SFPE Engineering Solutions Symposium: Modern Storage Challenges

August 12-14, 2025

Speakers
(Alphabetical order)

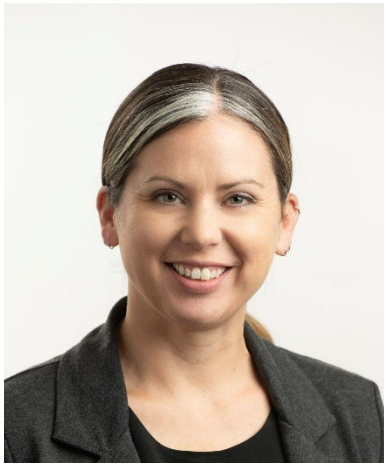
 Wes Baker	Wes Baker is a Senior Engineering Technical Specialist in the Chief Engineers Group at FM Global. He is a member of the Society of Fire Protection Engineers and an NFPA member serving on both the NFPA 13 Installation and NFPA 13 Discharge committees. He has been with FM Global for 40 years and is currently responsible for data sheets related to the protection of storage, as well as the installation guidelines for sprinklers that are used for storage protection.
 Tracey D. Bellamy	Tracey is Chief Engineering Officer at Telgian Engineering & Consulting. Tracey Bellamy has 37 years' experience in fire protection engineering. He has extensive experience with fire suppression system design, fire hazard analysis and fire protection system inspection and testing. He is licensed as a Professional Engineer in 49 U.S. states, and is an SFPE Fellow, a Certified Fire Protection Specialist (CFPS) as well as a Certified Water Based System Professional (CWBSP). He serves on several NFPA technical and correlating committees including NFPA 1, 11, 13, 15, 25, 30, 30B, 101 and 5000 (building code) and is a member of NFPA Standards Council. He is a contributor to the NFPA Handbooks on Fire Protection, NPFA 13 and NFPA 25 and a certified NFPA instructor.

 Ralph Bless	Mr. Bless has more than 40 years experience in fire protection including a broad range of water based and special hazard system design, code consulting and fire protection engineering services. Ralph is licensed as a Professional Engineer in six states, a Certified Fire Protection Specialist, Level IV NICET senior fire sprinkler layout technician and holds four additional NICET certifications, as well as twenty state licenses. Mr. Bless serves on six NFPA committees, including chairing NFPA 13 Installation, NFPA 232 Record Storage, and NFPA 915 Remote Inspection. Additionally, Ralph serves on NFPA 1, NFPA 13 Correlating, and NFPA 15.
 Virginia Charter	Dr. Virginia Charter is an Associate Professor and Program Coordinator for the Fire Protection and Safety Engineering Technology 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. Prior to returning to 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 as an alternate member of several standard committees, including NFPA 13, NFPA 20, and NFPA 101. She currently sits on the UL Fire Council, is an SFPE Foundation Governor, and is on the Higher Education sub-committee to the SFPE
 John Denhardt	John August Denhardt, P.E., ET, CWBSP, FSFPE, is the vice president of engineering and technical services for the American Fire Sprinkler Association (AFSA). He is responsible for strengthening AFSA's engineering and technical approaches to meeting member, industry, and operational priorities, with an emphasis on service, quality, and integrity. Denhardt is a registered professional engineer (P.E.) in the District of Columbia and the states of Delaware, Maryland, Pennsylvania, and Virginia. He is NICET Level III certified in water-based systems layout, NICET Level III certified in inspection and testing of water-based systems, and a certified water-based system professional through NFPA. Denhardt is a member of the NFPA 13 technical committee on sprinkler system discharge criteria, a fellow in the Society of Fire Protection Engineers (SFPE), a member of the SFPE Board of Directors, a member of the Board of Trustees for NFPA's Fire Protection Research Foundation and sits on the University of Maryland Department of Fire Protection Engineering's Board of Visitors. A native of Maryland, Denhardt holds a Bachelor of Science degree from the University of Maryland College Park in fire protection engineering. Prior to this role, Denhardt was employed by Strickland Fire Protection in Forestville, Maryland, since 1994, overseeing large-scale projects and assisting with design and installation technical issues.

 Benjamin Ditch	Benjamin Ditch is a Principal Research Engineer at FM and has an M.S. in Fire Protection Engineering from Worcester Polytechnic Institute in Worcester MA, USA. Mr. Ditch is the Technical Team Leader of the Large-Scale Fires Team with 25 years of experience in fire hazard analysis and specialty fire protection system design. He is responsible for the development and implementation of large-scale testing, including specialty hazards related to non-standard storage and emerging technologies. Mr. Ditch's current research interests include protection for automatic storage and retrieval systems, energy storage systems, and lithium-ion batteries.
 Mark Fessenden	Mark Fessenden is a globally recognized expert in active fire protection systems, including water-based systems (automatic sprinkler, water spray fixed systems, and watermist) and special hazard systems (clean agent, CO2, wet chemical, dry chemical, and foam). For the last three decades Mark has been involved with the manufacturing of active fire protection systems. His focus has been on the development of new technologies, codes & standards, sales and business development, technical services, training, and general management. Mark was the 2024 recipient of the NFSA Russell P. Fleming Technical Service Award, the 2021 recipient of the SFPE Harold E. Nelson Service Award and the 2017 recipient of the NFPA Industrial Fire Protection Section Fire Prevention Award. Marks has several patents in technologies related to water-based fire protection systems. He holds a Bachelor of Science Degree in Mechanical Engineering Technology from New England Institute of Technology and an MBA from Corban University. Mark serves as the Managing Director of the International Fire Suppression Alliance, an organization dedicated to the global promotion of the use of effective water-based fire protection systems.

