# **AAFI** 2014

Australasian Associations of Fire Investigators Conference 8 - 10 October 2014 BroadBeach Gold Coast



# **CONFERENCE & WORKSHOP**

FIRE INVESTIGATION - ACHIEVING BETTER OUTCOMES

Hosted by

QAFI

IAAI Chapter
No. 59

FIRE INVESTIGATION - ACHIEVING BETTER OUTCOMES



## **ABOUT THE EVENT**

This comprehensive event will encompass a workshop, two day conference and Gala Dinner.

An exciting program has been developed by industry representatives. Conference speakers will examine the challenges facing those involved in fire investigation and look at the best practices across the industry. Leading experts from different sectors will present information on the latest topics surrounding fire investigation. We have secured as key note speaker, renowned US fire investigation expert John Lentini.

John has been at the centre of the application of science to fire investigation for over 30 years. He is a well respected fire investigator and speaker, having presented at multiple conferences and training courses in the US and internationally. He has written many peer reviewed papers and book chapters, contributed to several standards and is author of the book "Scientific Protocols for Fire Investigation".

## THE VENUE

The Convention venue is the 5 star Sofitel Broadbeach on Queensland's beautiful Gold Coast.

Room includes private balcony, LCD TV and marble bathroom.

www.sofitel.com/Broadbeach

### WHO SHOULD ATTEND

Fire Investigation specialists including Fire Service Investigators, Police Investigators, Private Investigators, Government Safety Officers, Loss Adjusters, Insurers, Risk Managers, Senior claims executives, Lawyers, Service providers, Brokers and Restoration specialists.

### WORKSHOP

The program includes a workshop on 8th October "What a fire investigator needs to know to be halfway competent" Presented by US fire investigation expert John Lentini

### **SPONSORSHIP**

There is advertising available for interested parties.

For a copy of the Proposal please contact Adrian Libke

– Secretary at QAFI@uttinglibke.com.au



## **AAFI** 2014

Australasian Associations of Fire Investigators
Conference 2014

## FIRE INVESTIGATION - ACHIEVING BETTER OUTCOMES

### **WEDNESDAY 8 OCTOBER**

WORKSHOP	HOSTED BY JOHN LENTINI
9.00am – 4.00pm	'What a Fire Investigator Need to Know to be Halfway Competent' & 'Surviving Reliability Challenges'

## **THURSDAY 9 OCTOBER**

TIME	PRESENTER	TOPIC	COMPANY
8:00am - 9:00am	Registration		
9:00am - 9:15am	Gordon Hemphrey	Presidents Welcome and Opening Conference	Queensland Association of Fire Investigators
9:15am - 10:45am	John Lentini	Science to the Rescue : Successful Challenges to BS (Bad Science) in Bogus Arson Cases	Scientific Fire Analysis, LLC
10:45am - 11:15am	Morning Tea		
11:15am - 12:00pm	Bob Alexander	Use of Innovative Technologies in Fire Scene Examination	Fire and Rescue NSW
12:00am - 12:45pm	Brian Richardson	Solar Issues : Fires in Household Solar Power Systems – An Electrical Regulator Perspective	Electrical Safety Office
12:45pm - 1:45pm	Lunch		
1:45pm - 2:30pm	Chris Loane	Arson and Motor Vehicle Fraud	Suncorp
2:30pm - 3:15pm	Kate Grimwood	Time Until Flashover / Pre-Flame and Post Suppression Gas Emission	Forensic Psychologist
3:15pm - 3:45pm	Afternoon Tea		
3:45pm - 4:30pm	Michael Holohan	Emerging Issues in Expert Evidence	Lucas Chambers
4:30pm - 5.00pm	Terry Casey	Case Study – HMAS Westralia Fire	Forensic Services Australia
7:00pm – 11:00pm	Gala Dinner and John Lentini presentation	Incompetence, Spoliation, Errors in Critical Thinking and Fraud – The Case of Pennsylvania Vs Michele Owen Black	

