SFPE Fire Safety Conference on PERFORMANCE-BASED DESIGN
15-17 APRIL 2026 | SINGAPORE

Keynote Speaker

SEET Siew Teck Daniel, Deputy Commissioner, (Future Technology & Public Safety), Singapore Civil Defence Force

Senior Assistant Commissioner (SAC) Daniel Seet took over is Deputy Commissioner of the Future Technology & Public Safety (FTPS) cluster in SCDF on 1 May 2024. Prior to that, Daniel was Deputy Commissioner of the Operations & Resilience (O&R) cluster. In his current portfolio, Daniel oversees transformation and capability development in preparing the SCDF for future challenges. This involves the adoption of technology as well as driving the digitalisation of the organisation. He also oversees the development of fire safety regulations for Singapore.

Daniel first joined the SCDF as a conscripted officer (i.e., National Service, Full-time) in 1998. He previously held several appointments in SCDF and at the Ministry of Home Affairs Headquarters (MHQ). This included stints as a Media Relations Officer in the Public Affairs Department, Commander of Changi Fire Station, Head of Operations Branch for 4th SCDF Division, Commander of 1st SCDF Division, Director of the Crisis Preparedness Directorate under the Joint Operations Group in MHQ as well as Director of SCDF's Operations Department.

He also holds a Master of Arts degree in Organizational Communication from Emerson College, Boston, a Bachelor of Arts degree in Communication and Media Management from the University of South Australia, and before that, a Diploma in Mass Communications from Ngee Ann Polytechnic.

Daniel was conferred the Republic's State honours of the Public Administration Medal (Bronze) and (Silver) by the President in 2014 and 2022 respectively. In 2023, he was awarded the Public Administration Medal (Silver) (COVID-19) and the COVID-19 Resilience Medal.

Speakers

Pedro Armijo, PE (Idaho), CEng, Int.PE, MSFPE, IFE, Jensen Hughes

Pedro is responsible for managing the implementation and delivery of all major projects in the Middle East region. He has experience and exposure to a diverse range of fire engineering fields including fire protection system designs, fire research and investigation, fire brigade intervention, fire and evacuation modelling and specific fire engineering design solutions in line with complex performance-based Building Code regulatory systems. He has knowledge of the Saudi Building Code, UAE Fire Code and Regulations, National Building Codes (New Zealand/Australia), ICC suite of codes, NFPA Fire Codes, and EU/British Standards. His past professional roles for over the last 15 years have shaped his experience and knowledge in international performance-based Building Codes and their applications on large and complex projects.

Nathan Birmingham, PE, Code Red Consultants

Nathan Birmingham is a professional Fire Protection Engineer and Sr. Principal/Vice President at Code Red Consultants with a focus of applying performance-based design solutions to real world applications. Mr. Birmingham is skilled in addressing complex fire and life safety challenges where traditional prescriptive approaches fail to address modern hazards. Rooted in his diverse experience serving in a variety of project roles ranging from code consultant to fire protection engineer, to integrated test agent, Mr. Birmingham is able to effectively communicate design strategies that mitigate the risk associated with the modern challenges facing the fire protection community.

Warren Bonisch, FPE, FSFPE, WJE Fire and Life Safety

Mr. Bonisch is a graduate of the University of Maryland, Dept. of Fire Protection Engineering, with B.S and M.S. degrees in Fire Protection Engineering. He has over 40 years of fire and life safety consulting practice in USA and Europe. He is a licensed fire protection engineer in many of the USA states and is a Certified Fire Investor and Instructor. He is a Fellow at SFPE, member of the conference program committee, and chairs the Guide for Existing Building Committee.

Jeremy Chang, Technical Director, PhD(Fire Eng.), CPEng(NZ), PMSFPE, Holmes NZ

Jeremy is a Chartered Professional Engineer (CPEng) in New Zealand with a PhD in Fire Engineering from the University of Canterbury and over 15 years of design experience. He previously worked as a lecturer at the University of Canterbury following his postdoctoral research. His work focuses on performance based fire engineering, particularly travelling fires and fire severity within compartments. He has contributed to several local and international design guides.

Ervin Cui, PE, PhD, Wiss Janey Elstner Associates

Dr. Ervin Cui is an experienced fire protection engineer in fire protection, life safety, Computational Fluid Dynamics (CFD) modeling, analysis of fire and emergency ventilation systems, and egress modeling. Dr. Cui brings to the team more than 25 years of engineering expertise in a myriad of applications, including super-tall towers, convention buildings, airport terminals, industrial buildings, railroad stations, warehouses, amusement halls and other large space facilities.

