

Rethink Redefine Redesign

A **BREAKTHROUGH** in
fire safety, sustainability and
emergency response

Joint Organisers



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The Life Saving Force
... for a safer Singapore

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Fire Safety Asia Conference & Exhibition 2022

Commissioner's Message

Comr Eric Yap

Commissioner
Singapore Civil Defence Force



COVID-19's impact on the world has been unprecedented, affecting finance, commerce, healthcare, including the lives and livelihoods of people on a scale not seen in modern times. Besides its extensive impact, COVID-19 has underscored the need for us to be agile, flexible and adaptable in responding quickly to an evolving pandemic, as seen with the emergence of COVID-19 variants which sent renewed shockwaves across the world.

The global health crisis is indeed a timely reminder for all of us in the disaster management and fire safety fraternity to adapt and sustain our efforts to upkeep the high degree of standards necessary to prevent the loss of lives and damage to property.

Recently, there have been a few serious high-rise building fires overseas where tragically, lives were lost as occupants found themselves trapped and unable to evacuate safely. These incidents serve to reinforce the importance of how effective and robust fire safety systems can potentially save lives during emergencies. Members of the fire safety industry and building planners play a key role in addressing these matters upstream during the building design and construction phases. Fire safety sets the critical cornerstones for building safety as it addresses fire risks, prevention of fires from escalating, and importantly, enable the evacuation of occupants during emergencies.

Technologies are always evolving and developing. Keeping pace with new developments and emerging technologies will help keep respective building codes updated and relevant. The Singapore Civil Defence Force (SCDF) actively reviews the Fire Code every five years by working closely with stakeholders in the building industry to identify latest trends in civil protection and fire safety. In addition, SCDF's adoption of the performance-based approach towards fire safety has allowed building designers and architects considerable flexibility in designing buildings creatively and innovatively using fire engineering principles, calculations and/or appropriate software modelling tools to achieve the intentions of the Fire Code.

The digital Fire Code introduction by SCDF was another initiative aimed at improving convenience to building industry professionals. Features such as in-depth illustration of Fire Code provisions, intuitive search and cross-referencing, etc. contribute positively to overall quality and productivity of the industry.

SCDF is also firmly committed to translate research into application by collaborating with the academia. For instance, SCDF works closely with the National University of Singapore and Nanyang Technological University to assess and validate emerging research, technology and innovation on fire safety engineering and building design and turn them, where relevant, into applicable industry practices. Such efforts, which are important for a pro-business environment, have led to SCDF being conferred the Pro-Enterprise Survey Recognition Award in 2021.

At the frontlines, SCDF is constantly looking out to leverage technological advancements to enhance our operational readiness. One of the highlights in our transformation journey is our very first Smart Fire Station - Punggol Fire Station. Apart from the digital systems and smart wearables which our emergency responders will use, this latest state-of-the art fire station utilises an Integrated Building Management System (IBMS) that offers automated control of the building's sub-systems such as air-conditioning, mechanical ventilation fans and lighting, thereby optimising energy consumption. The fire station is also equipped with an automated control access that uses analytics such as facial recognition, motion sensing, and vehicular licence plate reading. This translates into greater precision in identification, quicker alerts during emergency activations and improved security for the premises. Being environmentally friendly is a necessary consideration for a sustainable future and, deservedly, Punggol Fire Station attained the Green Mark Gold Award in March 2020.

Another key highlight for SCDF's transformation journey is the development of the Emergency Responders' Fitness Conditioning & Enhancement Lab (E_xCEL). Since end 2021, E_xCEL is being progressively operationalised at the Civil Defence Academy (CDA). In my message for FISAC 2017, I had shared on how CDA will soon bring emergency response training to a new and unprecedented level. I am happy to announce that with E_xCEL, the future is here today. We are now applying human performance analytics to optimise our SCDF responders' potential and peak operational performance through an evidence-based approach. Through continual scientific research, testing and assessment, E_xCEL will monitor, assess, and enhance different aspects of emergency responders' optimal performance and improve safety.