### **FRIDAY 10 OCTOBER**

TIME	PRESENTER	TOPIC	COMPANY
8:15am - 8:45am	Registration		
8:45am - 9:45am	Professor Jose Torero	Elucidating Design Responsibilities for Fire Related Losses	Professor of Civil Engineering, UQ
9.45am - 10:45am	John Lentini	Changes in NFPA 921 and NFPA 1033	Scientific Fire Analysis, LLC
10:45am - 11:15am	Morning Tea		
11:15am - 12:00pm	Richard Douglas QC	Insurance Recoveries	Callinan Chambers
12:00pm - 12:45pm	Sarah Miller	Generating Offender Profiles from Arson Crime Scenes	Forensic Psychologist
12:45pm - 1:45pm	Lunch		
1:45pm - 2:30pm	Simon Cox	A Metallurgical Study of Electrical Fire Causes	Simon Cox & Associates Pty Ltd
2:30pm - 3:15pm	Andrew Sturgess	Fire Weather: Impact of Meteorological Conditions on Bushfire Development	Queensland Fire & Emergency Services
3:15pm - 3.45pm	Afternoon Tea		
3.45pm - 4:30pm	TBA	Salvage and Recovery	TBA
4:30pm	Closing	End of Conference	

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### **KEYNOTE SPEAKER**

### JOHN LENTINI



### **BIOGRAPHY**

John Lentini is one of a handful of people certified to conduct both fire scene investigations and fire debris analysis. He has personally conducted more than 2,000 fire scene inspections and has appeared as an expert witness on more than 200 occasions. He is an active proponent of standards for fire and other forensic investigations. He is a member of the NFPA 921 Technical Committee, the 1033 Technical Committee and has served three terms as chair of ASTM Committee E30 on Forensic Science. He is now an independent consultant living in the Florida Keys and doing business as Scientific Fire Analysis. His website is www. firescientist.com.

### **TOPIC SYNOPSIS**

# WORKSHOP 8TH OCTOBER: WHAT A FIRE INVESTIGATOR NEEDS TO KNOW TO BE HALFWAY COMPETENT: MEETING THE CHALLENGE OF NFPA 1033

Until now, most challenges to expert opinion testimony have focused on reliability and methodology. The opinions of experts may be excluded, however, on the basis of qualifications as well. NFPA 1033 has raised the bar for expert qualifications, by listing 16 areas in which a fire investigator shall be knowledgeable.

This session will cover the basics of the knowledge that fire investigators are required to have beyond the high school level. At the end of this session, attendees who have absorbed the material will be able to withstand the kind of cross-examination that leads to challenges based on qualifications, or the lack thereof.

#### **TOPIC SYNOPSIS**

# GALA DINNER PRESENTATION 9th OCTOBER : INCOMPETENCE, SPOLIATION, ERRORS IN CRITICAL THINKING AND FRAUD : THE CASE OF PENNSYLVANIA VS MICHELE OWEN BLACK

This session will describe the recently resolved case of Commonwealth of Pennsylvania versus Michelle Owen Black. This is a case with something for everyone. The fire was caused by a rare electrical phenomenon known as arc tracking. While rare, this kind of fire leaves very distinctive artifacts behind. Aside from the technical aspects of the case, however, the legal aspects make it very interesting and instructive.

#### **TOPIC SYNOPSIS**

## 9th OCTOBER : SCIENCE TO THE RESCUE : SUCCESSFUL CHALLENGES TO BS (BAD SCIENCE) IN BOGUS ARSON CASES

This session will cover several recent cases where wrongful convictions were overturned based on a review of the science initially used to obtain a conviction. Cases covered will include Wisconsin v Joseph Awe, California v George Souliotes, US v James Hebshie, and Michigan v David Lee Gavitt. And although they were not convicted, Amanda Gutweiler, spent 4 years in jail awaiting trial on a capital murder case, and Valerie and Scott Dahlman were arrested and charged with murder based on the flimsiest of evidence. In the Dahlman case, a city fire marshal lost his job because he would not knuckle under to the pressure put on him by the prosecution "team."