Joelle DeJoseph, PE, Senez Consulting, Inc.

Joelle is a professional engineer who comes to SenezCo with over 25 years of experience in fire protection. She has comprehensive experience in all aspects of fire protection and life safety in electric vehicle automotive manufacturing facilities and nuclear facilities, as well as commercial, educational, and warehouse facilities. Her expertise includes permitting and interfacing with AHJs, hazardous material programs, high-pile storage design and permitting, fire testing and fire modeling, and extensive experience with alternate means of compliance writing and acceptance (AMoC or AMM).

Joelle is passionate about all things fire and mentoring the younger generation of fire protection professionals.

Md. Ismail Siddiqi Emon, Machine Learning Associate, National Institute of Standards & Technology

Md. Ismail Siddiqi Emon is a researcher and machine learning engineer specializing in deep learning, computer vision, and multimodal AI systems. His research spans medical image analysis, audio-visual signal processing, and generative AI, with a strong emphasis on real-world safety-critical applications. In addition to healthcare-focused studies such as skin cancer detection, mammogram analysis, and medical image captioning, he has conducted research on fire ignition and early fire detection, leveraging audio and video data to model ignition events and intervention windows. His work involves analyzing battery-related fire datasets, extracting raw audio and spectrogram-based features, and developing deep learning models for early-stage fire detection. Md. Ismail Siddiqi Emon combines rigorous experimentation with practical system design to build efficient, reliable AI solutions for both healthcare and fire safety domains.

Martina Enochsson, BSc in Fire Protection Engineering, MSc in Risk Management, Brandskyddslaget AB

Martina Enochsson holds a BSc in Fire Protection Engineering and an MSc in Risk Management from LTH, the Faculty of Engineering at Lund University, Sweden, from which she graduated in the summer of 2025. During her studies, she completed a thesis entitled "Evacuation Through Inward-Opening Doors - The Impact of Individuals with Reduced Mobility", co-authored with Hanna Ivansson; the abstract of this work is being presented at the conference. Following her graduation, Enochsson commenced her career at Brandskyddslaget AB in Stockholm, where she is employed as a fire safety consultant.

Martin Feeney, CPEng, FSFPE, DistFEngNZ, IntPE, Holmes

Martin Feeney is a Principal and Senior Fire Engineer with international consulting fire engineering firm Holmes. He holds a Masters degree in Fire Engineering from the University of Canterbury. During his 43 years of consulting engineering he has practised as a structural engineer and fire engineer and has developed specialist expertise in performance-based fire safety design.

He is passionate about performance-based design generally and has a particular interest in developing fire safety concepts for complex projects. He has prepared performance-based fire safety solutions for a wide range of building types, including hospitals, shopping centres, public assembly buildings, apartment buildings and office buildings. His specialist interest is in the assessment of structural performance in fire.

He is a Chartered Professional Engineer in New Zealand, a Fellow of the Society of Fire Protection Engineers, a Distinguished Fellow of Engineering New Zealand and a Past President of the SFPE New Zealand Chapter. He has served on the SFPE Subcommittees for Very Tall Buildings, Standards Committee on Performance-Based Design and Professional Competency and Credentialing.

Luca Fiorentini, Prof, PE, PSFPE, TECSA S.r.l.

Prof. Luca Fiorentini, director of TECSA S.r.l. (Italy), expert in major risks, industrial accidents and process safety, is the author of a series of international volumes with Wiley on forensic engineering, risk analysis and management, fire risk assessment, fire safety engineering, as well as numerous technical and scientific articles in peer-reviewed and journals. He is Professional member of SFPE. His participation in international technical committees on the same topics also sees him involved as vice president of the Society of Fire Protection Engineers (SFPE Italy), head of the Italian branch of the Safety and Reliability Association (SaRS) and the Italian chapter of the Institute of Risk Management (IRM). He is also associate editor of the journals "Safety and Reliability" and "Fire Protection Engineering". For the National Fire Protection Association (NFPA), he is a member of the technical committees: "Fire risk assessment methods (FIR-AAA)", "Fire reporting (FIP-AAA)", "Industrial and Storage Occupancies (BLD-IND & SAF-IND)", "Spaceports (SPA-AAA)". He is also senior lecturer in "Safety and Reliability".

