

Keynote Speakers



Chief Roderick M. Smith, Atlanta Fire Rescue Department

Fire Chief Roderick M. Smith is a distinguished leader with over 30 years of dedicated service to Atlanta Fire Rescue. Rising through every rank, he brings unmatched experience, strategic insight, and a deep commitment to protecting lives and property. Chief Smith has led the department through some of Atlanta's most critical incidents, including the Fox Theater Fire, Fulton County Stadium Fire, and the I-85 bridge collapse. During the COVID-19 pandemic, he took command and fostered a culture of resilience, teamwork, and innovation.

He is a strong advocate for professional development, launching initiatives like the Divisional Officer Mentorship and Rising Phoenix Programs to build future leaders within AFRD. Under his leadership, the department expanded community outreach through the AFRD Cadet Program, Red Shirt Recruit Program, and The Safe Spots Program, targeting Atlanta youth and promoting fire safety.

Chief Smith has also implemented key operational improvements, including enhancing EMS response with new AFRD ambulances and improving response times across the city. A graduate of Morehouse College (B.A. in Finance), he also holds an MPA from Columbus State and is a National Fire Academy Executive Fire Officer.

His contributions to fire service extend nationally through active roles in the Georgia Fire Chiefs Association, Black Chief Officers Committee, and Metro City Fire Chiefs. Chief Smith's legacy is one of excellence, service, and enduring impact on Atlanta's safety and resilience.



Dr. Lori Moore-Merrell, Former U.S. Fire Administrator, UL Research Institutes

Dr. Lori Moore-Merrell, a prominent figure in the realm of fire safety and emergency response, serves as the Chief Fire Safety Strategist with the UL Research Institutes. Previously, she served as the U.S. Fire Administrator, a role she filled with distinction from October 2021 to January 2025. Under her leadership, the U.S. Fire Administration saw the implementation of groundbreaking initiatives, such as the National Emergency Response Information System (NERIS), which will revolutionized national emergency response analytics by replacing a legacy data system that had been in place for nearly five decades. Her tenure is further marked by her role as the visionary creator and chair of the Inaugural World Fire Congress, held in May 2024. This monumental event, orchestrated under the auspices of DHS/FEMA and the U.S. Department of State, brought together top fire officials from across the globe to foster international dialogue and collaboration on fire safety issues.

General Session Speakers



Shamim Rashid-Sumar, PE, FSFPE, 2026 SFPE President

Shamim is a Senior Vice President, Fire Codes and Standards at the National Ready Mixed Concrete Association (NRMCA). In her current role, she works with National Model Building Codes and International Standards Organizations to advocate for resilience and sustainability in the built environment. She also provides technical support regarding codes, standards, regulations and legislation at the national, state, and local level. She is a member of the ICC Multi-Hazard Resiliency for Residential Construction Committee, ASTM E05 Fire Standards Technical Committee, Associate Member of ACI 216 Committee on Fire Resistance and Fire Protection of Structures and ACI 560 Design and Construction with Insulating Concrete Forms, and a Principal Member of NFPA Technical Committees on Fire Tests, Building Construction, Fire Protection Features, Residential Occupancies, and Structures, Construction and Materials, among others.

Shamim holds a B.S. in Fire Protection Engineering and a Minor Citation in French Language and Cultures from the University of Maryland College Park. She is a registered professional fire protection engineer in the State of Delaware and holds previous registrations as a House of Expertise Engineer in the Emirates of Dubai and Abu Dhabi in the United Arab Emirates. She is a former member of the UAE Code Committee as well as an NFPA 101 International Instructor.

Prior to joining NRMCA, Ms. Rashid-Sumar served as Practice Leader, Middle East for Jensen Hughes. In her nearly two decades of experience in building and fire code consulting and performance-based design, she has worked on a multitude of projects including government facilities, hospitals and medical centers, airport terminals, museums, high-rise buildings, hotels, malls, and other special use facilities. A strong believer in maintaining fire safety in the built environment, Shamim is also a passionate advocate for diversity, equity, and inclusion in the construction industry and the advancement of women in engineering. She was active in the Middle East and India for 12 years as an industry expert, speaking on technical topics such as façade risk assessments, fire alarm system fundamentals and nuisance alarms, UAE and Saudi Building Codes and delivery of code compliant projects. In October 2019, Shamim was named as Fellow by the Society of Fire Protection Engineers (SFPE), and currently serves as a Member of the SFPE Board of Directors and the SFPE Foundation Board of Governors. Shamim also serves as the current President of the Alliance for Concrete Codes and Standards (ACCS).



Phil Friday, PE, FSPPE, The Reliable Automatic Sprinkler Co. Inc.

Mr. Friday is a licensed fire protection engineer with extensive experience in commercial and industrial building design, fire testing, performance-based design, fire and egress modeling, fire investigation, forensic engineering, and firefighting. He holds an M.S. degree in Fire Protection Engineering from the University of Maryland. Currently, he leads the Product Technology group at The Reliable Automatic Sprinkler Co. Inc.

Mr. Friday is a former volunteer firefighter, wildland firefighter, and Fire Commissioner. In his free time, Mr. Friday enjoys kayak fishing in the Gulf of Mexico.