### **TOPIC SYNOPSIS**

### 10th OCTOBER: CHANGES IN NFPA 921 AND NFPA 1033

2014 marks the first year that new editions of NFPA 921 and NFPA 1033 coincide. According to a recent article by Terry-Dawn Hewitt and Wayne McKenna, this confluence sets up part of the "perfect storm" that is going to make it difficult for fire investigators to qualify and testify as experts in the United States.

There were significant changes in the 2011 edition of NFPA 921, particularly the section dealing with "Negative Corpus" determinations. This change caused something of an uproar in the fire investigation community, up to and including a resolution condemning the change by the Georgia Fire Investigators Association.

Responding to the uproar, the language was changed in the 2014 edition, but "Negative Corpus" is still effectively disparaged by the document. The most significant change in NFPA 1033 is the addition of three more areas of knowledge that fire investigators must have, including documentation, fire suppression systems, and electrical systems. If you don't know enough about household wiring to wire house and dissect it, you don't know enough. NFPA 921 and NFPA 1033 are now effectively joined at the hip, even though one is a standard and one is a guide.

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## **AAFI** 2014

Australasian Associations of Fire Investigators

## PROFESSOR JOSÉ TORERO

#### **BIOGRAPHY**

José joined The University of Queensland in 2012 as Professor of Civil Engineering and Head of School. He holds a BSc from the Pontificia Universidad Catolice del Peru (1989) and a MSc (1991) and PhD (1992) from the University of California Berkeley. He has been awarded the Arthur B. Guise Medal by the Society of Fire Protection Engineering and the Rasbash Medal from the Institution of Fire Engineers (UK) for eminent achievement in the advancement of the science of fire safety. His work on bringing technology to the Fire Service was the subject of the April, 2007 BBC Horizon show: "Skyscraper Fire Fighters" that has been shown in more than 30 countries

### **TOPIC SYNOPSIS**

## ELUCIDATING DESIGN RESPONSIBILITIES FOR FIRE RELATED LOSSES

Traditional fire investigation focuses on the determination of the cause of a fire. This form of fire investigation relies in collection and interpretation of evidence to define the origin of the fire leading to the determination of cause and responsibility. A different, but equally important, form of forensic fire investigation is the consequence analysis that links the magnitude of the losses to different engineering decisions part of the design process. In this case, cause and origin are potentially secondary elements of the investigation and the primary issues are mostly associated with the performance of the safety components introduced in the design process. The skills of the investigator and the tools used for this form of fire reconstruction are very different to those typical of a cause and origin investigation. This presentation will discuss through a series of examples the different method and skills necessary to conduct a competent fire reconstruction.

Jose will examine building design and fire protection as well as alternate building solutions as applied to building fire engineering.

### **BOB ALEXANDER**

### **BIOGRAPHY**

Bob is one of Australia's most experienced fire investigators with 39 years of experience. He has previously worked at the Fire Investigation Research Unit (FIRU) and is now the manager for training co-ordination and resources for FRNSW.

### **TOPIC SYNOPSIS**

### USE OF INNOVATIVE TECHNOLOGIES IN FIRE SCENE EXAMINATION.

Bob will examine utilising the scientific method specifically through the development and application of the E-Fire investigation tool (E-FI) in fire scene examinations. E-FI allows users to conduct virtual fire scene examination in four stages from initial fire scene (stage 1) to ignition and extinguishment (stage 4).

### **BRIAN RICHARDSON**

#### **BIOGRAPHY**

Brian is Director of Equipment Safety, Electrical Safety Office and has 30 years of experience in electrical equipment safety, he is a delegate of the Queensland electrical regulator and represented the electrical regulator at the Palace Hotel Childers Backpacker Coronial Inquiry. He has a Diploma of fire investigation and is a past president of QAFI.