Andrea Franchini, PhD, Ghent University

Andrea Franchini is a Postdoctoral Researcher in the Structural Fire Engineering Team at Ghent University (Belgium). His research focuses on probabilistic performance-based analysis, design, and optimisation of structures exposed to extreme hazards, with particular emphasis on fire, as well as on optimal experimental design under uncertainty. He holds a PhD from University College London (UK) and a double MSc in Structural Engineering from the University of Trento (Italy) and Tongji University (China).

Adam Glew, MEng (Hons) MIEAust AIFireE, Arup

Adam Glew is a senior fire safety engineer in Arup's Sydney office. He has a strong interest in the holistic integration of engineering and architecture. This interest stems back to his degree in structural engineering, fire safety, and architecture, and his previous roles at a contractor and in an architectural practice. He has worked for Arup in London and Sydney.

His project experience centres around arts and culture and commercial buildings, devising fire safety solutions to address the hazards presented by novel, sustainable innovations, such as modern vehicles, mass timber, and green walls and roofs. Adam led the delivery of Arup's literature review into fire safety in carparks for the Australian Building Codes Board (ABCB), which helped shape National Construction Code (NCC) 2025 updates.

Claudius Hammann, Technical University of Munich (TUM)

Professor Hammann studied civil engineering and fire safety engineering while working as a professional firefighter in the position of head of the preventive fire protection authority, and completed his PhD at the Technical University of Munich (TUM) with distinction on the probabilistic risk analysis of complex systems. After completing a data-science program at MIT (USA), he began his habilitation in building physics. He has more than 15 years of experience in preventive and defensive fire protection as well as in special construction measures, and was appointed to the Professorship of Fire Science and Fire Protection Engineering at the TUM (Germany) in April 2025.

His work focuses on analyzing and further developing performance-based fire protection, fire risk engineering, and the associated human-machine interfaces.

Victor Ho, PE, Institution of Fire Engineers, Singapore/ HiLT Pte Ltd

Mr Ho, a Professional Engineer and a Registered Fire Safety Engineer, has been involved in fire safety/fire protection design for the past 30 years. He holds a double master's degree in Mechanical and Fire Safety Engineering, which reflects his intense interest and expertise in the field of Fire Safety Engineering. He led the team that won Best Fire Engineering Design for projects under 100 million awarded by the National Fire Prevention Council/Singapore Civil Defense (SCDF) in 2014. He was in the working committee that drafted the inaugural Singapore Fire Engineering Guideline (SFEG) 2015 and the latest SFEG update 2025. He currently sits on SCDF's standing committee and also on the main committee for the Singapore Master Fire Code. On the international front, he sits in UL TC 2849 and is a stakeholder in UL TC 9540.

John Hoffman, Koffel Associates

John, Senior Fire Protection Engineer with Koffel Associates, Inc. with both a bachelor's and master's degree in Fire Protection Engineering from the University of Maryland, is a registered Professional Engineer in Virginia.

John is experienced in the application of Building and National Fire Protection Association codes and standards to existing and new facilities and has vast experience with local and Federal codes and amendments. His work experience includes fire protection systems design, mass notification specifications and drawings, including developing fire protection performance criteria and related fire suppression and fire alarm/detection specifications. He conducts fire protection engineering surveys, witnesses' fire protection systems testing, reviews fire and life safety plans, and provides general building and fire code consulting services. Additionally, John performs stair pressurization design and performance-based design analysis utilizing computer modeling.

Pin-Ping Hsieh, Ph.D. Student / Captain, National Kaohsiung University of Science and Technology / Fire Bureau, Kaohsiung City Government

Captain Hsieh is a fire service officer at the Kaohsiung City Fire Bureau and received her M.S. in Fire Science and Technology from Central Police University, Taiwan.

M.C. (Man Cheung) Hui, PE, MSFPE, CPEng, FIEAust, CEng, FIFireE, MEng (Building Fire Safety and Risk Engineering), RED Fire Engineers Pty Ltd

M.C. Hui is a Technical Director and Quality Manager of RED Fire Engineers Pty Ltd. He has over 45 years of experience in the fire safety and fire protection industry, and has been involved in a vast range of types of building and infrastructure projects with respect to performance-based fire safety designs, product fire risk assessment, such as insulation panels and combustible cladding, as well as gained a few years of experience in fire resistance testing.

