



Njegos Bijelic, M.A.Sc., CFEI

Project Consultant, Fire Investigations

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Education

UNIVERSITY OF WATERLOO

Masters of Applied Science, Mechanical Engineering – Fire Safety

2015

McMASTER UNIVERSITY

Bachelor of Technology, Manufacturing Engineering

2012

CONESTOGA COLLEGE

Mechanical Engineering Technology, Design and Analysis

2009

Experience

ROAR ENGINEERING

2021 – PRESENT

Project Consultant, Fire Investigations

- Origin and cause investigations for residential and commercial structure fires; appliance and electrical equipment fires; heating equipment fires; solid fuel burning appliance fires; vehicle fires; and other fire-related losses. Investigations completed with consideration of NFPA 921 “Guide for Fire and Explosion Investigations.”
- Cause hypothesis testing involving scene examination, fire pattern analysis, review of witness and background information, review of available documentation, evidence examination, and assessment of potential ignition sources.
- Review of applicable codes, standards, maintenance information, installation instructions, and product/appliance/system documentation where relevant to the investigation.
- Fire investigation work supported by prior fire protection and code consulting experience, including review of building and fire code requirements, fire alarm systems, fire suppression systems, means of egress, fire dynamics, fire spread, and fire modelling.
- Preparation of technical reports, preliminary findings updates, evidence summaries, and client correspondence for insurers and legal representatives.

ENVISTA FORENSICS

2018 - 2021

Project Consultant

- Fire investigations involving residential and commercial structure fires, vehicle fires, equipment fires, and other fire-related losses.

JENSEN HUGHES

2014 - 2018

Project Consultant



- Fire protection and life safety consulting involving review of building and fire code requirements, fire alarm systems, fire suppression systems, means of egress, fire protection design, and fire/life safety requirements for buildings and facilities.
- Review of applicable codes and standards, including the Ontario Building Code, Ontario Fire Code, National Fire Protection Association standards, and other project-specific fire and life safety requirements.
- Fire modelling and fire dynamics analysis using FDS, CFAST, PyroSim, and related tools to assess fire development, smoke movement, tenability, fire spread, and performance-based design considerations.
- Preparation of reports, technical memoranda, and client correspondence related to fire protection engineering, code compliance, and fire/life safety matters.

UNIVERSITY OF WATERLOO
Research Assistant

2012 - 2014

Professional Associations and Certifications

- **National Association of Fire Investigators (NAFI)**
Certified Fire and Explosion Investigator (CFEI)
- **Wood Energy Technology Transfer Inc. (WETT)**
SITE Basic Inspector, WETT Certified
Certification renewed February 2026, valid for five years.
- **Canadian Association of Fire Investigators (CAFI)**
- **International Association of Arson Investigators (IAAI)**
Ontario Chapter
- **Society of Fire Protection Engineers (SFPE)**
Southern Ontario Chapter

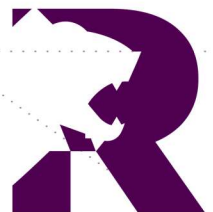
Core Expertise

- Structural fire origin and cause determination
- Appliance and electrical fire investigations
- Heating equipment and solid fuel burning system investigations
- Building and Fire Code review – OBC, OFC and NFPA
- Fire protection design review – egress, fire alarm, and fire suppression systems
- Fire alarm and fire suppression system assessment
- Fire dynamics, fire spread assessment, and fire modelling – FDS and CFAST
- Evidence documentation and joint destructive examinations
- Electrical equipment, wiring, receptacle, cord, and power bar fire investigations
- Vehicle fire investigations
- Review of applicable codes, standards, maintenance information, and installation instructions
- Fire testing and mock-up burns

Continuing Education

Publications and Presentations

- **Canadian Association of Fire Investigators / Seneca Polytechnic**



May 27–28, 2026

Lithium-Ion Battery Fires & Investigation Principles, 14-hour training seminar,

- **International Association of Arson Investigators — Ontario Chapter**
2025 Fall Seminar, November 19, 2025, Cambridge, Ontario
Legal Considerations in Fire and Arson Investigation, 2025 Fall Seminar, November 19, 2025, Cambridge, Ontario
- **Wood Energy Technology Transfer Inc. (WETT)**
Code Compliance, Fall 2019
Wood-burning Systems, Fall 2019
SITE Basic Inspection, Spring 2020
SITE Basic Inspection / Certification Renewal, February 2026
- **Fire Findings**
Investigation of Gas and Electric Appliance Fires, Fall 2019
- **National Association of Fire Investigators (NAFI)**
NFPA 921 Fire and Explosion Training Seminar, Spring 2018
- **Jensen Hughes**
Fire Forensic Training – Internal Training Seminar, Summer 2016
- **CFI Trainer**
Arc Mapping Basics
The Impact of Ventilation in Building Structures on Fire Development
Digital Photography
Documenting the Event
Explosion Dynamics
Fire Chemistry
Introduction to Evidence
Fire Investigator Scene Safety
The Scientific Method of Fire and Explosion Investigation