### **TOPIC SYNOPSIS**

## SOLAR ISSUES – FIRES IN HOUSEHOLD SOLAR POWER SYSTEMS – AN ELECTRICAL REGULATORY PERSPECTIVE

Brian will discuss issues of electrical safety of systems and components in solar power systems, causes of fires in solar power systems, and regulatory requirements

### **CHRIS LOANE**

#### **BIOGRAPHY**

Chris is the National Motor Investigations Manager for the Suncorp Group and has been both a Barrister and a Solicitor in private practice in Queensland. He holds a Master of Insurance from Deakin University; a Bachelor of Arts from Griffith University; the Queensland Barristers Board Examinations with 2nd class Honours and the Bar Practice Course at QUT.

### **TOPIC SYNOPSIS**

### ARSON AND MOTOR VEHICLE INSURANCE FRAUD

This presentation will consider a number of real life motor insurance claim scenarios, where vehicle arson has occurred to facilitate payment of a fraudulent theft claim. Chris will show the value of a comprehensive examination of burnt out vehicles, and the ways in which an Insurer may establish that both the theft and the fire have been staged

### KATE GRIMWOOD

### **BIOGRAPHY**

Kate is a PhD candidate and holds a Bachelor of Applied Chemistry (Honours) in Forensic Science. She also has a Diploma in Post Blast Investigation (US Bureau of alcohol, tobacco, firearms and explosives) and is a pro rata fire investigator.

### **TOPIC SYNOPSIS**

## TIME UNTIL FLASHOVER / PRE-FLAME AND POST SUPPRESSION GAS EMMISSION.

In a 2 part presentation Kate will present research into Australian made polyurethane foam and furniture with its impact on time until flashover along with gauging the impact of temperature to produce toxic gases in polyurethane containing products.

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### MICHAEL HOLOHAN

#### **BIOGRAPHY**

Michael is a Barrister of Law in private practice at the Queensland Bar. He is the holder of a Master of Laws, Master of Science (Forensic Science), Bachelor of Laws and Bachelor of Science degrees. In practice he specializes in criminal law, insurance and trade practices (product liability) and is studying for a PhD in law at the University. of NSW in the area of admissibility of forensic evidence.

### **TOPIC SYNOPSIS**

### **EMERGING ISSUES IN EXPERT EVIDENCE.**

Michael will present on expert evidence focusing on the admissibility of evidence of fire cause and origin determination in both civil and criminal jurisdictions in Australia. He will also examine the advantages of joint expert reports, expert conclaves and concurrent evidence in the Australian context.

## **TERRY CASEY**

### **BIOGRAPHY**

Terry holds degrees in Materials Science and Metallurgy and in Mechanical Engineering, is a member of the Institute of Engineers, Australia. He has conducted training courses, both in Australia and abroad and has provided expert testimony in civil, criminal and coronial courts and to the Naval Court of Inquiry.

### **TOPIC SYNOPSIS**

### **HMAS WESTRALIA FIRE**

The HMAS Westralia fire on 5 May 1998 involved severe damage to the engine room which resulted in the loss of the life of 4 sailors. It was the subject of a Naval Board of Inquiry, a WA Coronial Inquiry, and a Report of the Commonwealth Ombudsman dealing with allegations surrounding the fire. This presentation will deal with the investigations that followed this fire and highlight that a basic error in modifying the fuel system brought about this tragedy.

## RICHARD DOUGLAS QC

### **BIOGRAPHY**

Richard was admitted to the Bar in 1980 and commenced practice in 1982. In 1998 he was appointed Senior Counsel in and for the State of Queensland. In 2013 he was appointed Queen's Counsel. His areas of specialty are insurance, common law and statutory liability, commercial law, commercial vendor and purchaser, real property and confiscation of criminal profits.

#### **TOPIC SYNOPSIS**

### INSURANCE RECOVERIES.

Richard will cover topics such as - What is the onus of proof in recovery actions? What is negligence and how does this need to be proven? What has to be proven in order for an insurer to recover their costs from another party? and the application of Trade Practices Act in recoveries action.