 Christopher Gates	Chris is a graduate of Marquette University with a Bachelor of Science in Mechanical Engineering. He has 36 years of fire protection and loss prevention experience including 18 in the HPR insurance industry. This experience includes conducting loss prevention consultative audits of various hi-tech and manufacturing occupancies, field staff management and overall account loss prevention coordination. Chris is currently a Staff Engineer with Underwriter's Laboratories Building Materials and Life Safety Systems. He has been with UL in Northbrook, Illinois since 2006 where he has been involved in the development and conduct of large-scale fire testing and calorimetry. Chris speaks at numerous conventions and events on these topics. Chris currently serves on the NFPA 30B technical committee and was formerly the membership chairman for the Chicago Chapter of SFPE.
 Sean Gray	Sean has been a member of multiple technical panels involving fire safety research and is an appointed member of the UL FSRI Advisory Board. He has co-authored the book The Evolving Fireground (Fire Engineering) and speaks nationally on research-based tactics. Additionally, Sean is an NFPA committee member for Fundamentals of Fire Control Within a Structure Utilizing Fire Dynamics (NFPA 1700), Fire Hose (NFPA 1961-1965), Fire Service Occupational Safety and Health (NFPA 1500), and Fire Service Training (NFPA 1400). Sean also teaches Hands on Live Fire Search & Fire Attack along with a classroom lecture titled Attack from the Burned Side at FDIC, where he talks about how the modern fireground is evolving more than ever before, and with the use of research to enhance our procedures, how we can utilize different tasks and tactics to extinguish fires from all angles and how to apply evidence-based tactics to achieve a safer, smarter, and more efficient fireground.

 Matt Guilfoyle	Mr. Guilfoyle has been working in the fire protection engineering industry since 2012. He is an Associate Principal at Harrington Group and leads the performance-based design team. Mr. Guilfoyle specializes in performance-based design and alternative means and methods requests related to life safety, fire sprinkler, fire alarm, smoke control designs, and passive fire resistance. He is particularly interested in how fire testing can be used to support alternative designs in fire protection. Mr. Guilfoyle received a Bachelor of Science in Mechanical Engineering and Master of Science in Fire Protection Engineering from Worcester Polytechnic Institute.
 Ingunn Haraldseid	Ingunn is the Director of Product Safety in the cube storage pioneer AutoStore. Her focus within the company is research and fire testing as well as product safety. She also supports AutoStore's distribution partners and customers in safety related matters. Ingunn has a bachelor's degree in chemical engineering with a specialization in process chemistry and a master's degree in Technical Safety. She has a PhD in smoldering fires from the Otto-von-Guericke Universität Magdeburg. Ingunn is a technical committee member of the NFPA 13 Sprinkler System Discharge Criteria.

 Mark Hopkins	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.
 Melisa Rodriguez	Melisa Rodriguez is the Vertical Business Development Leader for Storage with Johnson Controls. She is a licensed Fire Protection Professional Engineer with 21 years of experience in the industry and has held various roles including Project Manager, Designer, Lead Fire Protection Engineer, and Senior Business Development Manager. She is also NICET certified Level IV in Water Based Systems Layout. She earned her Bachelor of Mechanical Engineering and MBA from the University of Minnesota located in Minneapolis, MN. Melisa serves as Chair on the MN board of licensure (AELSLAGID), Vice-Chair of the MN Governor’s Council for Fire Prevention and Control, a principal member of NFPA 14, 13R/13D and 88A Technical Committees, alternate member of the NFPA 13 Discharge Committee, NFSA Future Leadership Committee Vice-Chair, SFPE Virtual Learning Subcommittee Chair, and President of the MN Chapter Society of Fire Protection Engineers.

 Noah Ryder	For over 20 years Dr. Noah Ryder has focused on understanding fire and explosion's interaction with both built and natural environments. He is Co-Founder and Chief Operating Officer at Fire & Risk Alliance, LLC. He is a licensed professional fire protection engineer and focuses on how safety can be improved through the use of quantitative risk assessments, computer modeling, applied research, and performance-based design. Dr. Ryder has received numerous awards throughout his career and continues to serve the industry with his involvement in various safety focused organizations. He is the former chair of the Technical Committee of the SFPE Foundation and continues to serve as a board member, actively serves on multiple NFPA technical committees, is the former SFPE Chesapeake Chapter President, and frequently publishes and presents his work.
 Brandon Telford	Brandon Telford has been with Reliable since 2015 and brings over 28 years of experience in the fire protection industry. He began his career with nine years in fire protection contracting in the Mid-Atlantic region, followed by three years managing Department of State and Department of Defense projects in Albania and Qatar. Prior to joining Reliable, he spent six years as a territory sales manager for a fire protection products manufacturer. Brandon holds Associate of Applied Science degrees in Fire Protection Engineering Technology and Safety Management from Delaware Technical Community College. He is a Certified Fire Protection Specialist (CFPS) through NFPA and achieved NICET Level III Certified Engineering Technician (CET) in automatic sprinkler system layout. He actively contributes to the industry as a member of the AFSA Technical Advisory Council, NFSA Engineering and Standards, UL/FM/ISO Technical Advisory Group, and NFPA technical committees for standards 13, 13R, 13D, and 15.