

# Michelle R. Bradley

P. Eng., CFEI, CVFI



120 Watline Avenue  
Unit 8  
Mississauga, Ontario  
L4Z 2C1

## EDUCATION

Degree in Bachelor of Applied Science (B.A.Sc.), University of Windsor, Windsor, Ontario  
Graduated in 1997 in Mechanical Engineering

## PROFESSIONAL REGISTRATION/LICENSING

Professional Engineers Ontario (PEO)

## CERTIFICATION

National Association of Fire Investigators

*Certified Fire and Explosion Investigator, CFEI*

National Association of Fire Investigators

*Certified Vehicle Fire Investigator, CVFI (2002)*

## TECHNICAL AFFILIATIONS

International Association of Arson Investigators

- *1<sup>st</sup> Vice President, Ontario Chapter (2014 – present)*
- *2nd Vice President, Ontario Chapter (2013 – 2014)*
- *Ad Hoc Board Member, Ontario Chapter (2011 – 2012)*

Member - National Association of Fire Investigators (NAFI)

## PROFESSIONAL EXPERIENCE

Have participated in more than 420 engineering investigations to date.  
Accepted as an expert witness in civil court in the province of Ontario.

### March 2002 to Present

Investigative Engineer ***Origin and Cause Incorporated***  
Mississauga, Ontario

- Vehicle fire investigations, failure analysis and engineering investigations in the mechanical field for the insurance community, legal profession and manufacturers.
- Dryer fire investigations.
- Other various large and small appliance examinations.
- Investigation of sprinkler system malfunctions.
- Evaluation of gas valve malfunctions.
- Investigation of heat pump failures and refrigeration/air conditioning failures.
- Investigation of more than 300 vehicle fires including transport truck fires, transit bus fires, off-road heavy equipment and forestry equipment fires, farm equipment fires.
- Inspection and evaluation of engine failures.
- Investigation of component failures and malfunctions.
- Investigation of hoists and bridge crane failures.
- Evaluation of machine design.
- Investigation of personal injury incidents.
- Inspection and evaluation of welded components.
- Evaluation of motor vehicle accident reconstruction including point of impact evaluations, visibility analysis, field testing, and vehicle crush measurements.

### May 2001 to December 2002

Test/Manufacturing Engineer ***Ford Essex Engine Plant***  
Windsor, Ontario

# Michelle R. Bradley

P. Eng., CFEI, CVFI

120 Watline Avenue

Unit 8

Mississauga, Ontario

L4Z 2C1

- Conducted noise and vibration testing on various Ford engines in the Essex Engine Plant's dynamometer.
- Established a generic noise and vibration baseline in order to compare deviant engines. This helped to indicate possible variations with individual engines.

August 1997 to August 1999

Equipment Engineer **Samsung Austin Semiconductor**

Austin, Texas

- Organized the installation and pre-process qualification of Samsung's diffusion low pressure and atmospheric furnaces.
- Participated in various projects to improve the efficiency and quality of the equipment in the Diffusion Engineering Department.

## FURTHER TRAINING AND EDUCATION

- Ontario Fire College - NFPA 1033 Professional Qualifications for Fire Investigators Course (5 days), 2019
- CAFI - Spring Seminar (Agriculturally Related Fires) (2 days), 2019
- IAAI - Certified Fire and Explosion Investigator Course (4 days), 2019
- IAAI: Certified Fire and Explosion Investigator Training Program, 2016
- ISFI 2012 International Symposium on Fire Investigation Science and Technology (3 days), 2012
- IAAI: Electrical Fire Investigations (1 day), 2012
- IAAI: Certified Fire & Explosion Investigation Course (4 days), 2011
- NAFI: Vehicle Fire Investigation Course, 2011
- Fire Findings: Investigation of Gas and Electric Appliance Fires Course, 2011
- IAAI: The Evolution of Fire Scene Evidence Seminar, 2010
- IAAI: Adjusting/Investigating a Large Loss Fire Seminar, 2006
- Toronto Arson Task Force: Fire Investigations Seminar (3 days), 2005
- IAAI/OPP: Fire Investigation/Arson Task Force Seminar (2 days), 2004
- CAFI: Vehicle Fire Investigation Seminar (2 days), 2004
- Fire Findings: Investigation of Gas and Electric Appliance Fires Course (4 days), 2004
- CAFI: Vehicle Fire Investigation Seminar (2 days), 2004
- NAFI: Vehicle Fire Investigation Course (4 days), 2002
- IAAI/OPP: Fire Investigation/Arson Task Force Seminar (2 days), 2002
- CAFI: Fire & Explosion Investigation Course (4 days), 2002
- IAAI: Fire & Explosion Investigation Seminar (2 days), 2002

## PRESENTATIONS

- 2015 - "Rise Of The Machines: Appliance Fires And Flood Claims", Origin and Cause webinar
- 2012 - Dryer Fires at the IAAI: Electrical Fire Investigations (1 day)
- 2011 - Vehicle Fire Investigations at the IAAI: Certified Fire & Explosion Investigation Course (4 days)
- Has lectured to many Insurance companies on Vehicle Fire Investigations.

## PUBLICATIONS

- "What Is The Most Common Appliance Fire? Experts Say 'Dryers'", Origin and Cause Newsletter 2015
- "Trial & Tribulations of The Clothes Dryer Fire." Without Prejudice 2010.