Nicholas Ozog, PE, PMSFPE, MS, Wiss, Janney, Elstner Associates, Inc.

Mr. Ozog is a licensed Fire Protection Engineer with a master's degree in fire protection engineering and more than 19 years of professional experience. He routinely applies performance-based fire protection strategies in situations where prescriptive code compliance is impractical, utilizing advanced fire and egress modeling to address complex life safety and property protection challenges. He has extensive experience resolving complex fire protection issues for clients through science-based, technology-driven, and risk-informed decision-making approaches. His work includes developing and conducting fire risk assessments for existing buildings that incorporate client objectives and stakeholder requirements. Mr. Ozog is a principal voting member of multiple NFPA technical committees, including NFPA 1 Fire Code, NFPA 30 Flammable and Combustible Liquids Code, and the NFPA Committee on Fire Tests, that includes NFPA 285. He also participates in ICC committees on adaptive reuse and existing buildings and is a professional member of the SFPE and part of the Existing Building Task Group.



Jim Milke, PhD, PE, FSFPE

Dr. Jim Milke, PE is a Senior Principal Engineer with Fire and Risk Alliance. He is also Professor Emeritus and past chair of the Department of Fire Protection Engineering at the University of Maryland. He received his PhD in Aerospace Engineering, MS degree in Mechanical Engineering, and BS degree in Fire Protection Engineering from the University of Maryland. He also has a BS degree in Physics from Ursinus College. He was a faculty member of the Department of Fire Protection Engineering for over 40 years. Jim was the Fire Protection Engineer for Fairfax County, VA, and Research Fire Prevention Engineer at NIST. He is a Fellow and past president of SFPE and received the Arthur B. Guise Medal and John L. Bryan Mentoring Award from SFPE. He was part of FEMA's Building Performance Study Team that investigated the World Trade Center catastrophe of 9-11. He is a Life Member of NFPA and a current member and past chair of the NFPA committee on Smoke Management Systems. He has received awards for teaching, communications, and service from the University of Maryland, NFPA, SFPE, Automatic Fire Alarm Association, American Fire Sprinkler Association, and Siemens Building Technology Division.



**David Rhodes, VP Education FDIC/ Group Editor
Clarion Fire Rescue Editor in Chief Fire Engineering**

David is a 40-year fire service veteran retired from the Atlanta, Georgia Fire Department. He currently works for Clarion Events as the Vice President of Education for Clarion Fire Rescue Brands, editor in chief for FireEngineering magazine and the educational director for the Fire Department Instructors Conference (FDIC). He is a Chief Elder Emeritus for the Georgia Smoke Diver Program, served on the Fire Department Instructors Conference (FDIC) Executive Advisory Board, was the Hands-on-Training Coordinator for the FDIC conference,

and author for Fire Engineering Magazine, and Fire Apparatus and Equipment Magazine, authored the Hump Day SOS column for Fire Rescue, served as an adjunct instructor for the Georgia Fire Academy, and is an Advisory Board Member Emeritus for Underwriters Laboratory Firefighter Safety Research Institute and current Board Member of the Firefighter Air Coalition. He served as an Incident Commander for the Georgia Emergency Management Agency – Type III All Hazards Incident Management Team was a Task Force Leader for the Georgia Urban Search and Rescue Team.

Abstract Sessions Speakers



Gaurav Agarwal, PhD, FM

Gaurav is a scientist in the Fire Hazards and Protection Area at FM's Research Division. His primary research areas are material flammability, fire dynamics, and fire protection. His research interests are in the areas of understanding large fire phenomena via bench-scale experiments and theoretical models on material flammability.

Gaurav received his Ph.D. in Mechanical Engineering from Virginia Polytechnic Institute and State University (Virginia Tech). He is a member of the Society of Fire Protection Engineers (SFPE), National Fire Protection Association (NFPA), International Association of Fire Safety Science (IAFSS) and the Combustion Institute (CI). Gaurav is a member of American Society of Testing and Materials (ASTM) committee E05 on Fire Standards. He is an American National Standards Institute (ANSI) delegate for the International Standards Organization (ISO) technical committee (TC) 92 on Fire Safety, and the US technical advisory group (TAG) chair for the TC92/SC1 sub-committee on Fire Initiation and Growth.



Shannon Alvarez, Summit Fire Consulting

Shannon Alvarez is a Fire Protection Consultant based in New York City. Her expertise includes fire alarm and sprinkler system design, fire and egress modeling, code consulting, life safety assessments, property condition assessments, and fire safety planning across a wide range of occupancies. Shannon holds both a Master of Science in Fire Protection Engineering and a Bachelor of Science in Civil Engineering from Worcester Polytechnic Institute.



Ata Anvari, PhD, PE, Wiss, Janney, Elstner Associates, Inc.

Ata Anvari, PhD, PE is a Structural Engineering Consultant at Wiss, Janney, Elstner Associates, Inc., specializing in structural investigations, failure analysis, condition assessment of existing structures, and peer review of new structural designs. His research and practice focus is on the behavior and design of structural systems under fire loading, with particular emphasis on composite structural systems. He holds a PhD from Purdue University, where his dissertation on SpeedCore walls under fire loading contributed to AISC 360 and AISC Design Guide 38, and an MSc from the University of Illinois at Chicago focusing on damaged fireproofing effectiveness on structural steel. He has published in and served as a peer reviewer for multiple journals in structural fire engineering, serves on the ASCE Fire Protection Committee, and is an active contributor to AISC Task Committee 8 on fire design of steel and composite structures.



