Wylie Wong

PE, CGE

Senior Staff Consultant

Mr. Wylie Wong, P.E.'s areas of expertise are mechanical engineering, product safety and design, and product and workplace accident analysis and reconstruction. He has also assisted clients in evaluation and development of user manuals and instructions, product warnings, hazard analysis, risk assessments, product accident investigations, and workplace accident investigations.

Mr. Wong was employed at Weber Inc. as a test engineer and gas train design/project engineer supporting existing products and new product development. He has used statistical process control, design of experiments, computational fluid dynamics, hazard analyses, and consulted gas safety standards in barbeque design. He applies this experience to assist clients with safety-focused evaluation and analyses of product designs, hazard analysis, risk assessments, failure analysis, and product testing.

Mr. Wong was employed at Underwriters Laboratories certifying products to UL, CSA, and IEC safety standards, including UL/IEC 60335. He conducted product construction reviews, developed standard test programs, evaluated product instruction manuals and labels, and worked with clients to ensure compliance with appropriate standards. He applies this experience in safety-focused analyses of consumer products, commercial products, and industrial equipment and machinery.

Mr. Wong's work has included consumer, commercial, and industrial products such as household and commercial refrigerators and freezers, vending machines, pressure cookers, home beer brewing systems, gas barbecue grills, cooking appliances, air filters, air conditioners and refrigerant components, power tools and construction equipment, and refrigeration compressors, including high-voltage (15,000 V) insulation systems. His work also includes workplace safety and machinery, such as machine guarding and lockout/tagout systems and industrial and commercial workplace accident analysis.

Education

MS, Mechanical Engineering. University of Illinois Chicago. 2005

BS, Engineering Mechanics. University of Illinois Urbana-Champaign. 2002

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ESi Aurora

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Areas of Specialization

- Mechanical Engineering Systems
- Accident Analysis & Reconstruction
- Product Safety & Design
- Safety Standards & Codes
- Safety Engineering
- HVAC & Refrigeration Products
- Gas Products
- Risk Assessment & Hazard Analysis
- Experimental Testing & Failure Analysis

Licenses & Certifications

- State of Illinois P.E. License 062063242
- ASGE Certified Gas Engineer (CGE)
- Forklift Operator Safety Training & Certification
- eRail Safe Training Certification
- FARO Focus 3D Scanner Certification

Positions Held

Engineering Systems Inc., Aurora, Illinois

- Senior Staff Consultant, 2021 – Present

Weber Inc., Palatine, Illinois

- Test Engineer, Gas Train Systems, 2019–2021
- Test Engineer, Research and Development Laboratory, 2016–2019

Underwriters Laboratories, Northbrook, Illinois

- Senior Project Engineer, 2012–2016
- Project Engineer, 2008–2012
- Associate Project Engineer, 2006–2008

General Dynamics Land Systems, Sterling Heights, Michigan

- Mechanical Engineer, 2005–2006

University of Illinois Chicago, Chicago, Illinois

- Graduate Research Assistant, 2003–2004

Continuing Education

- **30-Hour Safety and Health (General Industry)** – OSHA
- **30-Hour Safety and Health (Construction)** – OSHA
- **Hazard Based Safety Engineering** – Underwriters Laboratories
- **Safety of Household & Similar Electrical Appliances: General Requirements (IEC 60335-1)** – Underwriters Laboratories
- **Polymeric Materials: Use in Electrical Equipment Evaluations (UL 746C)** – Underwriters Laboratories
- **Residential Natural Gas Systems** – CFITrainer.net

- **Residential Electrical Systems** – CFITrainer.net
- **Investigating Natural Gas Systems** – CFITrainer.net
- **Introduction to Appliances** – CFITrainer.net
- **Fire Flow Analysis** – CFITrainer.net
- **Fire Chemistry** – CFITrainer.net
- **Physical Evidence at the Fire Scene** – CFITrainer.net
- **Documenting the Event** – CFITrainer.net
- **Fundamentals of Hydrogen** – GTI Energy
- **Residential Wiring** – William Rainey Harper College
- **Welding I** – William Rainey Harper College
- **Introduction to Air Conditioning and Refrigeration** – Oakton Community College
- **Digital Circuit Fundamentals** – Oakton Community College
- **Mechanical and Electrical Systems for Buildings** – Macomb Community College
- **Automotive Systems** – Macomb Community College
- **Statistical Process Control and Design of Experiments** – Sigma Science, Inc.
- **Continuous Improvement Fundamentals** – Whirlpool Corp.
- **SOLIDWORKS Essentials: Parts and Assemblies Training** – CATI
- **SOLIDWORKS Flow Simulation Training** – CATI
- **SOLIDWORKS Simulation Training** – CATI

Professional Affiliations/Honors

American Society of Safety Professionals

- Member

Society of Product Safety Professionals

- Member

Human Factors and Ergonomics Society

- Member

International Society for Occupational Ergonomics and Safety

- Member

American Society of Mechanical Engineers

- Member

American Society of Heating, Refrigeration and Air-Conditioning Engineers

- Member

American Society of Gas Engineers

- Member

UL 82

- Technical Committee Member, Electrical Gardening Appliances

Publications

"Final Report XDX Refrigeration Valve Efficiency Testing," W.M. Worek and **W. Wong**, Illinois Department of Commerce and Economic Opportunity Grant No. 03-32107, 2004.

Presentations

"Risk Assessment After When Things Go Wrong," **W. Wong** and N.S. Faino, IEEE International Symposium on Product Compliance Engineering, San Francisco, CA, May 13–15, 2025.

"Risk Assessment: When Have You Achieved Acceptable Risk?" A.C. Mathias, **W. Wong**, J.C. Smolka, J.P. Mohorovic, and E.H. Knox, IEEE International Symposium on Product Compliance Engineering, Chicago, IL, April 30–May 2, 2024.

"Ergonomic Safety Analysis of Tilting a Concrete Grinding Machine," **W. Wong**, S.F. Uchneat, D.B. Brickman, E.H. Knox, and J.T. Eganhouse, XXXIV Annual International Occupational Ergonomics and Safety Conference, Virtual, September 15, 2022.