inspection)
- Churchill Engineering (structural steel inspection)
- Operating Engineers - ASIP - Local 150 (structural steel inspection)
- Structural Engineers Association of Idaho (welding design and inspection)
- Central Alaska Chapter of the International Code Council (bolting inspection, welding inspection)
- Vigor LLC (bolting)
- Schuff Steel (bolting, seismic requirements, AISC QC/QA)
- numerous other steel fabricators and erectors (bolting, welding, quality, inspection)
- numerous other inspection and testing agencies (bolting, welding, quality, inspection)

Technical Consultations

- Member, independent Peer Review Panel for Transbay (Salesforce) Transit Center, including investigation of girder failures, repair and retrofit of girders, whole-structure evaluation of structural steel system for brittle fracture and other performance risks, reporting to Metropolitan Transportation Commission (City and County of San Francisco and City of Oakland)
- Technical Consultant and Research Coordinator for XTB 200 ksi minimum tensile strength bolt assemblies (ASTM F3043 and F3111), Nippon Steel and Sumikin Bolten Corp.
- Principal Consultant and Instructor to update and instruct Federal Highway Administration / National Highway Institute course on "*High Strength Bolts for Bridges*"
- Lead Guideline Writer for *FEMA 353 Recommended Specifications and Quality Assurance Guidelines for Steel Moment-Frame Construction for Seismic Applications*, for the SAC Joint Venture Program to Reduce Earthquake Hazards in Steel Moment Frame Structures - Phase 2, also served on the Welding and Joining Technical Advisory Panel
- Principal Consultant to update the Commentary to the *AWS D1.5-96 Bridge Welding Code* for the NCHRP/ Transportation Research Board

Project Consultations – representative projects

Welding

- Municipal Services Building, City of Glendale, CA (seismic retrofit, repair, welding)
- Los Angeles County Courthouse, Van Nuys, CA (seismic retrofit, welding)
- Los Angeles County DPW Building, Alhambra, CA (seismic retrofit, welding)
- Bay Bridge, San Francisco - Oakland, CA (seismic retrofit, welding)
- World Trade Center Transportation Hub, New York, NY (welding, quality requirements)
- World Trade Center Oculus, New York, NY (welding, quality requirements)
- NASA Marshall Space Flight Center, Huntsville, AL (inspection and evaluation protocol for existing test structure, fabrication and connection details for new test structures, weld crack repairs)
- Athletic Training Facility, Iowa State University, Ames, IA (welding)
- Intel Fab 42 – Chandler, AZ (welding)
- Intel D1X – Hillsboro, OR (welding, cambering)
- Puente Hills Material Recovery Facility Administration Building, Whittier, CA (quality audit, welding)
- University of Iowa Arts Building, Iowa City, IA (welding)
- LAX T4.5 Terminal Vertical Core, Los Angeles, CA (welding)
- Gateway of the Pacific, Phases 2 & 3, South San Francisco, CA (welding)
- Electric Boat, South Yard Assembly Building, Groton, CT (welding)
- Ambassador Bridge, Detroit, MI (deck grating welding)
- Transbay Transit Center, San Francisco, CA (shop welding for castings)
- (W)rapper, Culver City, CA (welding)
- 200 Park Avenue, San Jose, CA (fabrication/erection planning, welding)
- New York University, John A. Paulson Center, New York, NY (welding)
- Delancey Street Pedestrian Bridge, New York, NY (welding, QC)
- UCSF Health Helen Diller Hospital, San Francisco, CA (welding, fabrication planning)
- New International Airport Terminal for Mexico City (fabrication and welding requirements, compliance)
- NIAMC Air Traffic Control Tower, Mexico City, Mexico (fabrication and welding quality, repair)
- 66 Hudson Yards, New York, NY (welding, NDT requirements, steel forging standards)
- New York Wheel (base), New York, NY (thermal cutting, welding)