Warren Bonisch, Principal, PE, FSFPE, Wiss, Janney, Elstner Associates, Inc.

Warren Bonisch is a nationally known expert in fire protection engineering, including fire and life safety analysis, egress design, performance-based design and analysis, code consultation, fire protection design and analysis, and related services for a wide range of structures and projects. His experience has included participation in numerous design and consulting projects, leading project teams, and managing projects. Mr. Bonisch is also recognized for his development of innovative solutions to code compliance issues. His experience includes both existing and new projects, nationwide and globally.



David Bostelmann, MEng(Hons) CEng MIFireE, Trigon Fire Safety

David is a Chartered Engineer and member of the Institution of Fire Engineers. He has fire safety engineering experience in projects across the built environment, including: retail, education, airports, offices, sports stadia, leisure, healthcare, historic, residential, high-rise buildings and commercial developments. Using British and international design codes, David has provided fire safety consultancy services for new build and alterations in the UK and worldwide.

Since gaining a First-Class Master's Engineering degree from the University of Edinburgh in 2005, David has focused on advancing his expertise as a professional fire safety engineer consultant. In addition to developing fire safety strategies, often using complex fire engineering techniques (such as CFD, structural and evacuation modelling), David has developed numerous fire safety management plans for clients.

As a British Standards Institution Committee member, David contributes to the development of British Standards. David assists the IFE by reviewing applications for the Engineering Council Chartered Engineer registration including candidate's professional review reports.



Virginia Charter, PhD, PE, FSFPE - Professor & Program Director, Oklahoma State University

Dr. Virginia Charter is Professor and Program Director for the Fire Protection and Safety Engineering Technology program at Oklahoma State University. She obtained her BS in FPSET from OSU, her MS in Fire Protection Engineering from Worcester Polytechnic Institute, and her PhD in Educational Leadership and Policy Studies - Higher Education from OSU. Prior to her position at OSU, she practiced as a consulting and design engineer for nine years in Las Vegas, Nevada. She has worked on many of the infamous Strip properties planning for and evaluation of fire protection, life safety, and risk control systems. Her research is focused on areas that impact fire protection system effectiveness, water supplies, building and fire codes and standards, and engineering education. She is a licensed professional engineer in Nevada, California, and Oklahoma. She serves the profession through several NFPA standard committees, the UL Fire Council, and SFPE. She is currently a Director of the SFPE Board of Directors. She is a Fellow member in SFPE.



Haonan Chen, PhD Student, University of Science and Technology of China

PhD student at the State Key Laboratory of Fire Science at the University of Science and Technology of China. Has worked in China's fire department for 5 years as a fire captain and fire investigator.



Michael Crowley, Principal Advisor, Coffman Engineers

Mike is a Principal Advisor with Coffman Engineers based in Houston, TX. He holds a BS in Fire Protection and Safety Engineering from Illinois Institute of Technology, and an MBA from The University of Houston. Mike is a licensed professional engineer in 6 states. Mike has more than 45 years of fire protection engineering consulting experience. Professional organization involvement includes Fellow in Society of Fire Protection Engineers (SFPE), Lifetime Member of National Fire Protection Association (NFPA) with past and present activity on NFPA Technical Committees including NFPA 101 - Healthcare Occupancies and Means of Egress Committee Chair, and NFPA 99 Correlating Committee, Fundamentals Technical Committee Chair and Technical Committee on Piping Systems Chair. Mike was the 2020 President of SFPE and current Member of NFPA Standards Council. He is a Life Safety Code and NFPA 99 instructor for NFPA. In addition, he is a Fellow Member of the American Society of Healthcare Engineers (ASHE). Mike has authored numerous technical articles and made presentations at various conferences and symposiums. Mike provides consulting to architects, facility managers and building owners around the world.



Juan Cuevas R, PhD, FM

Juan is a Postdoctoral Researcher in the Fire Hazards and Protection Area of FM, focusing on battery safety.



Ervin Cui, PE, PhD, WJE Fire & Life Safety

Ervin Cui has more than twenty-five years of fire protection engineering experience, including super-tall towers, convention buildings, airport terminals, railroad stations, industrial buildings, warehouses, amusement halls, and other large-volume facilities. His experience includes working on numerous design and consulting projects, leading project teams and leading international business development efforts. Dr. Cui has performed simulations and conducted analysis involving fire growth, smoke movement and egress in complex building geometries for large atrium buildings, airport terminals, high-rise buildings and below-grade train stations.



Tyler Dallas, EIT, Wiss, Janney, Elstner Associates, Inc.

Tyler Dallas is a fire protection and life safety consultant at Wiss, Janney, Elstner Associates, Inc. and has contributed to projects involving: loss investigations; fire protection systems design, analysis, and consulting; performance-based designs; litigation support; egress modeling; building and fire code analysis; passive fire protection consulting; and third-party code administration. His project work spans numerous cities, including practicing in Chicago and New York City. Through his multijurisdictional experience, he brings a well-rounded understanding of varying code adoption, enforcement practices, and project delivery environments throughout the country. He holds a Bachelor of Science in Fire Protection and Safety Engineering Technology from Oklahoma State University and is an active member of the Student Outreach Subcommittee of SFPE.



