



## Paul P. Thogersen, P.E., C.F.E.I.

### Professional Competencies:

Forensic Engineer who investigates and evaluates:

- Mechanical, electrical and electronic failures
- Materials and product defects or failures
- Structural, vehicle and product fires

Product Design Engineer with expertise in:

- Consumer and industrial product design
- Materials and sensor selection and evaluation
- Product design review and reliability assessment

### Experience Summary

- Temperature measurement product development
- Analysis and design of electrical and electronic systems
- Engineering services to support loudspeaker design and production
- Materials analysis research

### Employment History:

#### **Wolf Technical Services, Inc., Indianapolis, IN**

Electrical Engineer, Mechanical Engineer & Materials Science, Fire Investigator (2003 to Present)

Engineering analysis of electrical failures, including electrical fires and equipment faults contributing to property damage and personal injury. Investigation and evaluation of materials and product failures including fatigue, materials defects and corrosion. Contributes to product development design and testing in the areas of electrical, materials selection, sensors, electronic controls and data acquisition software.

#### **Tangent Systems, Inc., Charlotte, North Carolina**

Engineering Manager (1994 to 2002)

Developed electronic and mechanical products for temperature measurement.



**Thogersen Associates, Arlington, Massachusetts**

Engineering Consultant (1983 to 1994)

Analyzed and designed electronic systems to improve product or process equipment performance, or to reduce cost.

**Boston Acoustics, Peabody, Massachusetts**

Electronic Engineer (1981 to 1983)

Supported loudspeaker design and production, including designing and maintaining test and production equipment.

**Department of Mechanical Engineering and Materials Science, Duke University, Durham, North Carolina**

Researcher (1977 to 1980)

Research utilizing a range of vacuum deposition equipment and materials analysis tools.

**Education:**

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| Duke University, Durham, North Carolina       | 1977 |
| Bachelor of Science in Electrical Engineering |      |
| Graduated Magna Cum Laude                     |      |

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|---|------|
| Duke University, Durham, North Carolina   | 1980 |
| Master of Science in Mechanical Engineering & Materials Science                             |      |
| Master's Thesis: The Structure and Performance of Smoked Germanium Selective Absorber Films |      |

**Continuing Education, Presentations and Seminars:**

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| ▪ 2024 SAE Battery Lifecycle Summit  | 2024 |
| ▪ ASTM D1265 Standard Practice for Sampling Liquefied Petroleum Gases, Manual Method, ASTM E-Learning                          | 2024 |
| ▪ National Fire Protection Association (NFPA) 70E  | 2020 |
| ▪ National Association of Fire Investigators – Advanced Fire, Arson and Explosion Investigation Science and Technology Program | 2014 |
| ▪ Society of Automotive Engineers – Finite Element Analysis for Design Engineers – Hands-on FEA Workshop                       | 2007 |
| ▪ Indiana Chapter IAAA – Fire Investigation Conference   | 2006 |
| ▪ Fire Findings – Investigation of Gas and Electric Appliance Fires  | 2005 |



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- Indiana Chapter IAAI – Fire Investigation Conference 2004
- National Association of Fire Investigators – Advanced Fire, Arson and Explosion Investigation Science and Technology Program 2004

**Licenses, Certifications and Affiliations:**

Registered Professional Engineer in the States of Indiana and Massachusetts  
Certified Fire and Explosion Investigator, #9837-4373  
Member of National Association of Fire Investigators (NAFI)  
Science Olympiad Event Coordinator, Butler University

**Patents:**

US Patent No. 9,937,893 B2; Magnetically Actuated Personnel Restraint System