He is a fire safety engineer on the National Engineering Register with Engineers Australia, and registered in Victoria, New South Wales and Queensland.

M.C. has been a sessional lecturer at Victoria University, Western Sydney University, and City University of Hong Kong on their fire safety engineering course. He has been an SFPE member since the late 1980s.

Sigurjon Ingolfsson, MSc, Arup

Sigurjon Ingolfsson is based in Copenhagen leading Arup's Nordic fire offering. An experienced engineer having 14 years experience working in various countries across the Middle East, Australia, East Asia and Europe. He has recently been involved in advising clients and governments on safe transition to green energy sources as well as careful management of heritage buildings.

Hanna Ivansson, Brandskyddslaget AB

Hanna Ivansson holds a BSc in Fire Protection Engineering and an MSc in Risk Management from LTH, the Faculty of Engineering at Lund University, Sweden, from which she graduated in the summer of 2025. During her studies, she completed a thesis entitled "Evacuation Through Inward-Opening Doors - The Impact of Individuals with Reduced Mobility", co-authored with Martina Enochsson; the abstract of this work is being presented at the conference. Following her graduation, Ivansson commenced her career at Brandskyddslaget AB in Malmö, where she is employed as a fire safety consultant.

Kit Ying, Anny Ip, MIFireE, MHKIE, RFE(Fire), Ove Arup & Partners Hong Kong Limited

Ir Anny Ip is an Associate Director with Arup and is the APAC Fire Safety Skills Network Leader of Arup. She has over 25 years in consulting field of fire safety engineering and has been responsible for offering professional advice from a fire engineering approach in a variety of building projects including retail, high-rise office buildings, healthcare and transport facilities. Her experience includes design fire scenario establishment, fire hazard analysis and assessment, fire resistance analysis, building evacuation design and smoke control strategy. She has been involved in many landmark building projects and infrastructures, including the International Commerce Centre (ICC) which is a 108-storey commercial building in Hong Kong, the Express Rail Link which is the first high-speed rail in Hong Kong, and she is the fire disciplinary lead for the Kai Tak Stadium which is a multi-functional stadium housing more than 50,000 spectators.

Anny is a Chartered Engineer and a Member of Institute of Fire Engineers, UK. She is also a Member of Hong Kong Institution of Engineers (HKIE), and the Registered Professional Engineer (RPE) of Fire Discipline in Hong Kong.

Lorna Johnson, AIFireE MSPFE MEng (Hons), Arup

Lorna Johnson is a fire engineer working at Arup and is based in Edinburgh, Scotland.

She graduated with a degree in Structural Engineering with Architecture from The University of Edinburgh in 2022, where her experimental thesis studied the performance of protective coatings for mass timber.

She now works on a range of technically challenging and innovative projects across England and Scotland, and has a passion for sharing knowledge and lessons learned along the way.

Lorna was recognised as the SFPE UK Chapter 'Up and Coming' Fire Engineer in 2025.

Spencer Johnstone, MFireEngSt, BEng(Hons), Beca Ltd

Spencer is an emerging talent in the field of New Zealand fire engineering, bringing both exceptional technical ability and soft skills to the industry. With 4 years of experience, Spencer has distinguished himself amongst clients, architects, and contractors as an effective problem solver and communicator. He has a keen interest in hospital designs given his initial study in medicine, and has now focused his desire to help people into producing resilient fire engineering designs.

Amanda Kimball, PE, FSFPE, Fire Protection Research Foundation

Amanda Kimball, PE, FSFPE, is the executive director of the Fire Protection Research Foundation, the research affiliate of the National Fire Protection Association (NFPA). In her role as executive director, Amanda provides leadership on research initiatives that pertain to fire protection, emergency response, and virtually everything that challenges safety in the built environment. She is also a registered professional fire protection engineer in the state of Massachusetts. Prior to her arrival at the Research Foundation in 2011, she worked for seven years in a consultant capacity for Arup, providing insights on fire protection engineering, building code life safety, the design of fire protection systems, and the egress modeling of buildings and subway stations. Amanda has her BS in civil engineering and MS in fire protection engineering from WPI.

Manuel Kitzlinger, Dr.-Ing., Technical University of Munich

Dr. Kitzlinger studied civil engineering at the Technical University of Darmstadt and the Technical University of Braunschweig. As a fire safety engineer, he worked for fourteen years at Halfkann + Kirchner, one of the leading fire safety engineering companies in Germany
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From 2018 onwards, he played a leading role in the introduction of BIM into fire protection planning in Germany. He received his doctorate from TU Darmstadt in 2021 on the topic of BIM in fire safety engineering.