On that note, I look forward to welcoming all participants namely, fire chiefs, disaster managers and practitioners, building and fire safety professionals, industry experts as well as members of the academia, to FISAC 2022 in Singapore which seeks New Breakthroughs in Fire Safety, Sustainability and Emergency Response, as the theme aspires.



Chairman's Message

Mr Markham Shaw

Chairman
National Fire and Emergency Preparedness Council



After a 5-year hiatus, the Fire Safety Asia Conference & Exhibition (FiSAC) 2022 will return this year in November against the backdrop of the COVID-19 pandemic. In partnership with the Singapore Civil Defence Force (SCDF), the National Fire and Emergency Preparedness Council (NFECC) is pleased to organise this latest edition of FiSAC, widely recognised as one of the significant fire safety events in Asia. The multi-faceted event will include a conference to enable the sharing of best practices and lessons learnt in disaster management and on the latest fire safety developments as well as an exhibition to showcase the latest fire safety technologies. Another highlight of FiSAC 2022 is its signature awards ceremony to celebrate achievements within the fire safety industry of Singapore.

As the world learns and adjusts to living with the COVID-19 virus, the fire safety industry similarly must not rest on its laurels and needs to constantly keep abreast with the new challenges and developments in fire safety such as rapid urbanisation, proliferation of sustainable construction materials and use of solar panel systems. This is the reason why we have chosen the theme for FiSAC 2022 as *'Rethink, Redefine, Redesign: A BREAKTHROUGH in fire safety, sustainability and emergency response'*. We must continue to leverage technologies and embrace innovations, so as to achieve greater successes and overcome challenges within the fire safety industry.

As some of you may know, the NFECC has come a long way since the 1980s. In mid-2021, we rebranded the council by succinctly renaming it as the National Fire and Emergency Preparedness Council and unveiling its brand new logo. We also launched our first social media platform – the NFECC Facebook page in October last year.

Like many of our community and industry partners, the NFECC will continue to work closely with the SCDF to promote fire safety awareness and emergency preparedness in Singapore. On behalf of the NFECC, I would like to thank you for working alongside us in this important mission to keep Singapore safe and secure. At the same time, I take this opportunity to cordially invite all fire safety professionals including members of the academia, to lend your support and participate in this event. I look forward to welcoming all local and overseas participants who will be joining us at FiSAC 2022. See you soon!



Keynote Speakers

Mr Emanuel Psaila

Permanent Secretary of Home Affairs,
Security, Reforms & Equality (Malta)
Transforming Organisation

Emanuel Psaila is the former director-general of the Department of Civil Protection in Malta, which he had served since 1999. He has vast experience in emergency response and rescue. During his career, he has also served as President of the Civil Protection Association for 14 years and as a member of the Academy for Disciplined Forces and member of the National Book Council.



Professor Grunde Jomaas

ERA Chair and Head of Dept for Fire-Safe
Sustainable Built Environments
Fire Safety for Photovoltaic (PV) Installations

Professor Grunde Jomaas is the FRISBE ERA Chair holder and the Head of the Department for Research for Fire-Safe Sustainable Environment at the Slovenian National Building and Civil Engineering Institute (ZAG). He is also a professor at the University of Primorska in the Faculty of Mathematics, Natural Sciences and Information Technologies (FAMNIT). Professor Jomaas has a BSc (Summa Cum Laude) in Fire Protection Engineering from the University of Maryland (2001) and a MSc (2005) and PhD (2008) in Mechanical and Aerospace Engineering from Princeton University. He was an assistant (2009-2011) and associate professor (2011-2016) in the Department of Civil Engineering at the Technical University of Denmark (DTU) and BRE Chair and professor of fire safety engineering at the University of Edinburgh (2016-2021). Professor Jomaas has a broad experience in experimental combustion and fire safety research, including high pressure premixed flame research and flammability in microgravity, and he has published more than 60 peer-reviewed articles.