Madison Di Vico, Simpson Gumpertz & Heger

Madison DiVico is a Project Consultant at Simpson Gumpertz & Heger (SGH) based in New York. Her work, including Selecting Critical Fire Scenarios for Cantilevered Buildings, focuses on using tools such as FDS, PyroSim, and Pathfinder to analyze complex fire and life safety challenges and deliver practical, results-driven solutions. She holds a Bachelor's degree in Architectural Engineering and a Master's degree in Fire Protection Engineering from Worcester Polytechnic Institute (WPI).



**Sahar Dorosti, Fire Protection and Process Safety
Global Lead, Hatch**

Global fire engineering lead with a strong background in Fire Engineering and Process Safety Design for various industries such as oil & gas, nuclear, and mining. She has international and Canadian experience in process safety design for both offshore (FLNG and FPSO) and onshore projects (oil & gas refineries and wellhead & production units) and uranium, metal, and gold processing facilities. Her expertise includes conducting code compliance reviews, fire hazard assessments, and design calculations based on industry standards such as CSA N393/N293, NFPA, API, IPS, and IP. She is also familiar with different safety studies like HAZOP, HAZID, Fire Hazard Assessment, Fire Risk Assessment, QRA, ALARP, Flare Radiation, and Exhaust Gas Dispersion Study. Her experience in conducting fire water ring hydraulic calculations using PIPENET software and modeling flammable and toxic gas dispersion with PHAST software demonstrates her proficiency in these areas. Additionally, her involvement in creating Fire and Gas Cause & Effect and shutdown philosophies, supporting site Management of Change (MOC) and Pre-Startup Safety Review, and collaborating on capital improvement projects to enhance process safety/fire engineering further highlight her expertise.



Michael Drury, PE, PhD, AISC

Michael Drury, PE, PhD is a Senior Engineer with the American Institute of Steel Construction (AISC) focusing in fire engineering. His areas of interest include structural fire engineering and steel structures. His doctoral work consisted of large-scale experimental and computational research on steel-concrete composite floor systems under fire exposure, with a focus on developing simplified tools and relationships to be implemented in performance-based structural fire design. He is a licensed professional engineer in three states.



Justin Fletcher, Associate, EIT, Wiss, Janney, Elstner Associates, Inc.

Justin Fletcher joined WJE in 2022 and has contributed to projects involving fire protection system design and analysis, building assessments, building and fire code analysis, life safety analysis, egress design, loss investigations, and hazardous materials analysis.



Jason Floyd, PhD, FSFPE, UL Research Institutes' Fire Safety Research Institute

Jason Floyd is a principal research engineer with the Fire Safety Research Institute (FSRI), part of UL Research Institutes. He holds a Master of Science and a doctorate in nuclear engineering from the University of Maryland. His research at the University of Maryland focused on the application of fire models to fires in nuclear reactor containment buildings. His graduate work was followed by post-doctoral research at the National Institute of Standards and Technology (NIST) that focused on underventilated compartment fire tests and the development of combustion, radiation, and droplet evaporation models for the NIST's Fire Dynamics Simulator (FDS). Prior to joining FSRI, Jason performed consulting services including fire testing in support of codes and standards development, continued development of FDS, fire probabilistic risk assessment, performance-based fire protection design and support of Title 10 Live Fire Test and Evaluation (LFT&E).



Daniel Gorham, PE, UL Research Institutes' Fire Safety Research Institute

Daniel Gorham is a research engineer with UL Research Institutes' Fire Safety Research Institute (FSRI), where his work focuses on large outdoor fires and their impact on the built environment, including the wildland-urban interface (WUI). He has participated in numerous post-WUI fire reviews & analysis, as well as laboratory experiments. Prior to joining FSRI, Daniel was a research engineer at the Insurance Institute for Business & Home Safety (IBHS) and worked at the National Fire Protection Association (NFPA).



Andrew Grenier, PE, FSFPE, Coffman Engineers, Inc.

Andrew Grenier, PE, FSFPE, is a Principal Advisor with Coffman Engineers. As a retired Walt Disney Imagineer, he has a specialized background in themed entertainment attractions, parks, hotel resorts, cruise ships, and industrial facilities. Project experience includes design, delivery, and commissioning of fire detection and alarm systems, fire sprinkler systems, fire pumps, smoke control systems, special hazard fire suppression systems, materials fire safety and testing, fire hazard analysis, performance-based design, and integrated safety systems testing. A veteran of the U.S. Coast Guard, he served for over three decades in various assignments on active duty and in the Coast Guard Reserve. Activities supporting the Society of Fire Protection Engineers (SFPE) include past President of the SFPE Southern California Chapter and current service on the SFPE PE Exam Development subcommittee.



Jonathan Hodges, PhD, PMSFPE, UL Research Institutes Fire Safety Research Institute

Jonathan L. Hodges is a Lead Research Engineer with the Fire Safety Research Institute (FSRI), part of UL Research Institutes. He holds a doctorate in mechanical engineering from Virginia Tech. He is the chair of the Research, Tools, and Methods committee with SFPE and is a member of the SFPE Foundation Board of Governors. Dr. Hodges' expertise is a mix of experimental, computational, and analytical fire science, with an emphasis on artificial intelligence, fire dynamics modeling, heat transfer, and uncertainty quantification.