### SARAH MILLER

#### **BIOGRAPHY**

Sarah holds a Bachelor of Psychology & Counselling (1st Class Honours) and also holds a Master of Science Forensic Psychology (with distinction). She is currently involved in PHD studies on 'Risk factors for deliberate fire setting'.

### **TOPIC SYNOPSIS**

## GENERATING OFFENDER PROFILES FROM ARSON CRIME SCENES.

Sarah will give an overview of the main psychological theories used to explain why people set deliberate fires and the way these findings have been used to analyse suspected arson crime scenes and generate offender profiles.

### SIMON COX

### **BIOGRAPHY**

Simon has over 30 years experience as a forensic consultant to the insurance industry and legal profession. He has completed over 3,000 investigations and has appeared as an expert witness in Criminal, Coronial and Civil Courts on over 100 occasions. His main area of expertise is the investigation of fires, explosions and materials failures.

### **TOPIC SYNOPSIS**

### A METALLURGICAL STUDY OF ELECTRICAL FIRE CAUSES

Simon will provide an overview of how conventional metallographic techniques can be applied to distinguish the metallurgical microstructure of conductors altered by being subjected to common ignition mechanisms from those affected by direct heat transfer or liquid metal attack. He will also discuss how the microstructure of conductors can be further altered by subsequent exposure to fire and explore the subject of differentiating between primary arc beads and secondary arc beads.

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### **ANDREW STURGESS**

### **BIOGRAPHY**

Andrew had been a firefighter for 25 years and has worked on the frontline as a Firefighter and on Incident Management Teams at large scale bushfire events in Victoria, New South Wales and Queensland. He completed the National Fire Behaviour Analyst course in 2011 and currently is the head of the Predictive Services Unit for the Rural Fire Service of Queensland.

### **TOPIC SYNOPSIS**

 $\label{eq:fireweather-impact} \textbf{FIRE WEATHER-IMPACT OF METEOROLOGICAL CONDITIONS ON} \\ \textbf{BUSHFIRE DEVELOPMENTS.}$ 

Andrew will present a session that provides an overview of the origins and evolution of the scientific analysis of the impact that meteorological conditions can have on bushfire development. He will cover the methodology of meteorological analysis to develop predictive bushfire behaviour patterns, the benefits to Incident Management Teams and frontline Fire-fighting crews and the pre and post fire benefits to Fire Investigation Agencies.

### **TBA**

### **TOPIC SYNOPSIS**

DATA RECOVERY FROM FIRE DAMAGED COMPUTER EQUIPMENT

To be advised

## **CONTACT US**

Queensland Association of Fire Investigators (QAFI)

GPO Box 1705, Brisbane, Qld 4001

Phone 07 3229 6894 Fax 07 3221 7267 Email: QAFI@uttinglibke.com.au



# CONFERENCE & WORKSHOP FIRE INVESTIGATION - ACHIEVING BETTER OUTCOMES



Registration Form/Tax Invoice - AAFI 2014

DELEGATE DETAILS

Please complete form in BLOCK LETTERS. Payment must accompany registration form.

For multiple registrations please attach details of each delegate

DELEGATE DE	AILS		
Title: Mr N	1rs Ms	Dr	
(QAFI/VAFI/NSWAFI	/NZAFI) Member	Non-Member	
Surname:		Given name:	
Position:		Organisation:	
Address:			
State:	Country:	Postcode:	
Business phone:		Fax:	
Email: (confirmation will b	oe sent to this addre	ess)	
Preferred name on badge	:		
Dietary requirements:	Vegetarian	Other please specify:	



