Douglas J. Carpenter, MScFPE, CFEI, P.E., FSFPE

Doug brings both experimental and fire protection engineering skills to CSE and is a leader in applying quantitative tools to the investigation of fires and the design of buildings. Doug is an alternate member of NFPA 921, Guide for Fire and Explosion Investigations. He has developed and taught classes and seminars in fire investigation, performance-based fire safety design, and computer fire modeling for such organizations as the Society of Fire Protection Engineers (SFPE) and the International Council of Building Officials (ICBO). Prior to joining CSE, Doug has worked for the Office of Polar Programs at the National Science Foundation and Hughes Associates, Inc.

His responsibilities have included conducting fire investigations, supporting fire litigation, measuring fire-related material properties with the cone calorimeter, performing fire hazard and code equivalency analyses, characterizing of the ignition potential of halogen lamps, fire modeling (zone and CFD), developing fire-related software tools, and accessing alternatives for halon fire suppression systems. Doug has applied his quantitative fire hazard analysis skills to a wide range of projects including computer facilities, aircraft hush houses, nuclear production reactors, Navy frigates, and the unique and challenging environment of Antarctica. Doug earned his Master's Degree from Worcester Polytechnic Institute using Computational Fluid Dynamics (CFD) to model room fires.