Bryan Hoskins, PE, PhD, Oklahoma State University

Dr. Bryan Hoskins is a Professor at Oklahoma State University in the Fire Protection and Safety Engineering Technology program. He earned his BS and MS in Fire Protection Engineering from the University of Maryland and a PhD from Mechanical Engineering at the University of Maryland.

Professor Hoskins is an active member of the SFPE and NFPA. He serves as the chair of the working group that developed and maintains the SFPE Research Roadmap, serves on the committees for multiple SFPE guides and other committees, is an instructor for the SFPE PE Exam preparation course and is on eight technical committees for codes and standards.



Mark Hopkins, PE, FSFPE, Engineering Director and Industry Liaison, Summit Fire National Consulting

Mark is Engineering Director for SFC and has over 30 years of experience in fire protection engineering and code consulting. Mark co-authored the FPRF reports titled "Identifying Challenges to the Fire Service in Storage Facilities" and "Quantification of Water Supply Adjustments." Mark is currently working on the FPRF project titled "Landscape Analysis of Automatic Storage Retrieval Systems and Fire Protection Guidance" and has served on numerous FPRF project technical panels. He has also authored chapters in the NFPA 13 Handbook, the NFPA Fire Protection Handbook, and many other documents. He has served on numerous NFPA and SFPE technical committees, including but not limited to NFPA 13 (SSD, SSI, AAC, and HBS), NFPA 72 (IDS) and NFPA 25. Mark has presented technical reports to a variety of NFPA Technical Committees on a broad range of subjects and has presented at numerous national and international conferences. Mark is a Fire Prevention Commissioner in the State of Maryland and a member-at-large for the SFPE Board of Directors.



Oliva Hunt, MS, EIT, Jensen Hughes

Oliva Hunt holds both a B.S. and M.S. in Fire Protection Engineering from the University of Maryland, College Park. She recently completed her thesis in collaboration with ULRI's Fire Safety Research Institute where she was a fellow. Her primary interests are medium to large scale experimental burns, particularly when they assist in the advancement of performance-based design practices and methods. She is now an Associate Test Consultant with Jensen Hughes at their Baltimore Lab.



ZISHANUL HUSSAIN, University of Maryland, Code Consultants Inc. (CCI)

Zishanul Hussain is a Ph.D. student at the University of Maryland and a Research Project Consultant at Code Consultants, Inc. (CCI). His doctoral research investigates the thermal degradation and smoldering combustion of wood to support improved predictive fire modeling for mass timber structures. His professional work focuses on CFD modeling of fire and smoke movement for performance-based design, fire incident reconstruction, assessment of fire impacts on structures, and the application of fire modeling to achieve a range of design objectives.



Shangkun Jiang, University of Florida

Shangkun Jiang is a Ph.D. candidate in Civil Engineering at the University of Florida. His research focuses on emerging mobility data, transportation big data, data bias, travel behavior, and disaster evacuation modeling.



Jimmy Jönsson, FSFPE, Secretary/Treasurer, JVVA

Jimmy is a Director with JVVA in Madrid and has more than 20 years of international experience in fire and life safety engineering. He specializes in performance-based fire engineering design, fire risk management, and the delivery of fire engineering solutions for complex buildings and infrastructure projects, including high-rise buildings, airports, logistics centers, and rail and road tunnels.

Before joining JVVA, Jimmy spent more than 10 years with Arup Fire in London, Dublin, and Madrid, where he served as Team Leader for Arup Fire Madrid and Technical Leader for Arup Fire Europe. He earned a B.Sc. in Fire Protection Engineering and an M.Sc. in Risk Management & Safety Engineering from Lund University in Sweden and began his career conducting fire and risk modeling research at the university.

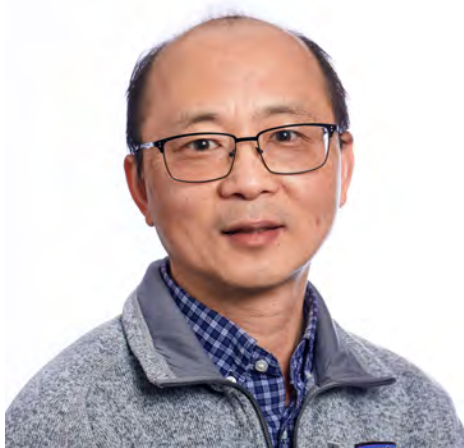
Jimmy serves on the Board of Directors of the SFPE Spain Chapter and is a member of SFPE Europe. He also teaches university courses on fire and risk engineering and delivers tunnel fire safety training for fire brigade personnel in Spain.



Raeshawn Kennedy, PE, Goodhead Consulting Engineers

Raeshawn Kennedy is a registered professional Fire Protection Engineer and holds a Master of Science (M.S.) degree in Fire Protection Engineering from Worcester Polytechnic Institute (WPI). Raeshawn currently works as a Senior Engineer at Goodhead Consulting Engineers. With a decade of technical experience, Raeshawn has been involved in complex, large-scale performance-based design projects across various building types and project typologies. His project portfolio includes performing fire and egress modeling for transportation hubs and large

population centers, such as domestic airports and arenas, across North America. Committed to advancing knowledge in the fire protection community, he has presented egress modeling research at an international performance-based design conference in Copenhagen, Denmark and is also a contributing author for the third edition of the SFPE Guide to Human Behavior in Fire.