Since July 2025, he is a group leading research officer with Prof. Hammann (fire science and engineering) at the Technical University of Munich, with a focus on the development of fire safety engineering methods with BIM and AI.

Dr. Kitzlinger is convenor of the DIN Standards Committee for Fire Safety Engineering and Representative of DIN in ISO TC92 SC4.

Simon Krishnan, FIEAust - Professional Fellow of the Institution of Engineers Australia / CPEng - Chartered Professional Engineer - Fire Safety / CPEng - Chartered Professional Engineer - Mechanical, SFPE Australia (inaugural member) and Astrix Fire Safety Certification (Director)

Born in Singapore served as a Military Police and worked in the MINDEF before pursuing a degree in Mechanical with Honours, followed by a Post Grad in Fire Safety Engineer.

Simon looks at everything objectively and logically and comes with with 19 years of experience.
Starting his own company (Astrix Fire Safety) in 2022 provided a wider perspective on Fire Safety and question everything or searching for alternatives as opposed to the norm.

He believes that there is never a perfect solution in miitgating Major Fire Safety risks but there will always be a perfectly acceptable solution at the time that should be reviewed, renewed and maintained.

In his free time, he is a competitive Dragon Boat paddler in his Club and in the Australian Team. As if that is not enough, Simon is also a Marriage Celebrant of Australia.

Tong Lu, Mr, The Hong Kong Polytechnic University

Mr. Tong Lu is currently a PhD student from the research group of Prof. Xinyan Huang at The Hong Kong Polytechnic University. His research focuses include mass pedestrian dynamics, emergency management, and Smart fire and evacuation prediction.

Brian Meacham, PhD, PE (CT & MA), CEng (UK), EUR ING, FSFPE, FIFireE, Meacham Associates / Lund University

As a consultant, Brian develops risk-informed performance-based solutions to complex building, infrastructure and fire safety management challenges, provides peer-review services, and conducts building and fire regulatory system studies. He also undertakes research in these areas, as well as in sustainable and fire resilient built environments, fire safety technologies and sociotechnical systems approaches. Brian has served in many leadership roles in the fire, life safety and regulatory arenas. He is currently Chair of the Code Development Committee for the ICC Performance Code, Immediate Past Chair and Trustee of the International Association for Fire Safety Science (IAFSS), Member of the Research Advisory Board of the UL Fire Safety Research Institute (ULFSRI), a Past President of the SFPE, and a Past Chair of the NFPA Technical Committee on Fire Risk Assessment Methods.

Julian Mendez, PhD, GradIEAust, Solis Fire Engineers

Julian is a Fire Safety Engineer at Solis. He holds a PhD in fire Safety Engineering from the University of Queensland where he studied the fire dynamics behid the flame spread on high rise buildings facades.

Yoshikazu Minegishi, PhD, PMSFPE, PE, Building Research Institute, Japan

Dr. Yoshikazu Minegishi is a chief fire research engineer of the Building Research Institute, Japan. He has 18 years of engineering experience in performance-based fire safety design at Takenaka Corporation, a design-build company with in-house architects and engineers. Minegishi is now exploring an engineering design approach that considers evacuees' psychology and crowd behavior. His current research focuses on egressibility, inclusive evacuation, and elevator evacuation. He has participated in the SFPE-PBD conference's case study seven times from 2012 to 2024 and made presentations.

Meet Panchal, International College of Engineering and Management (ICEM)

Meet Panchal is a Senior Lecturer at the International College of Engineering and Management (ICEM), affiliated with the University of Central Lancashire. His research focuses on fire dynamics, human behaviour in fire, and fire risk assessment, with an emphasis on improving life safety outcomes through evidence-based design and analysis. He contributes to teaching and research that bridges academic insight with practical fire engineering applications.

Diana Prostire, MEng AIFireE, Fire Dynamics Group

Diana is an Associate Director at Fire Dynamics in London, where her practice centres on performance-based fire engineering, with particular expertise in fire dynamics, CFD modelling, and the thermo-mechanical response of structures in fire. With over nine years of professional experience across diverse building sectors, she focuses on applying analytical and computational methods to develop robust, design-integrated fire strategies. Diana is an Associate of the Institution of Fire Engineers (AIFireE) and holds an MEng in Structural and Fire Safety Engineering from the University of Edinburgh. Her recent work includes reliability-based evaluation of passive fire protection systems in high-rack steel warehouse structures, aimed at advancing risk-informed approaches to structural fire design.