YAS Dato Sri Ts Mohammad Hamdan Bin Hj. Wahid

Director General
Fire and Rescue Dept of Malaysia
Challenges and Changes: FRDM Perspectives

Dato Sri Ts Mohammad Hamdan Bin Hj. Wahid was appointed as Director General of Fire and Rescue Department of Malaysia in 2018. Graduated with a Master of Science in Emergency Response Planning and Management from Universiti Putra Malaysia and Degree in Mathematics from Universiti Malaya. He has been serving for 30 years in Fire and Rescue Department Malaysia, holding various executive and strategic posts in states and divisions and has a vast experience in training, fire safety, firefighting and SAR operational commandship and disaster management. He is also the President of Institution of Fire Engineers (Malaysia) and past President of Institution of Master of Disaster 2018 and Emergency Management of Malaysia (IMDEMM) and has contributed significantly in development code of practices and fire safety regulations at national and regional level.

Session Speakers*

DC Ling Young Ern

Deputy Comr, Future Tech and Public Safety, SCDF

Mr Sean DeCrane

UL

Mr Peter Stephenson

Warrington Fire

Ms Susan Lamont

Director ARUP (UAE)

Mr Victor Ho

Principal for HILT Pte Ltd

Mr Jim Tan Yew Yaw

Xcube Solutions

Mr Jimmy Jönsson

President-Elect, Society of Fire Protection Engineers (SFPE)

Dr. Ricky Carvel

University of Edinburgh

Mr Jiang Fenghui

FM Global

Mr Keith L. Wen

City of New York Department of Buildings, Technical Affairs

Major Patrick Parayre

Paris Fire Brigade (BSPP)

*Subject to Changes

Conference & Workshop Programme

The highly anticipated 4th edition of Asia's most prominent fire safety event is back. Jointly organised by the Singapore Civil Defence Force and the National Fire and Emergency Preparedness Council, the Fire Safety Asia Conference 2022 will be held from 16 to 18 November 2022 at the Singapore Expo.

With a progressive conference theme of "*Rethink, Redefine, Redesign: A BREAKTHROUGH in fire safety, sustainability and emergency response*", the FiSAC 2022 will cover a 2-day conference and a half-day workshop on relevant case studies, methodologies, technologies and implementation strategies as well as an exhibition to showcase state-of-the-art equipment and technologies.

The conference theme captures and embeds the spirit of leveraging technology, embracing innovation and the growing emphasis in environmental sustainability. The blue, together with the greenish hue, was specially chosen to underscore the importance of sustainability as we pursue new breakthroughs in fire safety and emergency response.

Conference Programme*

Day 1: 16 November 2022, Wednesday

Time	Programme
0800	Registration and Opening Address
0930	Keynote Address 1 for FiSAC
1000	Tea Break and Tour of Exhibition
1100	Sharing on Paper 1
1130	Sharing on Paper 2
1200	Sharing on Paper 3
1230	Panel Discussion
1300	Lunch Reception
1400	Keynote Address 2 for FiSAC
1430	Sharing on Paper 4
1500	Sharing on Paper 5
1530	Panel Discussion
1600	Tea Break
1630	End of Conference Day 1
1900	Gala Dinner

Day 2: 17 November 2022, Thursday

Time	Programme
0900	Keynote 3 for FiSAC
0930	Sharing on Paper 6
1000	Tea Break
1030	Sharing on Paper 7
1100	Sharing on Paper 8
1130	Sharing on Paper 9
1200	Panel Discussion
1230	Lunch Reception
1400	Sharing on Paper 11
1430	Sharing on Paper 12
1500	Panel Discussion
1530	Tea Break
1600	Closing Remarks
1615	End of Day 2

*Subject to Changes

**Professional Accreditation Points to be determined

Gala Dinner

16 November 2022, Wednesday
Shangri-La Hotel,
Tower Ballroom (Lobby Level)

22 Orange Grove Road, Singapore 258350

Cocktail Reception begins at 1900hrs

Gala Dinner commences at 1930hrs

Workshop Programme

18 November 2022, Friday

0900hrs-1400hrs

Organised by IFE Singapore, FSMAS, and A-CERTS, three Half-day Workshops will be conducted concurrently covering different aspects of fire safety.