Tao Lai, Vice President, Catastrophe and Risk Solutions

Tao Lai is a Vice President at Catastrophe and Risk Solutions, and he also serves as Director of Earthquake Engineering with more than 30 years of professional experience, covering the fields of structural analyses and design, geotechnical engineering, building constructions, earthquake and fire risk modeling. He currently leads an engineering team developing Urban Conflagration Model and its application to earthquake fire-following. He participated several post-disaster reconnaissance including the 2010 Chile, the 2010, 2011 Christchurch earthquakes, and 2025 Palisades and Eaton fires.



John LeBlanc, Senior Engineering Technical Specialist / FSFPE, FM

John LeBlanc is a Staff Vice President and Senior Engineering Technical Specialist within the Chief Engineer's group of FM. John has been with FM for 40 years. John is responsible for the development and updating of FM's Property Loss Prevention Data Sheets on ignitable liquid handling/storage, aerosol products, explosion protection systems, and provides support to all of the special hazard subject matter experts who handle combustible dust standards, flammable gas standards, hazardous chemical standards, and special protection systems. In addition, he works with Research to support the development of

research programs to understand and protect client scenarios.

John received a Bachelor of Science in Chemical Engineering from Case Western Reserve University and a Master of Science in Fire Protection Engineering from Worcester Polytechnic Institute.

He serves on fifteen National Fire Protection Association committees responsible for ignitable (flammable and/or combustible) liquids (NFPA 30), aerosol products (NFPA 30B), finishing processes (NFPA 33/34), explosion protection systems (NFPA 67/68/69), static electricity (NFPA 77), hazardous chemicals (NFPA 400), the correlating committee for NFPA 13, and the three committees working on the creation of NFPA 660 combustible dusts. He is chair of the NFPA 30 Correlating Committee and NFPA 30B. John has recently been appointed to the NFPA Standards Council. John is a Fellow of the Society of Fire Protection Engineers and a member of the American Institute of Chemical Engineers.



Robert Libby, Principal Advisor, Coffman Engineers

Since graduating from the University of Maryland in 1982, Bob has advanced through every level of the engineering consulting profession, from intern and engineer to business development manager, engineering manager, regional manager, vice president, senior vice president, and principal of fire protection engineering.

A long-time member and supporter of SFPE, Bob applied his leadership, strategic planning, and organizational management skills during nine years on the SFPE International Board of Directors, including his term as President in 2024. He helped guide the organization's continued growth and success as an international society.



Pierce Lushinsky, Senior Fire Protection Engineer, Summit Fire Consulting

Pierce Lushinsky is a Fire Protection Engineer with Summit Fire Consulting (formerly Performance Based Fire Protection Engineering). He holds a Bachelor of Science in Fire Protection Engineering from the University of Maryland at College Park and is a licensed Fire Protection Engineer in multiple states. With over eleven years of experience, Pierce specializes in performance-based design, smoke control modeling, and the special inspection and commissioning of smoke control systems. He is one of the firm's experts in this area, having helped numerous project teams commission complex smoke control systems, including elevator hoistway pressurization, to verify correct operation and performance under acceptance testing conditions.



Joseph McIntyre, PE, Ph.D., USDA ARS National Peanut Research Laboratory

Dr. Joseph S. McIntyre is a Research Agricultural Engineer at the USDA Agricultural Research Service's National Peanut Research Laboratory in Dawson, Georgia. He holds B.S. and M.S. degrees in Mechanical Engineering from the University of Oklahoma and a Ph.D. in Mechanical Engineering from Auburn University, and is a licensed Professional Engineer.

Dr. McIntyre's research focuses on fire prevention, early fire detection, and worker safety in peanut and cottonseed storage facilities. He leads collaborative research to develop advanced fire detection systems for agricultural warehouses, including pioneering work identifying chemical emissions during pre-combustion, smoldering, and flaming stages. His broader research interests include post-harvest peanut processing, drying, handling, storage, and quality preservation.



Paulina Mejia, Wildfire Risk Mitigation Consultant, Jensen Hughes

Paulina is a consultant on the wildfire risk mitigation team working out of the Southern California region of Jensen Hughes. Paulina holds a master's degree in public policy with an emphasis on environmental policy. She has over seven years of experience in wildfire planning and outreach, which includes community outreach and engagement, education and program development, and stakeholder coordination and engagement. She currently manages and contributes to a wide array of wildfire risk mitigation projects which include wildfire risk assessments, planning and research for utilities, communities, fire safe councils, and government agencies across California and other fire prone regions in North America.



Brian O'Connor, PE, SFPE Professional Member, NFPA

Brian O'Connor is a Senior Engineer in the Technical Services department at NFPA and a licensed Professional Engineer in Texas and Massachusetts. He holds degrees in Mechanical Engineering from Rowan University and Fire Protection Engineering from University of Maryland. Brian's expertise includes batteries, water-based fire protection systems, healthcare facilities, and fire extinguishers. He is an active volunteer with SFPE and was recognized with the SFPE Top 5 Under 35 Award for his contributions to the fire protection engineering profession.