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## **REGISTRATION**

FULL CONFERENCE & WORKSHOP REGISTRATION (8-9-10 OCT)		
Workshop (Wed) 2 Day Conference (Thurs + Fri) Conference Materials, Lunch and Refreshments both days One Gala Dinner Ticket (Thurs)	Member (QAFI/VAFI/ NSWAFI/NZAFI)	Non-member
Early Bird (paid before 5pm 29 August 2014)	AUD\$	AUD\$
Individual registration	\$990	\$1,100
Multiple registration (3 or more from one company)	\$880	\$990
Standard (paid after 5pm 29 August 2014)		
Individual registration	\$1,150	\$1,250
Multiple registration (3 or more from one company)	\$1,050	\$1,150
CONVENTION REGISTRATION (9-10 OCT)		
2 Day Convention (Thurs + Fri) Convention Materials, Lunch and Refreshments both days One Gala Dinner Ticket		
Early Bird (paid before 29 August 2014)		
Individual registration	\$770	\$880
Multiple registration (3 or more from one company)	\$660	\$770
Standard (paid after 5pm 29 August 2014)		
Individual registration	\$930	\$1,040
Multiple registration (3 or more from one company)	\$830	\$940
WORKSHOP (8 OCT)		
Individual registration	\$660	\$770
ONE DAY CONVENTION REGISTRATION		
(Includes entry to the Conference on either Thursday or Friday with	conference Materials,	Lunch and Refreshments)
Thursday registration only	\$480	\$580
Friday registration only	\$480	\$580
OTHER OPTIONS		
Gala Dinner only (Thurs)	\$150	\$150



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### **CONVENTION DINNER (ONLY) ADDITIONAL TICKETS (FOR COLLEAGUES OR PARTNERS)** Gala dinner \$150 / person (For multiple registrations please attach details of each attendee) Name: Total AUD \$ Dietary requirements: Vegetarian Other please specify: ACCOMMODATION SOFITEL BROADBEACH Arrival date: Departure date: No of nights Single occupancy \$230 room only Total AUD\$ No of nights Single Occupancy – one breakfast \$260 Total AUD\$ No of nights Double occupancy \$230 room only Total AUD\$ No of nights Double occupancy - 2 breakfasts \$290 Total AUD\$ TOTAL AMOUNT PAYABLE **CONVENTION & ACCOMMODATION (+ ADDITIONAL DINNER TICKET) TOTAL AUD\$ PAYMENT DETAILS** 1) Cheques Cheques/ bank draft to be made payable to Qld Association of Fire Investigators – GPO Box 1705 Brisbane Qld 4001. 2) EFTPOS/ Direct Credit Account Name: Queensland Association of Fire Investigators Inc BSB: 084-004 Account Number: 8265-78482 Bank: NAB Branch: Queen Street, Brisbane Reference: Your name as per registration form 3) Credit Card Mastercard Card number: Cardholders name: Expiry date: \$ Amount:

Date:

(For receipt of payment notification)

FORM 3 of 3

Cardholders signature:

Cardholders email:

## FIRE INVESTIGATION - ACHIEVING BETTER OUTCOMES



## **CANCELLATION AND SUBSTITUTION POLICY**

- Cancellation in writing made before 7 September 2014 full refund less \$100 administration fee.
- Cancellation received after 7 September 2014 no refund.
- In the event of a registrant's inability to attend, a substitute delegate is welcome. Substitutions may be made at any time prior to 24th September 2014.

### **CHANGES TO THE PROGRAM**

If necessary the organising committee reserve the right to alter the program without prior notification to delegates.

### **ORGANISATION COMMITTEE**

Gordon Hemphrey - QFES

Gary Nash - Forensic Services Australia

Adrian Libke - QAFI

Brian Richardson - Electrical Safety Office

Marty Denham - QEC Global

Darren Smith - QPS

Chris Markwell - QFES

Quentin Lanyon - Owen - Cooper Grace Ward

Kris Evans – Suncorp Insurance

## TO CONFIRM YOUR BOOKING

## PLEASE COMPLETE THE FORM AND RETURN WITH PAYMENT TO:

Queensland Association of Fire Investigators (QAFI) GPO Box 1705, Brisbane, Qld 4001

Phone 07 3229 6894 Fax 07 3221 7267

Email: QAFI@uttinglibke.com.au



