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Richard Gann has been performing and leading fire research, initially at the Naval Research Laboratory, and, for the past 29 years, at the National Institute of Standards and Technology. For 18 of those years, he was chief of the NIST Fire Science Division. Dr. Gann has more than 90 scientific publications and has made more than 400 presentations to university, professional, industrial, and government audiences.

Dr. Gann chairs the National Fire Protection Association Toxicity Technical Advisory Committee and is an alternate member of the Fire Test Committee. He chaired the Technical Groups under two Federal Acts dealing with Cigarette Fire Safety. He was the founding chair of the Interagency Government Working Group on Fire and Materials, and is the technical program manager for the Department of Defense's Next Generation Fire Suppression Technology Program. He also serves as chair of the ISO TC92 SC3 Subcommittee on Fire Threat to People and the Environment. He is currently on the editorial boards of the journals Fire Technology and Fire and Materials.

His accolades include the ASTM Simon H. Ingberg Award and the Department of Commerce Gold Medal.

Challenges to Fire Safety in Tall Buildings

In order to increase the chances of survival during a fire emergency, the time available for a person to leave the danger zone must be longer than the time needed to make the escape. For tall buildings, providing time for people to reach safety requires unique considerations with regard to the potential for flame spread, challenges in fire suppression, the extended time occupants could be exposed to smoke and heat, and the potential for thermal weakening of the building structure.

Over the past two decades, there have been major advances in both the science of fire and its application to fire safety engineering. This presentation will summarize five tactical opportunities to provide enhanced fire control and escape time.

All of these issues will be presented in the context of the technical findings and recommendations of the NIST World Trade Center Investigation.