Shamim Rashid-Sumar, PE, FSFPE, SFPE 2026 President, National Ready Mixed Concrete Association

Ms. Rashid-Sumar is Senior Vice President, Codes and Standards for the National Ready Mixed Concrete Association. Based in New York, she works with National Model Building Codes and Standards organizations to advocate for resilience and sustainability through non-combustible construction and provides technical support regarding codes, standards, regulations and legislation at the national, state, and local level. Ms. Rashid-Sumar holds a Bachelor of Science in Fire Protection Engineering. Shamim is a Fellow of the Society of Fire Protection Engineers and a member of the SFPE Foundation Board of Governors as well as the SFPE Board of Directors, where she currently serves as Secretary/Treasurer. Shamim is a principal member of several NFPA Technical Committees, including Structures, Construction, and Materials, Fire Tests, and Residential Occupancies. She is also a member of the ACI 216 Committee on Fire Resistance and Fire Protection of Structures, ACI 560 Committee on Design and Construction with Insulating Concrete Forms, ASTM E05 Committee on Fire Standards, the ICC Performance Code, and the ICC Multi-Hazard Resiliency for Residential Construction Committee. Shamim currently serves as President of the Alliance for Concrete Codes and Standards.

Peter Senez, P.Eng., PhD, FSFPE, Senez Consulting Ltd.

Peter is a Governor and Chair of the Board for the SFPE Educational & Scientific Foundation, President of Senez Consulting, Chair of the National Model Code Committee on Fire & Life Safety in the development of the Canadian Model Codes, and Chair of the Board of RDH Building Science. He is also an alternate member of NFPA 130 transit standard and a sessional lecturer in the fire program at the University of Waterloo.

Shimon Seng, MIEAust, RED Fire Engineers

Shimon is a Fire Safety Consultant in RED Fire Engineers' Brisbane office, where he is developing his experience and technical expertise in performance-based design for developments located in bushfire-prone land across Australia.

He has worked on a wide range of projects throughout Australia, with a focus on design development and fire-engineered solutions for residential, mixed-use, commercial, and transport infrastructure projects. Shimon has extensive experience using CFD modelling as part of his fire engineering work and is keen to further advance his skills in fire modelling and evacuation analysis software.

Prior to relocating to Australia, Shimon spent several years working with the Housing & Development Board of Singapore and the Singapore Civil Defence Force. During this time, he completed a Master of Science in Structural and Fire Safety Engineering at the University of Edinburgh.

Radek Sikorski, MSc Eng, SMAY Ventilation Systems

Radek Sikorski is a Business Development Manager with 10 years of experience in the building and HVAC design sector. Holding full building design and site supervision credentials (chartership equivalent) in Mechanical Engineering, he specializes in Pressure Differential Systems for High-Rise Buildings. Radek delivers specialized training sessions for design firms and providing hands-on technical support, contributing to several high-rise developments across Europe and the Middle East. He is a member of multiple industry bodies, including the CEN Technical Committee TC191/SC1/WG6 (focused on pressure differential systems), the Fire & Life Safety Committee of the Council on Vertical Urbanism (CVU/CTBUH), and the Society of Fire Protection Engineers (SFPE).

David Stacy, Summit Fire Consulting

David Stacy served as the Principal and Founder of Performance Based Fire Protection Engineering, PLLC (PBFPE), based in Raleigh, North Carolina, which was acquired by Summit Fire Consulting in 2025. His firm specializes in fire and egress modeling, performance-based designs, and building and fire code consulting, while also offering full-service support for all fire protection and life safety challenges. Actively involved in the Society of Fire Protection Engineers (SFPE) and the National Fire Protection Association (NFPA), David has presented at national conferences and holds engineering licensure in North Carolina and multiple other states. His career also includes extensive fire service experience, where he previously served as a Captain for the City of Durham, NC Fire Department.

