

# Wylie Wong, P.E., CGE

Senior Staff Consultant



Mr. Wylie Wong's areas of expertise are mechanical engineering, product safety and design, and product and workplace accident analysis and reconstruction. He has assisted clients in product safety designs, evaluation and development of user manuals and instructions, product warnings, hazard analysis, risk assessments, product accident investigations, and workplace accident investigations (such as machine guarding and lockout/tagout).

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 the design of their barbeques. 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 previously employed at Underwriters Laboratories certifying products to UL, CSA (Canadian Standards Association), and IEC (International Electrotechnical Commission) safety standards, including the UL/IEC 60335 family of standards. His responsibilities included conducting product construction reviews, developing standard test programs, evaluating product instruction manuals and labels, and working with his clients to ensure compliance with the 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
  - 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
  - Refrigeration compressors, including high-voltage (15,000 V) insulation system

## Wylie Wong

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## ESI

4215 Campus Drive  
Aurora, IL 60504

## Education

M.S., Mechanical Engineering,  
University of Illinois at Chicago,  
2005

B.S., Engineering Mechanics,  
University of Illinois at Urbana-  
Champaign, 2002

## 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

- Workplace Safety and Machinery
  - Machine guarding and lockout/tagout systems
  - Industrial and commercial workplace accident analysis

## **Licenses & Certifications**

- State of Illinois P.E. License No. 062063242
- ASGE Certified Gas Engineer (CGE)

## **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 at Chicago, Chicago, Illinois**

- Graduate Research Assistant, 2003-2004

## **Publications & Presentations**

### **Risk Assessment After When Things Go Wrong**

Wong, W., Faino, N.S., IEEE International Symposium on Product Compliance Engineering (ISPCE), San Francisco, CA, USA, May 13, 2025-May 15, 2025

### **Risk Assessment: When Have You Achieved Acceptable Risk?**

Mathias, A.C., Wong, W., Smolka, J.C., Mohorovic, J.P., Knox, E.H., IEEE International Symposium on Product Compliance Engineering (ISPCE), Chicago, IL, USA, April 30, 2024-May 2, 2024

### **Ergonomic Safety Analysis of Tilting a Concrete Grinding Machine**

Wong, W., Uchneat, S.F., Brickman, D.B., Knox, E.H., Eganhouse, J.T. The XXXIVrd Annual International Occupational Ergonomics and Safety, Virtual Conference, September 15-15, 2022

## **Final Report XDX Refrigeration Valve Efficiency Testing**

Worek, W.M., and Wong, W., Illinois Department of Commerce and Economic Opportunity Grant No. 03-32107, 2004

## **Professional Affiliations/Honors**

### **Societies**

- 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 – Associate Member
- American Society of Gas Engineers – Member

### **Standards Committee**

- UL Technical Committee 82 – Electrical Gardening Appliances - Member

## **Professional Development**

- OSHA 30 Hour Safety and Health (General Industry)
- OSHA 30 Hour Safety and Health (Construction)
- Forklift Operator Safety Training and Certification
- 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



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- 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
- eRail Safe Training
- FARO Focus 3D Scanner