Haejun Park, PhD, PE - Associate Professor, Oklahoma State University

Dr. Haejun Park is an Associate Professor in the Fire Protection and Safety Engineering Technology program at Oklahoma State University. Prior to joining OSU, he worked as a Fire Safety Engineer in Melbourne, Australia, and as a Fire Research Engineer in Wellington, New Zealand.

At OSU, he teaches Fire Dynamics, Industrial Ventilation and Smoke Control, and Fire and Evacuation Modeling. His research interests include fire risk assessment methodologies as well as experimental studies.



Gabrielle Peck, Ph.D., MRSC, FCIA

Dr. Peck obtained her Ph.D. in Fire Chemistry with focus on Smoke toxicity from the UK where her work focused on the design and development of regulatory fire tests for use in the Construction Product Regulations in the EU. Her work has focused on advancing fire testing and guidance for reaction to fire, structural and effective compartmentation passive fire systems, designing and conducting large-scale fire tests globally, and advancing education in the fire industry.

Dr. Peck has recently joined the National Fireproofing Contractors Association (NFCA) and Firestop Contractors International Association (FCIA) as technical director-advancing the passive fire protection industry globally through advocacy, education, and training.



RJ Petrey, PE, Coffman Engineers, Inc.

Richard (RJ) Petrey, PE, is a Senior Fire Protection Engineer with Coffman Engineers. He received his Bachelor of Science degree in fire protection engineering from the University of Maryland in 2013. Prior to starting with Coffman Engineers in 2024, RJ has also worked at Arup and Jensen Hughes since starting his career. His project experience spans across both commercial and infrastructure type facilities. His commercial project experience includes hospitals, museums, higher education buildings, hotels and residential developments, laboratories, and manufacturing facilities. His

infrastructure work spans mass transit train stations for systems such as New York City Transit, Toronto Transit Commission, and Bay Area Rapid Transit, as well as airport terminals. Richard provides code consulting, structural fire engineering, fire protection and fire alarm system design, and smoke control design services across a wide range of facility types. He also has specialized experience analyzing rail tunnels, station overbuilds, and atria using computational fluid dynamics with Fire Dynamics Simulator and PyroSim. He also performs finite element structural fire analyses using SAFIR software.



Amelia Pludow, Senior Wildfire Risk Mitigation Consultant, PhD, Jensen Hughes

Amelia is a senior consultant on Jensen Hughes' wildfire risk mitigation team working out of the Southern California region. She has conducted wildfire research at the parcel scale up to the forest scale and focuses on social vulnerability associated with wildfire risk and the use of spatial analysis to develop risk reduction strategies. She is experienced in Geographic Information Systems (GIS), risk mitigation and resilience planning, demography, spatial statistics, optimization and modeling. Amelia is

especially interested in using innovative datasets and methods to understand spatial and demographic variation in risk and using these findings to inform policy solutions. She currently manages and contributes to wildfire risk mitigation assessment, planning, and research projects for utilities, communities, nonprofits, government agencies and private sector clients across California and in other fire prone regions in North America.



Adam Reis, Senior Fire Protection Engineer, Summit Fire Consulting

Adam Reis is a licensed Fire Protection Engineer from Chapel Hill, NC, with over 18 years of experience in the field. Adam's career has included extensive service as an Authority Having Jurisdiction (AHJ) within the federal government, where he gained invaluable insight into federal regulations, agency-specific requirements, and fire protection considerations across a wide range of building occupancies and construction types. In that capacity, he performed fire protection engineering reviews, acceptance testing, commissioning support, and special inspections for government buildings, including

smoke control systems and other complex life safety features. His work required a strong command of prescriptive code requirements, NFPA standards, ICC codes, and federal agency criteria. In his current role at Summit Fire Consulting, Adam continues to lend his expertise to the commissioning of new fire and life safety systems, including smoke control systems among many others, while supporting clients with practical code interpretation, compliance strategies, and prescriptive code requirements. Throughout his career, Adam has contributed his fire protection expertise to numerous high-profile projects from conception to completion, including multimillion-dollar construction projects for multiple federal agencies.



Timothee Rodrique, PE, FM

Timothee C. Rodrique is a Senior Staff Engineering Specialist in Climate and Structural Resilience at FM, where he serves as the subject matter expert for FM Data Sheets covering plastics in construction, metal composite material (MCM) façades, building-applied and building-integrated photovoltaics (BAPV/BIPV), industrial exhaust systems, and mass timber.

With more than 25 years of experience in fire protection and loss prevention, Tim has held engineering and leadership roles in the insurance industry and previously served as Director of the Massachusetts State Fire

Marshal's Office. In that role, he helped advance firefighter and life safety through major improvements to the state building and fire codes.

Tim is an alternate member of the National Fire Protection Association (NFPA) Fire Tests Committee and an active member of the Society of Fire Protection Engineers (SFPE). He holds an M.S. in Fire Protection Engineering from Worcester Polytechnic Institute and a B.S. in Mechanical Engineering from the University of Lowell.