Exhibition , Conference & Workshop Registration

Held in conjunction with the conference, FISAC Exhibition is the most prominent fire exhibition in Singapore and the region. Taking place only once every 3 years, the exhibition attracts both local and international fire industry professionals to Singapore for 3 days of business meetings and networking exchanges.

EXHIBITION RATE (GST Applicable)

BARE SPACE	SGD\$680/SQM (MIN. 18SQM)
SHELL SCHEME	SGD\$780/SQM (MIN. 9SQM)

Entitlement Per 9sqm Booth:

- 02 X Folding Chairs
- 01 X Information Desk
- 01 X 13amp Power Socket
- 02 X Fluorescent light
- 01 X Waste Paper Basket
- System Partition (White)
- Needle Punch Carpet
- Fascia Board reflecting Company Name



Additional Entitlement:

- 01 x Access Pass to Conference
- 01 x Access Pass to Gala Dinner

REGISTRATION FEES (GST Applicable)

	STANDARD	EARLY BIRD (BEFORE 01 AUGUST 2022)	ONLINE
CONFERENCE ONLY (16-17 NOVEMBER 2022)	SGD 900.00 (Non-Member) SGD 850.00 (*Member)	SGD 850.00	SGD 750.00
WORKSHOP ONLY (18 NOVEMBER 2022)	SGD 300.00 (Non-Member) SGD 250.00 (*Member)	SGD 250.00	N/A
PACKAGE (CONFERENCE & WORKSHOP)	SGD 1,020.00 (Non-Member) SGD 960.00 (*Member)	SGD 960.00	N/A

GALA DINNER (GST Applicable)			
	PREMIUM TABLE	STANDARD TABLE	SINGLE TICKET
GALA DINNER (16 NOVEMBER 2022)	SGD 3,888.00	SGD 2,688.00 (Non-Member) SGD 2,288.00 (*Member)	SGD 398.00

*Member price applicable to members of Supporting Organisation only

REGISTRATION FEE INCLUDES

- (i) Full Conference
 - All meeting sessions, Opening Ceremony, Conference Tea Breaks & Luncheons, and Awards Gala Cocktail Reception & Gala Dinner
- (ii) Workshop
 - One of 3 Workshop Tracks, Tea Break, and Luncheon

CANCELLATION POLICY

No cancellation is allowed. Substitution is allowed with prior notice (3 working days in advance). Any cancellation has to be made in writing to the secretariat office via oc@fisac.com.sg.

MODE OF PAYMENT

All payment to be made via ticket booking portal. Should you need any assistance on payment method, please email to the secretariat office via oc@fisac.com.sg.

Fire Safety Design Awards 2022



FIRE SAFETY
DESIGN AWARDS

The Awards accord recognition to the individuals, organisations and the project teams for ingenious design processes and solutions in overcoming project challenges to achieve high standard in fire safety design of building projects in Singapore.

The Awards aim to:-

- Inculcate a strong fire safety culture among building professionals in developing our built environment;
- Give recognition to professionals, developers and project teams for fire safety engineering achievements; and
- Honour like-minded individuals for their consistent contribution towards achieving high standards in fire safety and compliance to the regulatory system.

We invite all qualified persons, developers, building owners and project teams to participate and apply for the Awards in the respective project and individual categories.

Interested applicants may browse the participation manual for more details on the assessment criteria and submission guidelines. The manual can be downloaded from <https://go.gov.sg/fsdaparticipationmanual> or through this QR code.



The nomination for outstanding projects shall meet the following criteria:

- Must have obtained TFP/FSC before 31 Dec 2021
- Must only be nominated by one (1) Applicant
- Must not have received this Award in the past years

The nominated person / applicant shall meet the following criteria:

- Must be a Registered Architect, Professional Engineer or Fire Safety Engineer
- Must be involved actively and have contributed significantly to fire safety standards in Singapore

Applications close on 31 July 2022.

Award Winners will receive award certificates and specially designed plaques during FiSAC's Gala Dinner on 16 Nov 2022.

Participation Enquiries

Contact FSDA 2022 Secretariat via email
fsda@nfec.org.sg

Joint Organisers



SCDF
The Life Saving Force
... for a safer Singapore

Category of Awards