Bolting

- Miller Park Baseball Stadium, Milwaukee, WI (bolting, welding)
- D. L. Lawrence Convention Center, Pittsburgh, PA (connection failure)
- Canadian Embassy, Riyadh, Saudi Arabia (steel blast walls, retrofit evaluation and recommendations)
- United States Embassy (location confidential) (steel erection, bolted connections, tolerances)
- IPFW Campus Cable Stayed Footbridge, Ft Wayne, IN (evaluation, bolting, welding)
- Puentes Combined Cycle Thermal Power Plant, La Coruna, Spain (steel tolerances, bolting)
- Gordie Howe Bridge, Detroit, MI (bolting)
- Calpine Fremont Energy Center, Fremont, OH (bolting)
- Florida Power & Light Port Everglades Plant, Ft Lauderdale, FL (bolting)
- Arecibo National Observatory, Puerto Rico (bolting)
- Port Everglades Power Plant, Fort Lauderdale, FL (bolting)
- Palazzo Tower, Las Vegas, NV (bolting)
- Boeing 787 Assembly Plant, Charleston, SC (bolting)
- Refinery vessel Koch-Glitsch fastener assembly and installation (bolting)
- Third Highway System Bridge on the River Orinoco, Venezuela (bolting)
- Medupi Power Station, South Africa (bolting)
- Winnipeg Soccer Federation Complex, Winnipeg MB (bolting)
- Tenaris Seamless Pipe Mill, Bay City, TX (bolting)
- Explosives Handling Wharf, Naval Base Kitsap-Bangor, WA (bolting)
- Sellwood Bridge, Portland, OR (bolting)
- The Jewel, Changi International Airport, Singapore (bolting)
- Mercedes Benz Stadium, Atlanta, GA (bolting)
- AHN Wexford Hospital, Wexford, PA (bolting)
- SoFi Stadium, Inglewood, CA (bolting)
- M-39 Cantilever Sign Structure, Dearborn, MI (anchor bolts, stripped threads)

Recognition

AISC Fellow, American Institute of Steel Construction, 2026

“The AISC Fellow distinction honors the extraordinary legacy created by our volunteers and the lasting impact of their service. Your forward-thinking innovation and service have left a lasting mark on the industry.”

Arthur Smith Award, International Institute of Welding, 2026

“conferred upon an individual who, over numerous years, has given dedicated service to the objectives of IIW, particularly in the work of the Commissions”

Walter Edstrom Medal, International Institute of Welding, 2026

“to individuals who, at their level of knowledge and responsibility, have provided a remarkable and distinguished contribution to IIW”

Samuel Wylie Miller Memorial Medal, American Welding Society, 2026

“awarded for a particular meritorious achievement that has contributed conspicuously to the advancement of the art of welding and cutting”

Alumni Impact Award, Rose-Hulman Institute of Technology, 2026

“honors alumni who have donated their time and talent, resulting in a significant impact on the Rose-Hulman community, the advancement of STEM education, professional/industrial groups, and/or within their local community”

Lifetime Achievement Award, American Institute of Steel Construction, 2024

“Recognized for his work educating designers and fabricators on bolting and welding, his creation of the Student Steel Bridge Competition, and his continuing work on numerous AISC and industry committees”

Gold Medal Award, Canadian Welding Bureau Association, 2021

“For outstanding paper submission at the 2019 CWB CanWeld Annual Conference”

Gold Medal Award, Canadian Welding Bureau Association, 2018

“For outstanding paper submission at the 2017 CWB CanWeld Annual Conference”

International Meritorious Certificate Award, American Welding Society, 2017

“In recognition of significant contributions to the worldwide welding industry”

Thomas Medal, International Institute of Welding, 2016

“For personal involvement in IIW work and contributions to international standardization in the field of welding”

Arek Mekertichian Lectureship Award, Iranian Society of Steel Structures, 2015

“For dedicated and sustained contribution to engineering knowledge of design and construction of modern steel structures in Iran”

George E. Willis Award, American Welding Society, 2015

“For promoting the advancement of welding, internationally, by fostering cooperative participation in areas such as technology transfer, standards rationalization and promotion of industrial good will”

AISC Special Achievement Award, American Institute of Steel Construction, 2015

“For his bolting and welding handbooks, which are simple reference books that capture the common guidance engineers and contractors need for bolts and welds”

R. D. Thomas Memorial Award, American Welding Society, 2007

“For a significant contribution in the field of welding to the International Institute of Welding and dedication to the concept of technological growth through international collaboration”

AISC Special Achievement Award, American Institute of Steel Construction, 2000

“For his origination and development of the Student Steel Bridge Competition, which has thrilled thousands of engineering students while also providing a practical experience in design and construction”

Professional Employment

Steel Structures Technology Center, Inc.

- President (1990 – present)

American Institute of Steel Construction, Inc.

- Associate Director of Education (1986 – 1990) (Northeastern United States)
- Regional Engineer (1981 – 1986) (Michigan, Ohio, Eastern Kentucky)

Mississippi Valley Structural Steel Division of Bristol Steel and Iron Works, Inc.

- Sales Engineer (1976 – 1981)
- Project Engineer (1975 – 1976)
- Intern/Detailer (1973 – 1975)

Litigation / Arbitration Consultation

- Provided upon request