Ruiqing Shen, PhD - Assistant Professor, Oklahoma State University

Dr. Ruiqing "Ryan" Shen is an Assistant Professor in Fire Protection & Safety Engineering Technology at Oklahoma State University. Driven by a vision to safeguard people, communities, and the environment, Shen's research focuses on: developing eco-friendly fire-safe materials, designing cost-effective engineering safety and health strategies, integrating new technologies into chemical process safety, enhancing fire safety of energy storage systems, and improving occupational health and safety. His research has been funded by the National Science Foundation, Joint Fire Science Program, Mine Safety and Health Administration, Occupational Safety and Health Administration, and industrial partners.



David Stacy, PE, Summit Fire Consulting

David Stacy, P.E., is the Engineering Manager at Summit Fire Consulting, where he leads a team of fire protection engineers delivering design, code consulting, modeling, smoke control, and government/military projects support nationwide. He founded Performance Based Fire Protection Engineering, acquired by Summit in 2025, and brings deep technical expertise in performance-based design, fire and egress modeling, airflow analysis, and fire protection system review. David also has more than 14 years of fire service experience as a Durham Fire Captain, providing practical operational insight to his engineering work.



Christian Vogt, MS, UL Research Institutes' Fire Safety Research Institute

Christian Vogt is a research engineer with UL Research institutes' Fire Safety Research Institute. Christian's research focuses on fire hazards related to lithium-ion batteries, including suppression of electric vehicle fires and fire safety of battery overpack materials. He earned his Master of Science in fire protection engineering from Worcester Polytechnic Institute, where he investigated the vulnerability of solar farms to wildfires, and earned his Bachelor of Science in physics from Saint Michael's College, where he constructed a scintillation-based muon detector. Christian has also served as a volunteer firefighter in his native country of Germany, as a firefighter/EMT and Lieutenant with Saint Michael's Fire and Rescue, and as Deputy Chief and training officer for WPI EMS.



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

A Chartered Engineer with more than 20 years 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 is currently member of the SFPE Board of Directors SFPE (2026-28).



Young-Geun You, PE, PhD, UL Solutions

Dr. Young-geun is a fire protection engineer specializing in modern building fire challenges and the advancement of standard fire testing methods. He received both his M.S. and Ph.D. in Fire Protection Engineering from Worcester Polytechnic Institute (WPI). Prior to joining UL Solutions, he worked at USG, where he contributed to fire performance research in building materials. At UL Solutions, his work focuses on addressing emerging fire risks in contemporary construction and modernizing fire testing methodologies to better reflect real-world conditions.



Xilei Zhao, PhD, University of Florida

Xilei Zhao is an Associate Professor of Civil Engineering and Director of AI Initiatives in the Engineering School of Sustainable Infrastructure and Environment (ESSIE) at the University of Florida (UF). Dr. Zhao specializes in trustworthy AI methods and their applications in modeling human behavior in normal and emergency conditions. Dr. Zhao's work has been recognized by multiple awards, such as the 2024 NSF CAREER Award and the Early-Career Research Fellowship by the National Academies' Gulf Research Program. Dr. Zhao currently serves as an Associate Editor for Transportation Research Part D: Transport and Environment.

Presenting Staff



Chris Jelenewicz, PE FSFPE, SFPE Chief Executive Officer

With a BS in Fire Protection Engineering from the University of Maryland, Chris is currently the Chief Executive Officer of SFPE. He has been an FPE for the Library of Congress, University of Maryland, and Tenara L.P. Chris also has 20 years as a volunteer firefighter and seven years as Fire Chief for the Chillum-Adelphi Volunteer Fire Department in Langley Park, MD. From 2005-2016, Chris had a hand in 26 publications, many more following.



Leslie Marshall, PhD, SFPE Foundation

Leslie Marshall, PhD is Executive Director of the SFPE Foundation, a global non-profit organization affiliated with the Society of Fire Protection Engineers that supports research and education to improve the scientific understanding of fire and its interaction with the social, natural, and built environments. Dr. Marshall oversees all Foundation programs: facilitating professional awards, student scholarships, and research grants; leading cross-sectoral research collaborations; conducting research workshops and meetings; developing initiatives to support the next generation of fire protection engineers; and disseminating knowledge to advance the field of fire engineering and fire safety science. An affiliate of the Economic and Social Rights Research Group of the University of Connecticut's Human Rights Institute, Dr. Marshall has published multiple policy reports and academic journal articles and frequently speaks on emerging fire safety challenges, resilience and sustainability, economic development, and energy infrastructure and workforce transition. She has consulted for the United Nations Development Programme, Innovations for Poverty Action, the Centre for Women in Governance, and the Lebanese Center for Policy Studies, among others.



Joshua Reichert, PE, Society of Fire Protection Engineers

Josh is the Chief Engineer for the Society of Fire Protection Engineers. He has 13 years of experience in the Fire Protection Engineering field with a mix of teaching at Eastern Kentucky University and consulting experiences. While teaching, Josh taught many courses including Fire Dynamics, Advanced Structural Fire Protection, Sprinkler Design, Special Hazards Systems Design, and Human Behavior in Fire. Josh's consulting work primarily focused on fire and egress modelings for use in performance-based design. Josh is a graduate of the International Master's of Science in Fire Safety Engineering (IMFSE) program.

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