Anoop Subramania Warrier, PhD, University of Lancashire / Xeluxe Fire Safety Consultancy

Anoop Subramania Warrier is a Principal Consultant in Fire & Life Safety at Xeluxe Fire & Life Safety Consultancy (UAE). He recently completed his PhD at the University of Lancashire (November 2025) on "Externally Venting Flames: Dynamics in Non-Orthogonal Geometries," combining experimental research with numerical/CFD (FDS) investigations. Anoop's professional and research experience spans performance-based design, fire dynamics, and smoke modelling, supported by experimental and CFD based investigations. He also delivers authority-aligned fire safety strategies for complex projects across the GCC and is passionate about translating research outcomes into practical design guidance and safer built environments.

Wai Cheong (Andy) Tam, PhD, National Institute of Standards and Technology

Dr. Andy Tam is the Leader for the AI-Enabled Smart Fire Fighting project and a Mechanical Engineer in the Fire Fighting Technology Group of the Fire Research Division of the Engineering Laboratory at the National Institute of Standards and Technology (NIST). Before his tenure, Andy was an NRC Postdoctoral Research Associate at NIST after receiving his Ph.D. in Mechanical Engineering from the Hong Kong Polytechnic University. His research interests are thermal radiation heat transfer, machine learning for interdisciplinary research studies on smart firefighting and firefighters' health monitoring, and early thermal runaway detection technology for lithium-ion batteries.

Izabela Tekielak-Skalka, PhD

Dr Iza Tekielak-Skałka is researcher with expertise in performance-based fire design, fire dynamics, and risk-informed approaches to building safety and Head of SMAY's R&D. She holds a PhD in engineering and has experience spanning academic research and applied engineering practice. Her doctoral dissertation focusing on study of pressure drop in staircases. The results of these studies is used to design Pressure Differential Systems in High-Rise Buildings. In recognition of her contributions to the profession and leadership in the field, in 2024 Iza was awarded the Woman of The Year in Fire Safety distinction. She actively contributes to the fire safety engineering community through research, technical projects, and professional conferences.

Eric Tonicello, Structural engineer BSc and safety fire engineer, ISI - Ingénierie et Sécurité Incendie sàrl - Lausanne - Switzerland

Eric Tonicello is the director and founder of ISI - Ingénierie et Sécurité incendie in Lausanne, which has been operating in Switzerland since 2014 and has nine employees, mainly engineers. Trained as a structural engineer, he has specialized in fire engineering since 2005 and has carried out numerous expert assessments in the field of existing load-bearing structures, before continuing his training in all areas of fire engineering (smoke extraction, evacuation, and risk studies-notably with his partner Julien Duboc).

He particularly enjoys teaching and attending conferences where he can exchange ideas with colleagues from around the world and compare study methods and real-life cases.

Karl Wallasch, Dipl.-Ing. CEng MIFireE PMSFPE, Trigon Fire Safety

A Chartered Engineer with more than 20years of experience, Karl gained his qualifications in Civil and Structural Engineering at the Bauhaus University in Weimar, Germany. He gained unparalleled experience in multiple sectors including private apartments, council-led social housing schemes, luxury residential, retail, commercial/office, student accommodation and hotels, as well as high-rise and mixed-use developments. Karl has established himself as a respected fire safety professional by developing innovative fire safety solutions for new, existing, listed and heritage buildings. With a view to the future of the fire safety industry, he is also a tutor at the Bauhaus University in Weimar, Germany and currently a member of the SFPE Task Group for the Performance-Based Design Standards Making Committee. He was the President of the SFPE UK Chapter from 2018-24 and remains Chapter committee member. He organises regular international conferences for SFPE. He also regularly presents at national and international conferences.

Kristin Weniger, PE, PMSFPE, Koffel Associates

Kristin is a Senior Fire Protection Engineer with Koffel Associates, Inc., with more than 10 years of industry experience. She has a bachelor's degree in Fire Protection Engineering from the University of Maryland and is a registered Professional Engineer in Maryland, New Jersey, and Ohio. She is the President of the SFPE Chesapeake Chapter, a member of the American Institute of Architects, National Fire Protection Association, and serves as an alternate on the NFPA Technical Committee for NFPA 214 Water-Cooling Towers, NFPA 150 Animal Housing Facilities, and NFPA 72®, Emergency Communication Systems.

Kristin is experienced in the application of government and national fire protection and life safety standards to existing and new facilities. Her work experience includes fire protection and life safety surveys, performance-based design alternative designs, stair pressurization design and analysis, plan review, Construction Administration services, Life Safety Code® Assessments, creation of life safety compliance plans, fire protection system design, and general fire protection code consulting.

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